



Abstract

The TARDIS Technical Index represents an attempt to document and compile a majority of the information that has been "revealed" about TARDISes over the last forty years. It provides an analysis of the technical continuity of the TARDISes as present in the Doctor Who series. It covers method of travel, console rooms, power supplies, crew support systems, defensive capabilities. The Technical Index's Appendix also discusses TARDIS construction, design developments, the Laws of Time, and Role-Playing Rules for TARDIS. The work represents over seven years of research. Novels, audio stories, television episodes, and numerous reference books were all reviewed to insure that this Technical Index was truly comprehensive.

Foreword



"That is the dematerializing control, and that over yonder is the horizontal hold, up there is the scanner, those are the doors, and that is a chair with a panda on it. Sheer poetry, dear boy. Now please stop bothering me."

-The Doctor

In 1983 *The Doctor Who Technical Manual* by Mark Harris was published. This was the first piece of *Doctor Who* merchandise to fall into my 10-year-old hands. It opened up the world of "Who" to me. The chapter titled "Who is the Doctor?" answered many questions I had

about the time traveler who had graced my screen for a little over a year. I immediately set about constructing my own TARDIS console out of a large sheet of Styrofoam and several broken typewriters. This interest in the "science" of science fiction eventually led me to a Bachelor's Degree in Physics.

Despite the cancellation of the TV series, my interest in the Doctor and his traveling machine continued to thrive and grow. I now have what is quite possibly the largest collection of Doctor Who merchandise in all of Fairbanks, Alaska. And while I appreciated the enormous amount of effort that had been spent to document and catalog every aspect of the Doctor's life (both on screen, in print, and on CD), I realized that the Doctor's most stalwart and constant companion had been neglected - the being upon which the series' entire premise rested, that is, the TARDIS.

It is for this reason that I have attempted to analyze the TARDIS as if it were a real phenomenon. I do this not to provide a definitive vision of the TARDIS but to showcase the amazing amount of creativity and inspiration that went into a simple police box. It is my hope that this site will serve not as a continuity straight jacket but as a springboard for more creative and unique ideas in the world of *Doctor Who*.

In this Index I attempted, to the best of my abilities and resources, to catalog all the major and minor systems that have been "revealed" to us over the last 30 plus years. Resources include the TV series, novels (Target, Virgin, and BBC) and the audio dramas. I realize that "canon" can be a touchy issue to some fans, and I would like to assure you that if I inadvertently left out your favorite TARDIS gadget or capability, it was not because I did not consider it worth of inclusion but simply because I lacked access to the complete range of Who sources. To maximize usability I've designated each source with a different font colors. (see Color Key). The reader is then free to ignore the sources he doesn't agree with if he so desires.

Above all, as you investigate this text keep in mind the many people whose hard work and ingenuity are responsible for these ideas and concepts. They pushed the TARDIS beyond a police box and beyond a simple time machine and into the realm of uniqueness.

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Introduction



"Let me get this straight. A thing that looks like a police box, standing in a junkyard - it can move anywhere in time and space?"

-Ian Chesterton

TARDISes are the space and time travel ships of the Time Lords of the planet Gallifrey. Capable of dematerializing from their current location and rematerializing on any planet in the universe and at any point in that planet's history, the TARDISes are in many ways the heart of the Time Lords' technology and culture. The name TARDIS is an acronym that stands for Time And Relative Dimension(s) In Space, and the word Tardis means Time-Ship. The plural of TARDIS is still debated by Time Lords but for the purposes of this paper will be written TARDISes.

Like its name implies, a TARDIS is a machine for investigating Time and Relative Dimensions In Space.

As such they are primarily used as research platforms for gathering historical data about the universe. TARDISes are specifically designed to never change history. As such they can blend in to their environment by changing their exterior appearance. They can appear as a tree, a door, or (in one particularly infamous instance) a Metropolitan Police Telephone Box. Regardless of their exterior size their interior is a vast array of corridors, control rooms, living quarters, and storage rooms capable of holding thousands if necessary. This apparent discontinuity in interior versus exterior size is achieved by making the exterior doors of the TARDIS a dimensional gateway to a micro-universe. Since the interior isn't located anywhere near the exterior a TARDIS is immune to almost any external attack.

Acknowledgements

I'd like to thank all the friends and friends of friends who helped me with this project. First and foremost is my wife Holly, who served as the perfect representation of my target audience, by reading the whole thing to me over a long distance phone line just so I could see what she did and didn't grock. Thanks go to Stephen Gray for converting it to a webpage and hosting it on his wonderful site, and to Matt Durrant, who created a wonderful cover for the second draft and for his proofreading work. I'd also like to thank Craig Hinton and the other reviewers: The Other Chris, Carter, Anna Swift, and Sam Travis. The people at Continuity Cops and New Apocrypha Yahoo Groups for being a sounding board and asking me when I was going to release the Index - thanks everybody! TARDIS Technical Index banner by www.nervagraphics.co.uk

Chapters List

- The Life of a TARDIS: This chapter gives an overview of the growth and construction of a new TARDIS and covers their social life and death rituals.
- Navigation Systems: This section discusses the mechanics and physics of space-time travel, and gives an overview of the various flight options a TARDIS is capable of. Those wishing to see a detailed discussion of the effects of changing history should see Appendix 2: Temporal Physics.
- **Guidance Systems:** Here one will find information of the control systems used by the Time Lord operator to guide a TARDIS.
- **Drive Systems:** The focus of this chapter is on the power and propulsion systems of a TARDIS.
- **Environmental Systems:** This chapter serves as an overview of a TARDIS's multidimensional nature and crew support systems.
- **Defensive Systems:** The defensive mechanisms, both passive and active, are detailed in this chapter.
- Other TARDIS Systems: This catchall chapter covers systems that don't fall under the preview of other chapters
- **Storage Rooms:** A partial list of the many types of rooms contained within a TARDIS can be found here.
- **Types of Time Travel Capsules:** A history TARDIS development with details on several types of TARDIS.
- TARDIS Refits: Description of capabilities of each TARDIS Refit. Presents the many optional systems, both legal and illegal that an operator can install in a TARDIS.

Color Key

The following color code is used:

- **Black:** For information from the TV Series, including Dimensions in Time, and 1996 TV Movie.
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.



Chapter 1: The Life of a TARDIS



"The TARDIS is more than just a machine, you know. It's like a person. It needs coaxing, persuading, encouraging"

-The Doctor

This section describes in detail the life cycle and habits of a TARDIS, as well as more fundamental TARDIS technologies such as the science of Block Transfer Mathematics - which provides the basic "material" from which TARDISes are fashioned, and the Hyper-Loom, on which TARDISES are grown.

Block Transfer Mathematics

The bulk of a TARDIS is made up of Block-Transfer Mathematics. This form of Distributed



Cluster Algebra was first developed by the people of the planet Logopolis. It is based on the idea that the essence of matter is structure and the essence of structure is mathematics. Using the hexadecimal notations of Block-Transfer it is possible to create Space-Time Events through pure calculation. Any event or object can be described by thinking the correct Block-Transfer equations and it will instantly become reality. Block-transfer equations can alter history itself. A sufficiently adept mathematical genius can project a temporary block transfer projection of himself through space and time just by reciting the right equations. With 11 other people reciting the right block transfer numbers it is possible, though difficult, for a Time Lord to track his TARDIS through space and time.

Block Transfer might work by using pure mathematics to model the possible existence of a specific space-time event or piece of matter in a quantum alternate of this universe. Part of that model would be the probability/uncertainty that such a quantum possibility could exist. Once this model has been created then the relevant parts of that quantum universe can be transferred into this universe in discrete blocks of information - hence the term Block-Transfer. Thus any matter (or other space time event) can be created out of pure mathematics if its quantum possibility can be modelled. Because the equations have to function in multiple timelines, block transfer equations used in creating a TARDIS use Base Code Numerals which are numbers that are true in all Universes. Some examples would be the numerals Etra, Secque, Eram, Nol, Kayrie, Gorrock, Zel, Nerus, Av, Ressa, Carra, Otto, and Perdunesta. These are a temporally invariant form of

numeric representation. These calculations are powered by raw Artron Energy. Block-Transfer Mathematics can only be computed with an organic brain because the mathematics alter the nature of reality. This would cause a traditional computer to malfunction. The original equations can however be recorded in traditional non-organic storage media such as bubble memory.

Matter created by a TARDIS using block transfer will have enhanced temporal properties and be resistant to being retro-annulled. This also makes it immune to the normal Vortex energies. Some (but not all) Gallifreyan technology is made of non-atomic matter.

Credit for the Base Code Numeral Theory goes to Peter Dolan.

Hyper Loom: Conception of a Space-Time Event

A TARDIS is not built it is grown. The process used to create a TARDIS is one of the greatest secrets of the Time Lords. The initial block transfer equations necessary to create a Complex Space-Time Event like a TARDIS can only be assembled in a null-zone connected to the Eye of Harmony. This null-zone is called the Hyper-Loom or sometimes the Womb. In a very real sense, Complex Space-Time Events like a TARDIS always exist. These Events take the form of a complicated coded-series of Block-Transfer equations, which define their existence and position across all of Space-Time. The equations are based on the fundamental principles of movement, travel and infinite recursion. They serve as the foundation for the Time Travel Capsule (TTC). Being a four dimensional being, a TARDIS assists the Time Lords in its own creation. Legend has it that the Matrix, the Mother of all Gallifreyan Timeships, has always existed and created the Gallifreyans just so she would have a point of origin. This same legend also states that the Matrix secretly controls the Time Lords.

The Hyper-Looms provide the Capsule with a block-transfer connection to the Prime Eye of Harmony on Gallifrey. It is this block-transfer connection that serves as the heart of the Complex Event. The Space-Time Event combined with the Eye of Harmony connection forms an Extra-Dimensional Framework known as the Metastructure.

Gallifrey Blackhole Shipyard: Creation of a Time Travel Capsule

After being connected to the Eye of Harmony, the Space-Time Event is moved to neural construction docks at the Gallifrey Blackhole Shipyard to complete its growth. To protect Gallifrey from time pollution the Shipyard is located outside of Gallifrey's star system and is equipped with filter circuitry to generate Transduction Barriers. These barriers are also used to prevent the Capsules from escaping.

Inside the docks are numerous Dimensionally Transcendental Cradles (or Ubbo-Sathla) which hold the future TARDISes. The Time Lords alter this metastructure to make the Event dependent on the Symbiotic Nuclei of a Time Lord for its ability to travel in the Vortex. It is at this point that the Space-Time Event becomes a viable Time Travel Capsule.

TARDIS sentiences are created with a Block Transfer System using specific Artificial Intelligence Code. Using birthing matrices the block-transfer A.I. is rendered and physically formatted into the organic Protyon Units that serves as the brain of a TARDIS. The Protyon Core is then implanted in the Space-Time Event and programmed with multidimensional Grey-Prints of the new TARDIS. Grey-Prints are designed by Gallifreyan Mathematicians and set down many of the specifications and capabilities of the new TARDIS including its gender. At this point the Capsule uses Warp Matrix (Transdimensional) Engineering to grow its interior and exterior shells. Using these Grey-Prints as guide, the Protyon Units grow the interior/exterior of the Capsule. The Cloister Room (with the link to the Eye of Harmony) develops first, followed by the rest of the Time Sceptre. The capsule's Transducer Power Cells are also among the first items to be grown.

After spending a decade in the cradles they are moved to the Solar Workshops, where several pieces of exitonic circuitry are implanted by the Time Lords. Exitonic circuits are made of a type of metal that has many of the characteristics of plastic. The implants include the Temporal Drive and Chameleon Circuit. If the Capsule is designated female, it will receive XX circuits, if male, XY circuits. Because only about 1 in 80 Time Lords are female it appears that less then one out of every 100 timeships are male. Male TARDISes are sometimes referred to as bulls.

When running in a new TARDIS (or a TARDIS with a new Dynomorphic Generator), the operator should navigated an already established vortex wormhole (such as a Time Contour or a Time Corridor) to check out the temporal dimensions. This is a good way of testing the engines on low power it requires less energy.

For more information see the Molecular Stabilizers (LINK) entry.

Types of TARDIS



Once the Protyon Units have generated the necessary interior and exterior shell the Capsule is considered to be a fully operational Time And Relative Dimension In Space (TARDIS) ship. Some capsules (which have received upgrades) have the word dimension pluralized to dimensions. This is because the TARDIS now has acquired extra internal dimensions within it is standard multidimensional nature. The pluralization could refer to the addition of a micro-universe within the preexisting micro-universe. The word "Tardis" means Time-Ship, however the plural of TARDIS is still debated by Time Lords.

Each TARDIS has a plaque located in the Switch Room that says:

Time and Relative Dimension in Space
Build Site: Gallifrey Blackhole Shipyard
Type ## Build Date: ####
Authorized for use by qualified Time Lords only
By the Shadow Proclamation

Misuse or Theft of any TARDIS will result in extreme penalties and possible exile

A numerical Type designates each model of TARDIS. Every TARDIS that is constructed follows the specifications of its specific "Type." For example the Doctor usually operates a Type 40 TARDIS. Higher Type numbers indicated later model TARDISes. The Type number is fixed. For example the Doctor's TARDIS is still a Type 40 TARDIS despite the numerous upgrades and modifications it has received over the years. If a TARDIS Type is particularly successful, then over 300 of that Type might be created. The Type 89 TARDIS is the most advanced non-military TARDIS yet created. Military TARDISes are known to go up to Type 94.

The fully sentient and interactive TARDISes created during the Time War are some times called Type 100s (Type 101, 105, etc...) but are more properly referred to a Form 101 or Form 103 etc... The Form 105 was the most advanced TARDIS known to exist during the Time War. For full details on the various of Models of TARDIS that were created by the Time Lords see Chapter 9 [LINK]

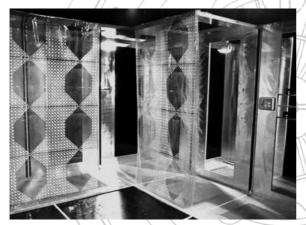
TARDIS Cloning: SIDRAT



With a sample of organic Protyon Units it is even possible to clone a whole new TARDIS using a fist sized piece of a pre-existing female Capsule. Indeed, even if a TARDIS suffers enough damage to reduce it to a 1 inch cube the molecular stabilizers will still be able to re-grow the capsule.

In either case, the regeneration occurs in much the same way that the capsule originally grew in its Dimensionally Transcendental Cradle. The capsule's Protyon Units will use warp matrix

engineering to reform in endo and exo shells following the specifications set down in its Grey-Prints. This process will start with the Cloister Room and expand from their to reform the rest of the Time Sceptre.



With a Dimensionally Transcendental Cradle to feed it this re-growth will only take a decade. Without it, the new TARDIS have to rely on some other source of artron energy, such as that generated by being close to a Time Lord. When limited in this way the TARDIS will take thousands of years grow up. The growth of the exo-shell will be limited to about 4 cubic inches per year. Once the capsule's exo-shell has reached a size of about 2 cubic meters it will take about 90 years for its shell for its materialization beacon and to become active. The surface of the shell will also hum when

touched by a Time Lord. Approximately 20 years after that point the regeneration mode will be completed and the TARDIS will allow the Time Lord entry.



At the end of this time the TARDIS will still need to have several pieces of exitonic circuitry implanted in it. These systems include the chameleon circuit, the gender circuits, and, most importantly, the temporal drive. Given the about of time the cloning process will take, an experienced Time Lord, with the proper plans, will have plenty of time to build the necessary systems; even if they are limited to primitive Level 5 technology (such as that found on Earth in the late 20th century). In the case of re-growning a catastrophically damage TARDIS its possible that some or all of these

components might have survived and the TARDIS will be fully functional.

One way to accelerate this growth would be to find a source of energized morphologically unstable organic material. Depending on the power levels this could reduce the grow time to around a century. Similar results can be obtained by shatterfying the plasmic shell and modifying the dimensional stabilizers to a fold back harmonic of 36.3. This will accelerate its growth by a factor of 59. Continual exposure to Rift Energy can also help reduce the growth time to about 50 years.



It is not unknown for time aware species to attempt to illegally clone a TARDIS using this process. A fully cloned TARDIS (legal or otherwise) is usually designated with a Model number based on the Type of the capsule that provided the cutting. Hence the clone of a Type 60 would be know as a Model 60. It should be noted that an illegally cloned TARDIS would have the same Imprimature Signature as original donor TARDIS. Which means that the official owner of the parent

TARDIS can be easily found by cross referencing the TARDIS's Imprimature Signature against records on Gallifrey.



While some humans have been able to acquire Model 70 clones from Nekkistani on the world of Gryben, the most notorious examples of TARDIS duplication was Magnus the War Chief's construction of several TT Capsules for the War Lords. Though the Capsules were probably cloned from the War Chief's Type 42 (or 43) Capsule, his ally, the Master failed to provide Magnus with all of the pieces of exitonic circuitry that would be necessary to create full operational Model 42 TARDIS clones. Most notably the timeships lacked the green crystal dynamorphic projectors. Since the crystals are only

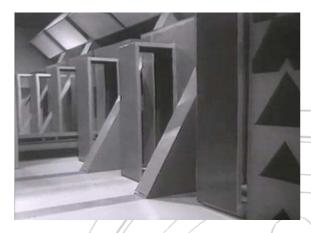
found on Gallifrey, other, less sophisticated materials had to be used, resulting in a capsule that was much more prone to breakdown. There were also no Chameleon Circuits installed on the



ships. These simplified TT Capsules were known as Space and Inter-Time Dimensional Robot All-purpose Transports, or SIDRATs. While capable of traveling over half a million years their range was more limited then the standard TARDIS. Their simplified design did give them a great deal of dimensional flexibility allowing their internal architecture to easily reshaped and they could hold thousands of passengers. As their name implies, these 'robotic' transports were designed to be remotely controlled. However, as with most forms of remote control, this drastically shortened the

life of the time control units which are part of the dynomorphic projectors. Under continual use they rarely lasted more then a few weeks.

Dry Dimension Dockyard Cradles: a.k.a. Berthing Cradles



The TARDIS is then piloted to a Berthing Bay in the Dry Dimension Dockyard Cradles on Gallifrey and registered. Each TARDIS is given a Registration Code. These codes can be used to indentify which Time Lord is responsible for a given capsule. All the Berthing Bays contain rows of Berthing Cradles, each capable of holding one TARDIS when it is not in use. The excess energy from telepathic discussions held in Gallifreyan Artron Forums is routed to these bays to supply the timeships.

There are hundreds of TARDISes on

Gallifrey. Most TARDISes are designed to serve as mobile research laboratories and it takes a team of 6 researchers to make full use of TARDIS's capabilities. For this reason they rarely travel in groups. It is common for only a couple of TARDISes to be off Gallifrey at any given time.

TARDIS Social Interaction

The adult TARDIS is a living, semi-sentient, creature of time calculations, trans-dimensional equations and exitonic circuitry. The Protyon Core is the organic brain of a TARDIS. Male TARDISes (or Bulls) tend to be dominant in TARDIS herds. TARDISes will "talk" to each other and indeed love to gossip about their pilots.

TARDISes believe that they were designed to be "as one" with time and space. They also believe that they are the ultimate evolution of the Time Lord race. A properly maintained TARDIS doesn't have emotions. But they can develop "affection" for their regular crewmembers. Given the opportunity, they will occasionally be drawn, like insects to a light source, out of their cradles only to be found lurking near the Prime Eye of Harmony.

Life On A TARDIS



While some Time Lords do use Time Rings, the TARDIS is the preferred method of travel when leaving Gallifrey. Time Lords have almost no interest in other methods of travel.

Gallifreyans who attend the Time Academies have their Biodata modified to include Symbiotic Nuclei, making them a Time Lord. On their first day at the "TARDIS Academy" each TARDIS chooses their Time Lord operator from the ranks of

Junior Time Lords at the Time Academy. It is also possible (in some situations) for a Gallifreyan with a symbiotic nuclei to purchase a TARDIS. Once chosen, a TARDIS uses its Symbiotic Relationship Circuits to form a symbiotic bond of transcendent biomechanics with the Symbiotic Nuclei known as the Rassilon Imprimature. The Rassilon Imprimature makes a TARDIS more then just a vehicle or even a beast of burden to a Time Lord, they are essential parts of Time Lord technology and culture. The semi-instinctual neural-link between a TARDIS and its operator is almost sexual in its intimacy. Each TARDIS has a gender, and some believe they provides a sense of companionship for its Time Lord operator in much the same way that a husband or wife does for their spouse. It is not unheard of for a TARDIS to occasionally leave a new arrival "welcome aboard" gifts. While the option exists for a TARDIS to form a link with all six of its Time Lord crew, it is impossible (or at least unethical) for a Time Lord to own more then one TARDIS. This is, at least in part, due to the fact that a TARDIS becomes terribly jealous when an operator is bonded to more then one. Despite all of this most Time Lords treat their Time Travel Capsule as nothing more then a utilitarian form of transport rather then as living creature.

Only after graduation Time Lords are allowed to make solo trips in their TARDISes. Even though hundreds of Time Lords have a TARDIS granted to them they must still obtain authorization before using the TARDIS to leave Gallifrey. It is common for only a couple of TARDISes to be off Gallifrey at any given time. Most TARDISes are designed to serve as mobile research laboratories, for this reason they rarely travel in groups. It takes a team of 6 researchers to make full use of TARDIS's capabilities. Such a team will often consist of the TARDIS's Time Lord operator and 5 technicians or specialists, who might be Apprentice Time Lords or mere Gallifreyans. Officially it is forbidden to allow a lesser species into a TARDIS, but this law is often overlooked. Retired Time Lords are not permitted to own a TARDIS, and unauthorized use of a TARDIS carries a mandatory Death Penalty. It should be noted that, in the case of a Gallifreyan, death refers to losing a single life.

While a TARDIS's transportation of its crew through time and space is usually described as a "Journey" it is just as accurate to say that a TARDIS actually works by recording is crew's biodata and reprocessing/manipulating their future to take into account a different location in

space and time. As part of this process the Auto-Systems ensure that the crewmember's reality quotients remain at 1.

A TARDIS constantly generates a low-level telepathic field, which allows it to telempathically read the surface thoughts of its crew. This allows a fully functional TARDIS will guide lost crewmembers to their destination using glowing arrows on the walls. The movement of non-sentient animals within a TARDIS can be controlled by setting the TARDIS to deliver electrostatic shocks if an animal moves into forbidden area. A TARDIS with Time War era upgrades automatically reconfigures the architecture to make sure the room the crewmember needs comes to him. Being four dimensional beings TARDISes are even able alter the architecture to accommodate future passengers before the ship's Time Lord knows their will be a new passenger. This can extend to rearranging and creating new living rooms.

The Auto-Gravity System automatically adjusts the gravity, within reason, while in the Vortex to acclimatize the crew to the local gravity of the destination. The gravity can also be manually controlled and the setting of individual rooms can be configured separately.

The TARDIS has devices that will alter the metabolism of its travelers so they won't gain to much weight if they over eat. There is some evidence to indicate that never need urinate or defecate while on board the ship. The beneficial environment of the TARDIS can help in prevent wounded people from passing out.

The Laundromat's laundry circuits automatically repair, clean, and iron any clothes left overnight in the sleeping quarters. Normally the auto-cleaning systems keep the interior of a TARDIS is quite sterile and insure that the atmosphere is automatic-cleaned. There is only one known case of a poorly maintained TARDIS spreading an organic virus from one time zone to another, indicating that a fully functional TARDIS must have some sort of anti-viral software.

The environmental systems always plays a very light melody in the background to soothe and relax its crewmembers. This melody sounds like a steady hum to non-Gallifreyans. The tone of the hum changes depending on whether the TARDIS is materialized or in the Vortex. While traveling in the Vortex the TARDIS always has a faint vibration, which vanishes when the ship materializes. A TARDIS has an optional diurnal (day/night) cycle. The duration of these cycles, if enabled, will be derived from the brainwaves of the authorized crewmembers.

A TARDIS interior micro-universe is created using Transcendental Equations that don't interface



with Normal Space in a traditional way. The Hynoleptic Interface's default setting creates numerous internal illusions to prevent lesser humanoid species who are travelling in a TARDIS from going insane.

Technically speaking vortex travel is instantaneous and the travel time is an illusion. For this reason, observant crewmembers will find that for every month they spend inside a TARDIS they will age slightly less then a week. There are reports of that a human can

live 2000 years while trapped inside a TARDIS, but this is unconfirmed. It should be noted that when energy supplies are completely depleted, the passage of time inside the TARDIS slows

down relative to the exterior.

Though the TARDIS provides almost total protection from the energies of the Vortex, most crewmembers experience a subconscious sense of disconnection during vortex travel. This is the result of a cellular level awareness of being outside the first four dimensions. Some, (if not all) of a Time Lord's 22 temporal senses grow more acute the more times a Time Lord crosses the Time-Fields in a TARDIS. Because of this Time Lords are vulnerable to Temporal Shift Lag. Such effects can only be overcome if the Time Lord develops special mental disciplines. Temporal Shift Lag only effects beings with a symbiotic nuclei.

With each trip, the crew of a TARDIS will still be lightly irradiated with Artron Energy from the universe's background radiation. This chronon radiation can't be found in temporally stable environments and exposure can only occurs by traveling in the Vortex. The amount of artron energy oxidants in the crew's DNA will incrementally build up with each trip. For this reason traveling in a TARDIS also has significant effects on the brain of any lesser species. The lymphocyte white blood cells will also mutate slightly under the influence of the radiation, but there are no negative side effects from this irradiation and, it will never reach dangerous levels. The exposure does provide greater reserves for certain telepathic situations and will grant even lesser species a sensitivity to the changing of history. It might help a member of a lesser species survive travel though the Vortex and interstitial time.

Vortex travel will also cause the crew to accumulate Bockatrons, and Harminum, and other exotic particles. While most humanoids experience no side effects, a small percentage of life-forms that lack Symbiotic Nuclei suffer from Time-Sickness during flight. This usually manifests itself as strong feeling of dislocation but can take the form of headaches or digestive disorders.

Every TARDIS contains instruments for measuring these types of irradiation and thus verifying if the subject has traveled through the Vortex. These effects will show up very plainly in certain types of very advanced brain scans and the effect can be used to date the exposure. While it is possible to drain this energy out of a time traveler's DNA and put it to some sort of constructive use, under normal circumstances the levels of concentration will never fade.

Death of a TARDIS



Every TARDIS has an expected life span of several thousand years but in modern times it is unlikely that any TARDIS will reach that age. One should keep in mind that most Time Lords tend to view their time capsule as nothing more then a utilitarian form of transport. Each successful Type of TARDIS will lead to the creation of hundreds of that model. However, given that there are only 1000 Time

Lords at any given time it would appear most TT Capsules are scrapped after only a couple of centuries or less. In most cases, a TARDIS will be replaced as soon as its technology becomes obsolete and its operator can afford a newer timeship. In the 2000 years leading up to the Last Great Time War, capsules were often be de-registered well before the end of their expected lifespan. After being put to sleep by its owner, the old TARDIS is usually scrapped at the breakers.

Even if a TARDIS is spared the breakers, eventually, entropy will eat away at a TARDIS's systems until a major system failure occurs. For example, a TARDIS will die if it remains in a state of Dimensional Collapse for more than a few decades. When a TARDIS is near death the flow of time between the interior and exterior begins to break down. Some areas will show the past, some the future. Some will be frozen in time, some will have accelerated reference frames. A TARDIS that is abandoned for around 3000 years will breakdown from lack of maintenance, leading to the death of the timeship.

A dying TARDIS will, if capable, travel to a secret TARDIS graveyard. But a mortally wounded TARDIS could rip a hole in the vortex as it moved through the Vortex. If the TARDIS is incapable of safely traveling then it might be forced to suffer in a near death state for centuries. If the TARDIS is incapable of reaching the Graveyard on its own it not unknown for the wounded timeship to send out a telepathic recall signal to any Time Lords who share a symbiotic link with it.

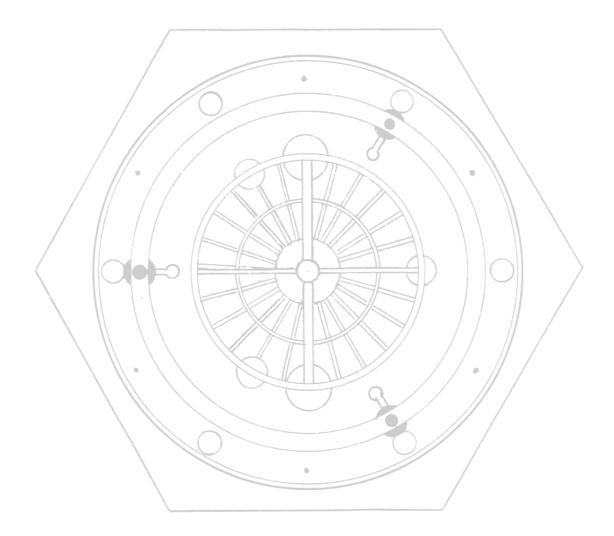
A TARDIS that dies with an active Eye of Harmony will jettison its interior. Its location at the time of death will determine whether the interior is dumped into the Space-Time Vortex or the Space-Time Continuum. It is for this reason that a TARDISes owner is responsible for putting them to sleep when they are beyond repair.

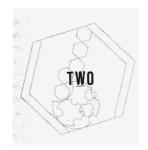
If possible, a dying TARDIS will automatically time-link itself to another nearby TARDIS. When Time-Linked the dying TARDIS's chameleon circuit and desktop theme will instantly be re-configured to match the pattern of the healthy one. This will stabilize the flow of time inside the capsule.

The traditional method of putting down a disabled TARDIS is to use the time-link to pilot the dying TARDIS into the heart of a star. The healthy TARDIS to aid the dying one in reaching the star by generating a wormhole within the Vortex for it to travel along. This can be done by synchronizing the coordinates of both timeships, making sure the

calibrators are online, and dematerializing at the exact same time. Care should be taken that the impact doesn't cause any minor shift the orbits of any planets in the star system.

Once the timeship reaches the heart of the star the energies found there will allow the dying time ship to reach the TARDIS Graveyard, located in an impacted pocket dimension outside of normal space and time. Very few Time Lords have seen this graveyard, but one such visitor reported seeing hundreds of decaying TARDISes. The Cloister Room will be the last part to disintegrate.





Chapter 2: TARDIS Navigation



"The indicator of lasting worth in a civilization is the discovery that multidimensionality is much more than a convenient mathematical concept. When a civilization considers dimensions beyond the three most common, not as intangibles for academics, but as building blocks to be moved about and bent to the individual will, that is the true test of greatness. That civilization will never die!"

-The Book of the Old Time, Volume 17

This section gives a brief overview of the nature of the universe and the environments that a TARDIS has access to. It also has a detailed description of the standard stages of TARDIS flight, including dematerialization, vortex travel, and re materialization. The section finishes with a list of various flight modes and options such as Emergency Stops, Remote Parallel Control, and Time Ram.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV
 Movie
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

The Ur-Universe

The reality of the Ur-Universe is an eleven dimensional phenomenon. Random fluctuations of energy within the Ur-Universe produced the Multiverse in a big bang. Time is born as is matter and space. The forces of Good and Evil shatter leaving only echoes. A similar process continues to occur throughout the Ur-Universe producing a sea of isolated universes. The lifeforms, called Intercreationals, are composed of these universes exist and in this sea. They are far more powerful than Chronovores (and Guardians) and can destroy universes by touching them.

The Multiverse



The Multiverse was formed by a random fluctuation of energy called the Big Bang or Event Zero. This explosion created Normal Space (N-Space), and Exo-Space (which has negative coordinates). All of the various Parallel Alternate Universes would later be artificially created based off of this one. Each of these Universes exists by collapsing and expanding over billions of years. The Multiverse is made up of 11 dimensions: The three spatial (dimensions 1-3) and two temporal dimensions (4-5) form first. The remaining 6 dimensions curled up into the size of a proton to

become the Six-Fold Realm (aka Calabai-Yau Space). Its possible that a TARDIS could visit these higher dimensions or even collapse it crew so that they could explore lesser ones.



It is known that, before the Time War, there was well over 117,863 artificially created parallel universes located 'sideways' in time. Given that the artificial created universes can create further universes, it is possible that there an infinite number of universes. By the end of the Universe over 100 billion alternate versions of history will have been created. The Time Lords use the Axis to hold alternate timelines that are the result of failed Time Lord interventions. Some other universes are

bound to a station in the inter-dimensional void. This Station Control holds between 400 and 1,700 universes.



Like all universes these universes are defined by the conscious choices of their inhabitants. It is relatively easy for a for a fully functional TARDIS to travel to a specific parallel universe if one knows that universe's phase shift, but this will strain and possibly damage a poorly maintained vessel.

The occurrence of the Last Great Time War changed this. The damage to the Web of Time caused the formation of the Lost

Dimension. The Lost Dimension (aka the Void) is the space between each divergent realities and

parallel universe. The formation of this wall was an attempt to protect the other realities form the Time War. The Void has no temporal dimension and nothing for the conscious mind to believe in. It is composed of pure Void Stuff which is neither matter, nor energy. Breaching the Void to reach an alternate Universe is nearly impossible and any timeship that succeeds will still suffer significant damage. While it is possible to send a message to a specific parallel universe it requires the power levels of supernova to transmit even a short message. Anything that passes through the Void will be contaminated by Void Stuff. The contamination can be visually identified by humanoids by placing red and blue filters over their eyes. While Void Stuff normally has no negative effect a breach in the universe will cause all Void stuff (and anything it has contaminated) to be pushed back into the void.

While Alternate Universes are nigh impossible to reach after the Time War, tiny 'bubble universes' that exist on the 'surface' of the main one. If a connecting rift can be found it is possible for a TARDIS to enter such a universe, but they would need to burn up several rooms to have enough thrust to do so. The operator is warned however that escaping such a universe will require not only the use of sub-routine Sigma 9, but also burning up about 30% of the TARDIS's storage rooms.

It should be noted that if a TARDIS that relies on scavenged fuel (as opposed to the Eye of Harmony on Gallifrey) travels into a another universe it would leave it without power. Fuel collected in this Universe can only be used in this Universe. The TARDIS would be dead unless a source of Gallifreyan energy or a local source of rift energy could be found.

The Universe: aka Normal Space-Time Continuum, Minkowski Space



The Normal-Space Universe (or N-Space) is the part of the Multiverse which contains the Time Lords and "classic" time. It is as experienced by three-dimensional beings (such as Gallifreyans and Humans) as being made up of the first four dimensions-length, width, height, and time. These first four dimensions are sometimes referred to as Minkowski Space.

A TARDIS relocates itself in the conterminous time of N-Space by traveling in the Fifth Dimension (the Space-Time Vortex). This allows it to visit any planet in the Universe and any point in that planet's history.

In actually practice some galaxies under the control of the Confederation have created Tollports that use infra-red flightpaths to guide in ships that wish to travel through space or time in that galaxy. The 5 credit fees provide funding for barriers at dangerous hyperpasses. The Time Lords have agreed to pay this fee while operating in Confederation controlled galaxies.

The Space-Time Vortex: The Fifth Dimension



beginning of time,

Also known as the Fifth Dimension, the Space-Time Vortex is the foundation for the first four dimensions. The Vortex was brought into being using a loophole of temporal physics. By constructing the Eye of Harmony Rassilon and the Other participated in the creation of the 5th Dimension (the Vortex) at the moment of Event 1. This act was an essential event as earlier Gallifreyan researchers, and other higher evolutionaries had been accessing the Astral Vortex since the

Time itself is made up of individual particles called Chronons. While it is possible to transmat objects through space by breaking the object down into light-waves and pushing them through the space between the time particles such actions have limited applications for time travel. Unfortunately, wormholes are extremely difficult to stabilize in Normal (Minkowski) Space, due to the space pressures, but such pressures are absent within the Vortex. Unlike the first four dimensions the fifth (and sixth-eleventh) dimension is collapsed and folded into a space the size of an atom. This allows for the formation of the wormholes that a TARDIS travels through. Since the Fifth Dimension is the foundation of the first four dimension it is possible for a Travel Capsules to move from Minkowski Space and integrate into the Fifth Dimension.

When plotted out in three dimensions the Vortex appears to be a glittering blue void with gold highlights. There is no air pressure within the Vortex and the time winds are such that they would destroy any normal matter by aging it until complete structural breakdown occurred. Block-Transfer objects are immune to the normal Vortex energies. While most humanoids would die in seconds if immersed in the Vortex some Time Lords can survive in the Vortex by using a technique called Vortex-Walking. Artron Energy can exist in the Vortex, and indeed it is the Artron Energy of every sentient in the Universe that makes up the Web of Time.

Even for a TARDIS, Vortex travel isn't entirely safe. They are vulnerable to surges in the Vortex called Time Spillage. These discharges of energy in the Vortex come from and go to nowhere. Freak surges in the Vortex can create time spikes. While only a minor inconvenience for fully trained Time Lords, inexperienced operators can end up losing their TARDIS's time signature when they collide with the time spike. Without out the signature the TARDIS wouldn't know where Galactic Zero Center is and it would be impossible to plot the rout-map home. A TARDIS uses Vortex Shields to protect itself and uses muon based counter-magnetization to navigate this and other turbulence. Most TARDISes can handle Time Spillage with a rating of 7 on the Bocca Scale, but if overloaded a TARDIS will attempt an Automatic Emergency Landing. A TARDIS that is trapped by a Spiral Nebula's gravity field will need carefully plotted escape coordinates to break free. The Event One hydrogen inrush that created the Milky Way Galaxy generates an immense amount of time force, enough that it is almost impossible for a TARDIS to escape.

Other dangers include massive black holes in the Multiverse (which cause random gravity lenses), monopole turbulence (often created by starship plasma drives), Tuckson-Jacker force fields (often used in weather control systems), quantum mirages, substrate diversions in the

Vortex, and crossing the Time Spiral boundary. If a TARDIS was to be trapped between a Vortex Rupture and a Subspace Infarction it would break up. There are also uncharted areas of the Space/Time Vortex. The Mandragora Helix inhabits one such area. The Mandragora Helix is a spiral of pure energy radiating outwards in ways the Time Lords don't fully understand. This energy is sentient and has a relationship to the position of the stars. It is also possible (but very rare) for a TARDIS to become trapped in a fractional dimension between the Vortex and N-Space. But the Vortex is not just a danger to a TARDIS. A TARDIS is also a danger to the Vortex. A mortally wounded TARDIS could rip a hole in the vortex as it traveled.

The Web of Time: History

The Web of Time, within the Space-Time Vortex, was constructed by Rassilon and the Other. The axis of the Web of Time is a vast transdimensional Time Spiral that encompasses the universe and serves as a foundation for all points in space and time. Its creation made it much easier for the Time Lords (and any other species) to travel in time but it also made it much harder for anyone to change history. The Observer Theory states that for the changing of history to make any sense their must be an outside observer who watches all of history and sees this change. The Eye of Harmony is that observer. The Eye of Harmony serves as an anchor for the threads of Continuity and causality of the Universe and probably sits at the exact center of the Vortex and thus at the center of the Web of Time.

Using the data collected the Time Lords can observe and predict almost any event. In mapping out the Universe they rationalize it and create a permanent version of space-time. Because of this most primitive forms of time travel aren't capable of making major changes to History. The Web of Time is the structure that all future races used to build their own histories on. The Time Lords view History (aka the Web of Time or The Great Time Line) as high-order mathematical structures that can be predicted by powerful computers. However these processes are complex enough to be regard as living beings. Indeed some Time Lords (and all members of Faction Paradox) view history as a sentient being or beings (sometimes called Loa). Whatever the truth of the matter, it is known that the Web is capable of affecting the mind of a Time Lord. Indeed, due to density of strands in the Web of Time it is unhealthy for even a Time Lord to stand too close to the Eye.

It should be noted that the creation of the Web of Time also create Anti-Time - the opposite of the positive time. This timeless shadow of the Web of Time is just as destructive to causality and continuity as anti-matter is to matter. The theory of Anti-Time is viewed as superstition for millions of years.

The Rassilon Imprimatur biologically links a Time Lord to the Web of Time, making the foundation of the first four dimensions an integral part of Time Lord Biology and culture. This link means that Time Lords keep history largely unchanging merely by existing. Indeed they are so intertwined with the universe that they are a part of the Laws of Time and Space. An Osmosis Dampener or Transduction Barrier will put a blockade up in the Vortex that will prevent a TARDIS from traveling outside a defined area of the Space-Time Continuum.

Whenever another species causes enough temporal distortion to damage the Web an Interventionist (probably the CIA) is sent to prevent the species from causing further damage. While a single timeship exploding in the Vortex is no danger but the destruction of a fleet of 1700 timeships could rupture the Web of Time permanently.

Core Time Travel Equations

$E = mc^3$	
$82_z(37^{\infty})$	$8\pi \left[T^2 4\right]$
$\frac{6y \text{ S}\Sigma > \text{K}_5}{79_{\infty} (28*x)}$	$K^{10} _{\scriptscriptstyle \infty} \int^3 \leq K$
$K \approx x(K3)+S$	$S_{\infty}57_{\Theta}\pm\!\infty$
Z_{mass} $D \sum 9^*$	$46^{\circ} 2x \sqrt{5}$
$\frac{468}{N = (V)} \le C \text{ (K2)G}$	$T \neq 8(-z)$
	$\Delta G^{\alpha} > X$
	$MT\pi$

The Temporal Physics Equations that govern Time Travel are so complicated they couldn't all be stored in a human mind. The most basic of these is $E = MC^3$. Another important equation is 76Zs = EQ cubed. All Gallifreyan temporal technology must take into account the fact that revolution-induced gravity affects all temporal manipulation. The "closer" a TARDIS is to Gallifrey's Time Zone (3.5 billion years ago and the center of the Mutter's Stellian Spiral) the easier it is to navigate.

Gallifreyan Noosphere Parameters

The Time Lord's Noosphere is the field of thought and cultural understanding, whose limits are set by the Matrix's collection of data and the Time Lord mind's understanding universal laws and imagination. A TARDIS can reach the edge of what a Time Lord can imagine (the Noosphere) and then a bit beyond.

The Back Time Field Buffers prevent a TARDIS from visiting Gallifrey's past. The Buffers can be breached, but it is extremely difficult to do this. Removal of the Relativity Differentiator will allow a TARDIS to travel into Gallifrey's distant past (before the Eye of Harmony), but it will prevent the TARDIS from changing its spatial coordinates relative to the current planet. For reasons that even the Time Lords don't understand, a TARDIS cannot enter the Kasterborous Sector in Gallifrey's immediate future. It is however, possible to visit Gallifrey's star system several million years after the fall of the Time Lords.

Despite the restrictions in and around Gallifrey, a TARDIS can visit the past or future of the rest of the Multiverse with only two limits. For the most part the Space Parameter is defined by the size of the Universe. A TARDIS will automatically stop when it reaches the edge of creation. It is limited by the boundary between is and isn't. The planetoid Hindmost lies so far from Gallifrey that a TARDIS would have to be specifically re-engineered to reach it.

A TARDIS cannot travel further back in time than around 3500 years after Event One (the Big Bang). This is approximately 10,000,000,000 years before Gallifrey's present (13,500,017,903 BC). This limit is established because of the danger to the universe a time traveler could represent. The laws of physics are still forming at this point, and the addition of any particle to Event One could change the entire universe. The other limit is dictated by the ability of a TARDIS to collect Artron Energy from the Prime Eye of Harmony on Gallifrey. The forward

Time Parameter is located at approximately 3,510,000,000 years after Gallifrey's Present (10,000,000 AD). This forward limit of TARDIS travel was set because there are like to be species in existence who have grown more powerful then even the Time Lords. Automatic Systems prevent a TARDIS from traveling beyond this point and will trigger a boundary limit error message stating "Time Parameters Exceeded."

Very few Time Lords have ever traveled to Event 2 – the end of the Universe. However, if an operator overrides the Automatic Systems his TARDIS will have to rely on its own copy of the Eye of Harmony. If the Automatic Systems are overridden then a TARDIS can travel forward until the universe begins to collapse. Beyond this point it begins to lose its anchor point on Gallifrey because time works differently. The controls will begin to lockup and then a TARDIS will be destroyed. An emergency re-materialization is the only known solution. If a TARDIS travels this far into the future it will require some time to recalibrate before it can dematerialize again.

The Parameters are also defined by the boundaries of the Vortex's Time Spiral. Any TARDIS that tries to pass this boundary would be destroyed and scattered throughout the Vortex. These parameters are wired into core of a TARDIS making accidental crossing a virtual impossibility. As back up, if the TARDIS is in danger of being crushed by the Time Spiral, a Boundary Error Alarm will sound. The Defense Unit can then be plugged to the console and the operator can then instigate an emergency landing, which will allow the Defense Unit to materialize on a "nearby" world. The Defense Unit can be found on Type 40 and later TARDISes. (For more information on the limits of TARDIS travel see The Governing Circuit.)

Dematerialization



This is the first stage of space-time travel. The Molecular Dematerialization Codes are needed to activate the laser trigger found inside the Dematerialization Circuit. The Symbiotic Relationship Circuits automatically input these codes if the operator is a Time Lord. It might be possible to bypass the codes and activate the laser trigger using a Light Accelerator. Once the circuit is activated Dematerialization begins with the sublaminar processes being modulated by a stepped series of quantum-depolarized frabjastanic couplings. The resulting gravimetric

packets are then filtered through a reciprocating Brantix-Wankel amulator to convert their subneutronic spin from anticlockwise to inside out. This is necessary because the only way to enter the Vortex is by slipping through the eracks between one moment of time and the next. During the dematerialization phase the Relative Dimensional Stabilizer can be heard outside and, if the operator leaves the brake on, on the inside as well. Many Exeo-Shell disguises are equipped with a Materialization Beacon which indicates both dematerialization and rematerializations. The Beacon can also be set illuminate when there is one or more sapient being inside.

The TARDIS can take part of the surrounding environment with it when it dematerializes, but this requires some skill to accomplish reliably. The operator must use the dials beneath the console's dematerialization array to extending the Ionic Time Field. This is done by matching it to the

energy signature of a nearby object. If that object's energy signature has been locked on to the TARDIS's engines then it is possible take that object with the TARDIS during vortex travel and drop it in a new Time Zone. It is possible to move spaceships, or even entire towns through the Vortex using this technique but it is very difficult to accomplish. If programmed correctly, a TARDIS can dematerialize leaving whatever has recently entered it behind at the original coordinates. This is made even easier if the object is not fully in phase with the interior dimensions.

With the dematerialization complete the TARDIS's Harmonic Generator uses the subneutronic spin as a basic Space-Time Warping Template for a resonant harmonic/mesonic collapse of the interstitial mesh which opens and then seals the breach in space-time preventing any disturbances. The Space-Time Warping Template can be used to seal other types of breaches (see <u>Temporal Fusion</u>). If removed from the TARDIS the Space-Time Warping Template will appear to physically twist and warp. This is a neurological illusion caused by the template twisting the space-time structure of the neural network of the observer's brain. The amount of power being used by the TARDIS increases drastically during Dematerialization. Most of this power is converted into potential energy. To prevent this energy from discharging into normal space at the moment of dematerialization the energy is stored and slowly emitted from the Eye of Harmony in the form of Hawking Radiation. If a TARDIS is trapped in mid-dematerialization it will keep releasing chronometric particles from the event horizon. The energy will continue to be emitted until the TARDIS has "bled to death." After each materialization, it takes twelve minutes for the Time Rotor's Energy Storage Unit to power up for the next trip. This makes the Dematerialization Circuit the most power intensive system in a TARDIS.

The Dematerialization process will be quite rocky if the thermo-couplings have been exposed to freezing conditions. For this reason it is important to keep the main doors closed if the exterior environment is sub zero. Dyestrial toxin clouds in the atmosphere can inhibit a TARDIS's dematerialization. For this reason the operator should ensure that a TARDIS moves through time to a point where there is no Dyestrial toxin before beginning special displacement. Strong shields, temporal fields, magnetic fields, or steep gravity gradients (like a black hole) can also interfere with dematerialization.

Since mass effects the shape of space time its possible that a TARDIS may find it easier to enter and exit the Vortex away from large masses like a planet. During dematerialization it would shift itself slightly out of time - making it insubstantial and invisible. It would then lift-off to reach a safe distance from the nearest gravitational body. At this point it would enter the Vortex. Minor faults in the visual stabilization circuits would explain the numerous scenes of the TARDIS hanging or traveling through normal space. The various scenes of the TARDIS flying up into the sky could be cases where it takes off or arrives in a visible (and sometimes tangible) form due to a malfunction of the visual stabilization circuit. Alternately the Vortex might look like space when the TARDIS is hanging in limbo (and thus not generating a wormhole tunnel). The handful of physical take off scenes could just mean that the Doctor chose to use Hover Mode to gain some distance from a specific interference field before he began the dematerialization process.

Vortex Travel: Walrus Mode



Travel within the Space-Time Vortex is the second stage of space-time travel. While within the Vortex the TARDIS operates in Walrus Mode. This keeps the pranantic waveform properly antifrated and keeps the timeship's reality quotient reduced to 0.9. The reduced reality makes it easier to travel through time. The Spatial Drive will activate automatically when a TARDIS has entered the Vortex. The Wormhole

Generator, Stabilizing Devices, and Refractors will induce, generate, and control the wormhole that a TARDIS travels through in the Vortex. While wormholes are extremely difficult to stabilize in Normal (Minkowski) space, due to the space pressures, such pressures are absent within the Vortex. The Light Speed Overdrive is an essential component of the Wormhole Generator and thus is vital to Vortex Travel. Two crystalline jewels are necessary of the continued operation of the hyperbolic laser drive. In an emergency this Overdrive can be patched into a radio transmitter to send radio signals to anywhere in the universe.

The Dynamorphic Generators use revolution-induced gravity to convert the Artron Energy into Orbital Energy. This energy takes the form of energetic Muons, which provide countermagnetization Thrust for travel in the Space-Time Vortex. The thrust is controlled by the Velocity Override which regulates and modulates the Time Rotor using a form of Block Transfer math known as Forced-Matter Calculations. While often described in terms of a ship moving via thrust it is technically more accurate to say that the wormhole flux is flowing by a stationary time capsule. The gyro dials display the status of the gyro-series which stabilize the TARDIS in the Vortex. Gravity from Normal Space has no effect on TARDIS travel.

In theory once the coordinates and course are programmed in, a TARDIS will travel to its destination and materialize automatically. And if the Logical and Physical mapping techniques described in Stages 11-275 have been understood and implemented, i-o ambiguities should not normally create difficulties at this stage. In summary, the sentience of the Protyon Core guides the timeship to work with the currents and eddies and tides of the Vortex. Not only does this make for a much smoother trip, it also allows the TARDIS to remain in the Vortex for an indefinite amount of time. Most (if not all) TARDISes prefer the environment of the Vortex to that of Normal Space - however TARDISes have Curiosity Circuits. Without these circuits a TARDIS would never leave the Vortex.

In practice Time Lord supervision is sometimes necessary to avoid dangers in the Space-Time Vortex. For example, collision with other objects in the Vortex can be prevented using the Anti-Collision Control. The anti-collision device is part of the HADS and uses a coordinate override to change location. A level five alarm indicates a temporal collision has in fact occurred. Turbulence while in the Vortex is most often caused by altering the settings of the dimensional stabilizers, a malfunction in the relative drift compensator, or by feedback from the solar comparator.

If a TARDIS's navigational system and velocity regulator are reset incorrectly, the Control Room will accelerate to ultra-warp speed beyond the spatial limits of the noosphere parameters and into frontier of the unknown. It the process the hyper-sonic speed will flood the control room with

Time Spillage. Jamming the Dimension Circuits of a TARDIS will prevent it from materializing anywhere. It will continue to fly through the vortex until its power supply is exhausted. Another danger involves the relativity circuit of the temporal balancing governor. If the default temporal recursion algorithms of this circuit and the back-up circuits are disrupted the TARDIS will accelerate backwards in time at a tremendous rate. The TARDIS must be brought under control using the velocity override before the speed exceeds six and a half googol years per metasecond or the ship will collide with Event One and be destroyed.

The vortex wormhole can be displayed on the scanner screen. A red tint is used for traveling forwards in time and a blue tint indicates travel into the relative past. Many people find seeing all of reality spinning by to be a disturbing experience. For this reason the scanner screen is often switched off during vortex travel.

While a TARDIS's transportation of its crew through time and space is usually described as a "Journey" it is just as accurate to say that a TARDIS actually works by recording is crew's biodata and reprocessing/manipulating their future to take into account a different location in space and time.

While traveling in the Vortex the TARDIS always has a faint vibration, which vanishes when the ship materializes. Using the PAST [LINK] the TARDIS provides almost total protection from the energies of the Vortex, most crewmembers experience a subconscious sense of disconnection during vortex travel. This is the result of a cellular level awareness of being outside the first four dimensions. During Vortex travel some Time Lords are vulnerable to Temporal Shift Lag due to having 22 different types of temporal senses. Such effects can only be overcome if the Time Lord develops special mental disciplines. Temporal Shift Lag only effects beings with a symbiotic nuclei.

Rematerialisation: Actualizing the Quadro-Anchor

This is the third stage in a space-time journey. The operator should activate the Synchronic Feedback Checking Circuit (to ensure that the TARDIS does not arrive upside down) and the Multi-Loop Stabilizer (to ensure the TARDIS lands firmly on the nearest surface). The Safety Precaution Selector prevents a TARDIS from materializing in a dangerous location (see <u>Safety Precaution Selector</u>).

If the Time Lock function slips then the Landing Circuit will jam and a TARDIS will end up materializing in space - possibly in orbit of the planet it was supposed to materialize on. TARDISes can be forced to materialize at a specific location by an outside force using a navigational guidance distorter tractor beam.

Alternately if a timeship's Dynamorphic Generators are not functioning at full capacity then it is possible for its course to be deliberately deflected by another TARDIS. This is done by materialize a TARDIS at the exact same space-time coordinates of the arriving timeship. If successful the arriving timeship will be thrown back into space-time. If unsuccessful the operators risk Time Ram (LINK).

When the TARDIS reaches the correct location in the Vortex it exits the wormhole. Right before materialization in a time zone whose History is uncrystallized the TARDIS releases a burst of Artron Energy to collapse the infinite number of possible timelines into a single crystallized

timeline. A TARDIS also emits a burst of Tachyons right before materialization. Because of this, it is possible for lesser species to detect the imminent materialization of a TARDIS by watching for peaks in a warp oscilloscope, or gravity dilation meter. Shields rated at 7,300 megazones or a soft Icaron Field can prevent materialization, as can strong temporal, magnetic, or gravitic fields. Weather control systems, such as a Graviton, can pull a TARDIS off course. If a fault occurs that prevents a TARDIS from re-materializing, then the TARDIS will initiate an Emergency Stop.

For the non-time sensitive, re-materialization looks rather simple. A TARDIS fades into view accompanied by the sound of the Dimensional Stabilizers. This sound will also be heard on the inside if the operator leaves the brake on. There is also a stirring of the air as the TARDIS physically displaces the local atmosphere. Many Exo-Shell disguises are equipped with a Materialization Beacon which indicates re-materialization. Those who are fully time sensitive can 'see' pseudo-metallic tentacles (the Dimensional Stabilizers) extend out of the Space-Time Vortex. Without the exterior shell the real world interface appears to be a biomechanical crustacean with several waving fins (the Scanner and other sensors). The time-warp anchorage unit acts to stabilize the TARDIS in its new time zone while the Harmonic Generator then seals the vortex breach by collapsing the interstitial mesh with resonant harmonics to prevent disturbances. Every Re-Materialization leaves a temporary space-time track in the form of residual Artron Energy in the Vortex. The TARDIS Scanner automatically collects data from the landing site's radio, computer, and satellite broadcasts. Analysis of any local cities is made as well. All of this information is stored in the Data-Bank. Using the Telepathic circuits, The TARDIS automatically compensates for traditional jet lag. However certain malfunctions in the TARDIS systems can cause crew members to experience extreme jet lag. The last stage in a TARDIS flight is Stage 387. This stage involves zeroing the co-ordinate differential, so that the automatic systems can reactivate the real-world interface. After this the Main Doors can be opened.

It should be noted that the accidental opening of the Main Doors after the Stabilizers have been extended but, before the displacement field has engaged and materialization is complete, can cause severe disruption to the dimensional stabilizers, possibly resulting in a miniaturized crew and TARDIS. It is also dangerous to overlap the materialization fields of two different timeships, as this will jam the materialization and cause severe damage to both vessels.

Since mass effects the shape of space time its possible that a TARDIS finds it easier to enter and exit the Vortex away from large masses like a planet. During rematerialization a TARDIS would emerge from the Vortex in an invisible insubstantial form somewhere above the destination. It would then settle on the ground (or inside a cave, ship, or building) and fully materialize in solid form. Minor faults in the visual stabilization circuits would explain the numerous scenes of the TARDIS hanging or traveling through normal space. It would also explain why the TARDIS is occasionally seen descending from the sky rather than appearing out of nowhere. Alternately the Vortex might look like space when the TARDIS is hanging in limbo (and thus not generating a wormhole tunnel). The physical descents from the heavens might simply be occasions where the TARDIS materialized in mid-air and hover mode was used than used to reach the surface. It this was the case then its possible that a TARDIS occasionally materializes in space to "get its bearings." Under such circumstances the journey can be continued by toggling one of the coordinator vector switch at the correct time.

Microjumps: Short Hops

This is a "short hop" through Space or Time, usually less then a few hundred miles or a decade through time. Microjumps through space are usually achieved by disconnecting the Time Element to prevent any temporal drift. Due to the Blinovitch Limitation Effect they are difficult to perform accurately and even more difficult to accurately reverse. Performing several micro-jumps in a row causes a build-up of residual Artron energy, which makes a TARDIS easier to track. It should be noted that the complexity of micro-jumps is directly proportional to the size of the universe the capsule is attempting to navigate.

Temporal Orbit

A TARDIS which has materialized can be shifted into Temporal Orbit by bypassing the Time-Space Rationalizer. This keeps a TARDIS traveling back through time at the same rate that time is passing outside - a sort of a temporal free fall. As a result time outside a TARDIS appears to be "frozen." The operator could spend weeks or years inside his TARDIS, and when he leaves the Orbit, he will find that no time has passed outside his TARDIS.

Temporal Drift and Alternate Time

The Relative Drift Compensators try to keep the TARDISes position in both space and time stable by protecting it against time eddies, random molecular disturbances, and other fluctuations. It will cause the TARDIS to move towards and lock onto the nearest major center of gravity. If a TARDIS is placed in space near a planet, the Compensators will draw the TARDIS down to the surface of the planet.

While in <u>Hover Mode</u> a TARDIS can be set for Temporal Drift by disabling the Relative Drift Compensators and engaging the Stasis Switch. This will cause a TARDIS to move forwards in time at a rate of 50 years a second. An indicator light shows when the switch has been engadged. Unlike other forms of time travel the dimensional stabilizers will not be heard inside or outside the capsule. Though a TARDIS is not fully rematerialized in N-Space, the Scanner can still be used to observe the effects of the passage of time outside the vessel.

This system can even be used to temporarily examine the Alternate Time possibilities by jumping a time track. While in alternate time the Yearometer will stuck in safety mode reading all zeros. The main doors can be opened but if the crew leave the timeship they will discover that their reality quotient to low to have any effect on events in the time zone. They will be ignored by all life forms they encounter and indeed be able to pass through some objects. The reality quotients of the crew will remain low until they leave alternate time or until the TARDIS's automatically corrects this wandering by moving a crystalline component back into place. At that point the crew will all snap back in time to the point where the TARDIS properly materialized before the journey into alternate time began.

A malfunction in the relative drift compensator often causes turbulence while in the Vortex. If a malfunction caused a TARDIS's gravitation bearing to de-rectify or the Lateral Drift Compensators to activate the ship could drift away from the current time zone without its operator on board. The TARDIS needs to be in Normal Space for its temporal drift systems to be recalibrated. A TARDIS can use its temporal drift function without a Time Lord being on

board. However it will only be able to travel 1,382 years back in time before beginning to lose structural integrity.

Automatic Emergency Landing

Several events can trigger an Automatic Emergency Landing. If the Navigation or Guidance



Systems suffer sudden damage while in flight (such as a Critical Timing Error, or monopole turbulence), if the Main Doors are opened while in the Vortex, if the TARDIS is approaching the boundary of the Time Spiral, if exposed to time spillage with a rating of more then 7 of the Bocca Scale or if the Warp Ellipse Cutout Circuit detects an imminent collision with a vessel in spatial-temporal warp ellipse orbit. Under all these circumstances (and more) a TARDIS will use the coordinate override and the Pause Control [LINK] to

initiate an Automatic Emergency Landing on the "nearest" available safe place – preferably a habitable planet. If no safe place is available some TARDISes have been know to materialize inside themselves (see Space Loop LINK). An Emergency Materialization can be manually by pushing a green button on the Master Control Console. This function can be used to get a TARDIS to home in on and arrive near the source of a broadcast signal of some sort.

Emergency Stop: Free-Float

While in Vortex travel the Emergency Stop function can be used to put a TARDIS into Free-Float mode. The hyper-dimensional neutralizer circuit halts the TARDIS's flight and suspends it in the inter-dimensional space of the Vortex. A TARDIS can suspend itself in the Vortex forever. Emergency Stops occurs automatically if a "kink" is discovered in the dematerialization protocols or if a fault occurs that prevents a TARDIS from rematerializing.

Autonomous Control

Some operators who have a very close relationship with their TARDIS have been known to enable Autonomous Control which allows the ship to select its own Space-Time Coordinates and input them into the Directional Unit. Among other things, it can help ensures that the ship will materialize near what he is looking for (say a missing travelling companion). This is accomplished using the Intuition Circuits. The neural network uses the Astral Map's holographic representation of the Universe to make guesses about where the TARDIS should materialize.

If a TARDIS's options analysis switching loops become clogged with partially rejected parallels the TARDIS will effectively have Autonomous Control regardless of the operator's wishes. This might result in a TARDIS constantly taking the operator to time zones where the Time Lord's skills and abilities are needed most. In some cases a TARDIS has been know to automatically enact an emergency program to reach the timeship's operator. Some operators have even installed a switch to trigger such actions.

Emergency Displacement System (EDS)



The Emergency Displacement System (EDS) is usually activated by the TARDIS in sitations where the Hostile Action Displacement System would be insufficient to safeguard the capsule. By enabling the localized default setting the operator can also trigger the system with the push of two buttons. When activated, the EDS uses a type of microjump known as a Materialization Flip-Flop. Because this setting has its own logic loop it bypasses most of the guidance systems, resulting in a materialization in a theoretically safe location.

This safe location will take the form of a random 'nearby' point in space in time that could be up to

several hundred miles and somewhere between 5 minutes to 500 years from the previous location. However, if the threat pursues the TARDIS into the Vortex, the ship will travel as far through time as necessary to escape from the danger, even if it means violating the noosphere parameters.

Using a Time Safety Jump the EDS can be limited to temporal jumps. By limiting the Flip-Flop to a shift through time only, the operator can materialize the TARDIS inside a craft that was on a collision course for the capsule. This requires a fair amount of skill from the operator as timing is critical.

While designed to more the TARDIS to random safe location, this system can also be used to take the TARDIS to a random dangerous location by reversing the linearity of the proton flow. Materialization Flip-Flops tend to cause damage to a TARDIS that takes some time to repair and for this reason should only be used in an emergency.

Curiosity Circuits

TARDISes prefer the environment of the Space-Time Vortex to the four dimensional world. They have Curiosity Circuits to encourage them to leave the Vortex. These circuits have linear spools that must be periodically reset.

The Doctor's TARDIS might be attracted to the Artron Energy produced by the conscious minds of sentient beings collapsing quantum waves into History. That would explain why there is sentient life everywhere it materializes. It even possible that some of his traveling companions are selected based on their higher then average levels of artron energy.

Emergency Unit



When this small box is plugged into the Control Console, it disconnects the entire coordinate sub-system of a TARDIS, which results in a TARDIS being removed

from the normal dimensions of time and space and being relocated outside of Normal Space. Normally it is impossible to alter the coordinates once the TARDIS has activated the Spatial Drive, but the Emergency Unit is the exception to this limitation. The Unit can be used to remove a trapped TARDIS from a dangerous environment or course through the Vortex, but runs the risk of trapping it in the Land of Fiction (located within Conceptual Space). For this reason the Emergency Unit has a built in timer to warn the operator to log in the coordinate subsystems and leave as soon at the Time Rotor's Energy Storage Unit is charged- usually 12 minutes. After the Time Lords dismantled the Land of Fiction its possible to travel through the void of conceptual space as long as one doesn't try to materialize until after one has left.

Temporal Fusion

A TARDIS can be used to collapse an existing time couture by navigating through the corridor to close and seal the damage behind it. This is done using the Space Time Warping Template that collapse a TARDIS's breach in space-time during dematerialization. If a malfunctioning TARDIS causes damage (such as a rift) to either the Multiverse or the Space-Time Vortex, it is sometimes possible to use Temporal Fusion to repair this damage by reversing the trip that caused the damage. While Temporal Fusion can seal the "rift" it often leaves a paradox scar that can have minor effects on local causality. It is likely that improperly performed Temporal Fusion could lead to Eigen Ram.

Spatial Overlap

A TARDIS can materialize around an object. This object will then appear within a TARDIS's interior. A TARDIS automatically diverts these objects to the currently occupied control room, but this can be overridden to make the object appear anywhere in the interior that the operator desires. It is dangerous to materialize around objects with temporal or multidimensional displacement (such as another Time Travel Capsule).

If programmed correctly a TARDIS can dematerialize leaving whatever has recently entered it behind at the original coordinates. This can be done with objects that were spatially overlapped or objects that entered through the Main Doors.

TARDIS Interlock



Two TARDISes can phase into (or materialize inside) one another, but they have to be operating on the same frequency. The frequency is adjusted using the Time Sensor Control. The Time Sensor Control fine-tunes the exact space-time coordinates of the atoms that make up a TARDIS. also ensures the proper time setting, which must be within 1 x 10⁻⁹ nano-seconds. If the time setting is too low the TARDISes will go flying off in opposite directions. If it's too high, then <u>Time Ram</u> occurs. For this reason performing TARDIS Interlock violates 15,473 different Laws of Time. If one TARDIS has no shields then the other ship

must lower their shields for Interlock to occur. If someone or something happens to be standing in the space where a TARDIS is phasing into during interlock the person or object will be atomized.

When two TARDISes are successfully Interlocked, they will appear to be inside each other. This can cause a Gravity Bubble by increasing the weak force flux beyond design limits. A Gravity Bubble will trap a TARDIS at its current Space-Time Coordinates. If the operators of both timeships work together the capsules can be separated without danger of damage. But without the help of the other Time Lord a significant power boost to the drive systems is necessary to escape the Bubble. It should be noted that prior reconfiguration of the Architectural Configuration Program can prevent Gravity bubbles (see Environmental Systems).

TARDIS Interlock can be used to capture and tow a more primitive TARDIS. Under such circumstances the only way to escape is for the captured TARDIS to reverse the time vector drive. The back surge will break the two ships apart. Such an action can tear a rift in the Vortex and also runs the risk of draining the transpower system to the point were it needs to be jump started to access the Eye of Harmony.

Time Ram

If two TARDISes occupy precisely the same point in the Vortex (such as from a failed attempt at Interlock), then Time Ram occurs. It is one of the most dangerous things that an operator can do with a TARDIS. During Time Ram the atoms making up two TARDISes occupy exactly the same space. This is enabled by careful manipulation of the Time Sensor control. The chaotic forces between the two overlapping ships will grow until one of them explodes. While the attacking TARDIS sometimes survives in a Time Ram a more likely outcome is that both TARDISes will be destroyed, as well their Eyes of Harmony. This will result in the uncontrolled release of enough Energy to destroy most of a solar system.

There is, however, there a small chance that one of the TARDISes will evaporate and the other will survive. In this case the energy released would only destroy all matter in a 2.4 km (1.5 mile) radius.

Space Loop

It is possible to materialize a TARDIS inside the past version of that same TARDIS, but it requires overriding the Time-Track Crossing Protection Protocol circuit. If a TARDIS rematerializes inside of itself it creates a space loop, where the endo and exo-shell would joined. It should be noted that if the time setting is too high an Eigen Ram will occur.

If a Space Loop is successfully created, then the crew would be trapped within the TARDIS forever. The exo-shell is likely to undergo temporal drift, resulting in a distortion of the causality between the too interfaces. But it is possible to set up a controlled temporal explosion to escape.

Eigen Ram

If an operator attempts to send a TARDIS back in time without changing the spatial coordinates there is a chance that the ship could travel back in time and Time Ram itself. Such an event would be known as an Eigen Ram. The Banshee Circuits would activate the Cloister Bell if such a course were entered. But if the vortex shields are not activated when a TARDIS dematerializes it could cause an Eigen Ram without triggering the cloister bell.

In either case if Eigen Ram occurs there will be two time zones at war in the heart of the TARDIS. While lesser species will perceive only a severe distortion of their senses all Time Lords traveling in both the past and future version of the TARDIS will be able to see and interact with each other (almost inevitably causing a violation of the First Law of Time). The operators will only have just over 5 minutes to alleviate the situation before the paradox blows a 30,000 square kilometer hole in the space time continuum. The resulting black hole will be strong enough to eventually swallow the universe. Such an event will, of course, cause the cloister bell to ring. The solution is to turn the TARDIS's Eye of Harmony into a supernova at the instant of destruction using the following procedure.

- 1. Vent the thermal buffer
- 2. Floor the helmic regulator
- 3. Fry the Zyton-7 Crystals

The Supernova will cancel out collapse of the two black holes merging, causing all matter to remain constant. The Operator will, of course, have to replace the Zyton-7 crystals afterwards.

Time Control Unit

A Time Control Unit is a golden sphere about the size of a Cricket ball. It is stored in the Secondary Control Room. All TARDISes have one of these devices, which can be used to remotely control a TARDIS by broadcasting Stattenheim signals that travel along the time contours in the Space/Time Vortex. It allows a minimum of two Time Lords to (with some difficulty) telepathically remote control a TARDIS that the Time Control Unit is linked to. The Time Control Unit can be detached from the console and taken into the field. Some Time Lords have used it to shift one end of a Time Corridor to a different point in time.

Remote-Parallel Mode

Using the Tracking Monitor Control Board, the navigation units of two TARDISes can be Remote-Paralleled so that wherever one goes the other will go too. If the power ratios are correctly known and balanced this function can even be used on another TARDIS that is being tracked by the Time Path Indicator [LINK].

A variation of this function allows an operator who has access to the Control Crystal of another TARDIS to use his console to enact complete Parallel Control over the other TARDIS. This allows him to remotely operate almost all the systems of the other TARDIS. Parallel control can even be used to have precise control over a TARDIS equipped with a symbiotic bypass.

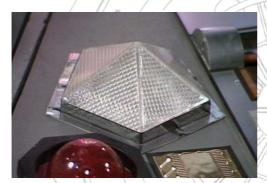
Both forms of parallel control can be thwarted by reversing the time vector drive. However this tears a rift in Vortex drains the power of both TARDISes to the point where there is not enough to jump start the systems.

Remote Control

This system allows the High Council of Gallifrey or the Celestial Intervention Agency to control any TARDIS with a Recall Circuit whose location is known. They can force it to materialize in any Time Zone and prevent dematerialization. As with most forms of remote TARDIS navigation, use of the Remote Control drastically reduces the life span of a TARDIS's <u>Zyton-7</u>. Should an operator find a way to override Remote Control, the Time Lords can use Collection Beams on any dematerialized TARDIS whose location in the Vortex is known.

Circuits that allow Rassilon to override the commands of a Time Lord operator are traditionally installed on all TARDISes. These same circuits can also be controlled using the Ring of Rassilon. In a similar fashion, the original Worshipful and Ancient Law of Gallifrey to serve as a "key" to the Time Lord prison asteroid, Shada. When the pages of this book are turned while within a TARDIS the book will use Remote Control to pilot a TARDIS to Shada.

Recall Circuit



The Recall Circuit is a five-sided crystal with circuits imbedded into it that, when it receives the right Stattenheim signal, can force a TARDIS back to Gallifrey. Stattenheim signals travel along the time contours of the Space-Time Vortex. In a Mark II console it is stored inside the base of the console. In a Mark VI console it is mounted on panel 6.

The Recall Circuit is almost never used and requires authorization by the High Council. However when its use is authorized the Time Lords can punish

operators who resist its summons by steering the rebellious TARDIS into dangerous situations and then deactivating all the defensive mechanisms. Because it is integrated with the Main Space-Time Element it is difficult (but not impossible) to remove without disabling the TARDIS.

Trans-Replicator Mode

When activated it causes a TARDIS to swap locations with another nearby pre-selected TARDIS provided that both capsules have been set to Trans-Replicator Mode. The idea behind this system is to allow for the easy return and replacement of a damaged TARDIS that needs repair. Thus Trans-Replicator Mode will still operate even when one of the timeships is in need of major repairs. It will also function even when one of the capsules is trapped by external forces.

Stattenheim Remote Teleport Control



Normally operating a TARDIS by Remote Control [LINK] drastically reduces the life span of the Time Control Unit's Space-Time Element. The Stattenheim Remote Teleport Control is a method of remote TARDIS control that does not

cause this damage. With it a Time Lord can summon his TARDIS to his current location at the push of a button.

The system was secretly perfected around the time of the War Lord Malfeasance Tribunal. The CIA installed this newly developed system on capsules being used by their agents, like the Proto-Type 97. Its existence would not become general knowledge for almost 450 years. The system is found only Capsules that have the Mark X refit installed. It takes several days worth of work to uninstall a Stattenheim Remote Teleport Control.

The Statenheim Control uses a teleport control which sets up a twin symbiotic link to the central diaphragm. The handheld Recall Button Disc broadcasts a Stattenheim signal through the Vortex, which summons the operator's TARDIS when the operator is in the field. Any Time Lord with a properly tuned Recall Disc can exert dual-control over a TARDIS with this system. The Disc can also be used to get a TARDIS dematerialize and enter a parking orbit in the Space-Time Vortex to await summons. When not in use the small black Recall Button Disc is stored inside a transparent dome built into the console.

Dreamtime

It is possible to restructure a TARDIS so that it can be "materialized" within the conscious (or unconscious) mind of a sentient being - including the mind of the Time Lord who is symbiotically linked with it. This is possible because a TARDIS is not composed of real matter but collections of Block-Transfer Equations. Piloting a TARDIS into its operator's Dreamtime is very difficult and dangerous for both the TARDIS and the operator and will result in severe damage to the TARDIS.

Time Loop

A Time Loop is a distortion in the Fourth Dimension where time folds back on itself. A TARDIS can be programmed to time loop an area at least 100 meters long. This is very difficult to do and results in a TARDIS (and the operator) being trapped in the Time Loop. It is possible for a TARDIS to escape from the Loop, but this is even more difficult to achieve. Stopping the Time Rotor while in Vortex might allow a TARDIS to escape from some types of Time Loops (but not Chronic Hysteresis). It is possible for a vessel trapped in a Time Loop to be forced free by another TARDIS in the Vortex.

It also possible to set up a temporal bubble around a particular room within the TARDIS, effectively trapping everything within the room inside an endless time loop. Under certain dangerous situations the TARDIS will automatically put the inside of the control room into a time loop to protect the crew within such a temporal bubble.

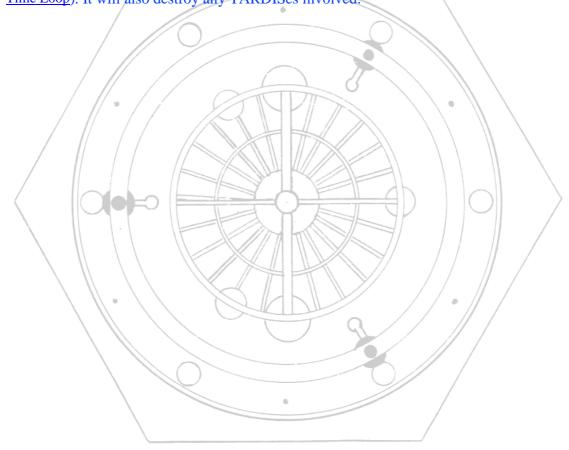
Time Corridor: aka Kontron Tunnel

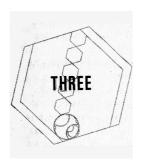
A time corridor is a type is a form of space-time travel that involves creating a wormhole through the Vortex that is connected to two different space-time zones, and is stable enough to allow unprotected humanoids to travel it. The traveler needs only to step into the Time Corridor to be instantly transported to the other end. Because these wormholes are very similar to the ones used

by a TARDIS it is quite easy for a TARDIS traveling in the Vortex to be caught in a Time Corridor and be drawn along it to its destination. The time stresses of being caught in a Time Corridor can accelerate a TARDIS to such a high speed that it could break up if it tries to escape. There is also a chance that the TARDIS could be damaged by time particles colliding with its multidimensional implosion field. With proper modifications a TARDIS's Time Control Unit can be used to shift one end of a Time Corridor to a different point in time.

Time Drill

A herd of TARDISes (locked in <u>Parallel Control</u> with a lead TARDIS) can be set to travel in a closed time-like spiral through the Space-Time Vortex. Moving at a billion years a second this Time Drill can penetrate almost any temporal distortion or barrier (such as a <u>Time Loop</u>). It will also destroy any TARDISes involved.





Chapter 3: TARDIS Guidance Systems



the Doctor's Console Rooms.

"Overweight, underpowered, museum piece... Might as well try to fly a second hand gas stove!" -The Master

It's no good being able to go anywhere in time and space if you always arrive in the middle of deep space or at the centre of a star. This section examines in detail the various systems that get a TARDIS going where its operator wants it to go, or not as the case may be. In particular, it contains a guide to the various TARDIS Control Rooms, including all the known variants of

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Symbiotic Nuclei



All stable forms of time travel require re-writing of the traveler's biodata. Because of this, time travel makes sapients vulnerable to the influence of powerful transtemporal beings that exist outside of linear time. These beings will try to force the time traveler to become their agent/servant. It is for this reason any species that wants to become a stable, time-active race must alter itself. Gallifreyans who attend the Time Academy have their Biodata modified to include Symbiotic Nuclei, making them Junior Time Lords. This done by anointing them with Time Energies from the Eye of Harmony.

Symbiotic nuclei can also be added to a subject's biodata by injecting them with Retro DNA serum in the form of a red liquid. The Nuclei are probably located in a Time Lord's hearts.

The Symbiotic Nuclei maps the Time Lord into the Space-Time Vortex with Block-Transfer Numbers. They become linked to the heart of space-time and capable of changing their time-state by thinking the right Block-Transfer equations. It also allows them to withstand the energies of the Vortex.

This symbiotic nucleus is needed to implement the Rassilon Imprimature on a Time Travel Capsule (such as a TARDIS). To achieve the full rank of Time Lord a Gallifreyan must be granted a TARDIS and form a symbiotic link with it. This Imprimature gives the Time Lord access to the Power of Creation.

This link means that Time Lords are constantly sending small temporal waves throughout the Universe. The Symbiotic Nuclei cannot be removed from a Time Lord without killing them. They can be permanently deactivated by the right type of mutagen. Such a deactivation would eliminate a Time Lord's powers and his ability to regenerate.

Rassilon Imprimature: aka Symbiotic Relationship Circuits



"Warning. It is useless to try operating this machine until the correct telepathic link has been established. This link is known only to the Owner of this Type 40. Attempts to tamper with the control console will be met with the strongest possible retaliation."

- TARDIS Type 40 Master Control Console Operating and Repair Manual, Page 1

The Rassilon Imprimature is the legendary link that a Time Lord shares with his TARDIS. To achieve the full rank of Time Lord a Gallifreyan must be granted a TARDIS and form a symbiotic link with it. On their first day at the

"TARDIS Academy" each TARDIS chooses their Time Lord operator from the ranks of Junior Time Lords at the Time Academy. It is also possible (in some situations) for a Gallifreyan with a symbiotic nuclei to purchase a TARDIS.

Once chosen, a TARDIS uses its Symbiotic Relationship Circuits to form a symbiotic bond of self-regenerating transcendent biomechanics with the Symbiotic Nuclei that is woven into the Time Lord's very being. This Rassilon Imprimature is based on irrational numbers and imaginary equations. Because of this shared artron field, a bonded Time Lord's artron energy levels are greatly elevated, and the Gallifreyan can now access to the greatest of all Time Lord abilities - the Power of Creation. As part of this Imprimature, the TARDIS idiosynchronizes itself to the operator's metabolism giving the operator quasi-symbiotic control of a TARDIS. This ensures that the will of a Time Lord Operator always overrides the will of a TARDIS's Artron Center. The Telepathic Induction Circuits [LINK] are an essential part of this system and their removal will sever the symbiotic link.

To initiate a link the following procedure is used.

- 1. The operator will type "INFORM NEXT" after the "NEXT" prompt on the console's visual display unit (VDU). The VDU will read "NEXT = HELLO TARDIS."
- To run the program type "HELLO TARDIS." The program will respond with "HELLO coperator's name> + CHECKING." The VDU will then scroll through the dematerialization code as the Symbiotic Relationship Circuits checks the operator's Symbiotic Nuclei and forms the bond. The VDU will then read "CHECKING COMPLETE + st Fault locator damage report> + OTHER FUNCTIONS GO + NEXT".
- 3. The operator can then type "INFORM NEXT" which will result in the VDU displaying "3. ENTER DESTINATION + SPACE-TIME CO-ORDINATES". At this point the TARDIS is now ready for normal operations. See Dematerialization Procedures

Even though all full Time Lords have a TARDIS assigned to them they must still obtain authorization before using it on a mission. The Imprimature Signatures of all Time Lords/TARDIS unions are recorded in the Records section of the Berthing Bay Imprimatur Cortex. This Cortex is directly linked to each TARDIS's symbiotic Relationships Circuits. While the official owner of any TARDIS can be checked by cross referencing the TARDIS's

Imprimature Signature against these Records, an illegally cloned TARDIS would have the same Imprimature Signature as other original TARDIS. It is possible to "rekey" a TARDIS by severing the symbiotic link but this requires hours of work by a certified TARDIS Systems Technician. Scrambling the Berthing Bay's Imprimatur Cortex would permanently disable all the symbiotic relationship circuits of all the TARDISes on Gallifrey, preventing any of them from entering the Vortex. Only the Lord President of Gallifrey has the authority to initiate such an action.



No substance can survive the time winds of the Vortex without a Molecular Stabilization System. For this reason, the Symbiotic Atomic Nuclei is needed to 'prime' a Time Travel Capsules, form a quasi-symbiotic link with the Capsule, and to prevent the Capsule from molecularly destabilizing in the Vortex. The symbiotic-link between a Time Lord and his TARDIS allows the TARDIS to access the Dematerialization Codes from his symbiotic nuclei. When the Rotor Control is activated the Briode-Nebuliser absorbs a symbiotic print of the Codes from the operator's Nuclei. This genetic link

serves as a genetic key for the Dematerialization Circuit to access the Vortex and as programming code for the Molecular Stabilizers. The Nuclei serve a similar function with Time Rings and other trans-temporal technology.

The nuclei is essential to initiate and survive long term travel in the Vortex. Most attempts to use a TARDIS without a symbiotic nucleus results in severe wounds and eventually death for the operator. The Capsule itself will be destroyed by the Vortex after several hundred years. The safest way for someone without a symbiotic nuclei to perform any sort of space-time jump is to use the Emergency Manual Override of the Hostile Action Displacement System [LINK]. A TARDIS can also use its temporal drift function without a Time Lord being on board. However it will only be able to travel 1,382 years back in time before beginning to lose structural integrity.

It is possible for a Time Lord to leave a thin membrane of symbiotic print by paring the nebuliser's interface. This membrane will allow a TARDIS to enter and exit the Vortex once without the presence of a Time Lord. If the coordinates have been preset then the Remote Control Facility allows a TARDIS to make a space-time jump without having an operator onboard. Using the Manual Symbiotic Bypass Controls it is possible to permanently bypass the nebuliser and operate a TARDIS without a Rassilon Imprimature.

A TARDIS generates a low intensity telepathic field of Artron Energy. This telepathic field leaves a "thumb print" of the Time Lord's Symbiotic Nuclei and can be used by others to identify the operator of a TARDIS even after it departs. These prints get even more noticeable if a TARDIS makes a bunch of short hops. However this trail can be distorted by bypassing the Symbiotic Relationship Circuits.

Through the Rassilon Imprimature a Time Lord becomes able to detect his TARDIS's location from several dozen meters away, and predict when materialization is imminent. A Time Lord who is very close to their TARDIS can probably send a telepathic message which will cause its Eye of Harmony to detonate in a massive explosion that would destroy everything for miles. The link even allows the Time Lord to detect a badly wounded TARDIS's "cry" of pain and feel when his TARDIS has been destroyed. This exchange works both ways. If the operator suffers a serious mental trauma it can disable many of the TARDIS's systems including the telepathic circuits.

The Rassilon Imprimature makes a TARDIS more then just a vehicle or even a beast of burden to a Time Lord, they are essential parts of Time Lord technology and culture. The semi-instinctual neural-link between a TARDIS and its operator is almost sexual in its intimacy. Some believe a TARDIS provides a sense of companionship for its Time Lord operator in much the same way that a husband or wife does for their spouse. While the option exists for a TARDIS to form a link with all six of its Time Lord crew, it is impossible (or at least unethical) for a Time Lord to own more then one TARDIS. This is, at least in part, due to the fact that a TARDIS becomes terribly jealous when an operator is bonded to more then one. A TARDIS dims its lights when attempting to communicate with its operator.

There is at least one know case of a Time Lady linking herself to her TARDIS's Protyon Core at the exact moment of her regeneration. The artron energy was channeled into the TARDIS causing the two of them to become, in essence, one being, with the TARDIS functioning as her body.

If a TARDIS is abandoned by its operator it will deactivate most of its systems, and alter its appearance as necessary to avoid attracting attention. In theory, the death of a TARDIS's Operator causes the Capsule to automatically return to Gallifrey. However in many cases, the death of the Time Lord Operator can cause a grieving TARDIS to lose power, and shut down. Sometimes it even collapses the interior. The Exo-Plasmic shell will suffer isomorphic mass-degeneration. If someone forms a new symbiotic link by idiosynchronizing a TARDIS to respond to a different metabolism, a TARDIS will revive. Some TARDISes in such a state will grieve for millennia, whilst others will die if no Time Lord forms another symbiotic link after a few decades. After the death of an operator with which the TARDIS was particularly close some TARDISes travel to a secret TARDIS graveyard located in an impacted pocket dimension outside of normal space and time. Very few Time Lords have seen this graveyard, but one such visitor reported seeing hundreds of decaying TARDISes.

Passenger Adoption Scanning Terminal (PAST)

The Passenger Adoption Scanning Terminal (PAST) plays a vital part in the TARDIS' control circuitry. No substance can survive the time winds of the Vortex without a Molecular Stabilization System. For this reason, a Symbiotic Nuclei is needed to 'prime' a Time Travel Capsules by serving as a genetic key to access the Vortex. The nuclei also contains the programming code for the Molecular Stabilizers, that prevent the Capsule from molecularly destabilizing in the Vortex. While Symbiotic Relationship Circuits allows the TARDIS to share in the Time Lord's protection they do not provide protection for any crewmembers or passengers who do not have their own symbiotic nuclei.



Most attempts to use a TARDIS without a symbiotic nucleus results in severe wounds. Zygma energy will split open the victim's DNA Helix, causing their protenoids to fall out of balance. There is no cure. The only treatment is using a distillation chamber to drain the untapped artron energy of sapient beings. But the more cells of energy the victim absorbs the more the catalytic extraction will destroy his metabolism and mutate his body, eventually leading to death.

It is for this reason that the Passenger Adoption Scanning Terminal was created for the Type 26 and all future TT Capsules. It uses rho waves to alter the mental and physiological processes of

the crew. This allows even lesser species to survive Vortex travel. This molecular stabilization system will even provide time travelers with temporary protection from having their own biodata altered by a change in history. While this grace period is not indefinite it can often provide the crew with stable memories and physiology until the damage to history has been rectified.

If there is a symbiotically bonded Time Lord on board, the PAST will automatically screens and adopts any sapient life-form which is present at the moment of dematerialization into the Vortex. If there is no symbiotically bonded Time Lord (a Symbiotic Bypass LINK) at the moment of dematerialization the PAST will not adopt any other life-forms.

Though the TARDIS provides almost total protection from the energies of the Vortex, most crewmembers experience a subconscious sense of disconnection during vortex travel. This is the result of a cellular level awareness of being outside the first four dimensions. Some, (if not all) of a Time Lord's 22 temporal senses grow more acute the more times a Time Lord crosses the Time-Fields in a TARDIS. Because of this Time Lords are vulnerable to Temporal Shift Lag. Such effects can only be overcome if the Time Lord develops special mental disciplines. Temporal Shift Lag only effects beings with a symbiotic nuclei.

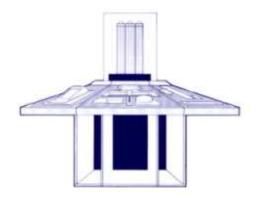
As of the release of the Type 32 TT Capsule the PAST also became responsible for ensure that every crew member has access to the Voice Integrator [LINK]. In theory only the crew of the TARDIS will be able to experience the Voice Integrator, however, some TARDISes have been known to in selectively adopt certain acquaintances of the crew.

Because some time zones have lack sufficient light in the visual spectrum the Linear Calculator will have their eyes to see in the dominate EM spectrum of that particular time zone. The modification is accomplished with the telepathic circuits in such a way the that crew is unlikely to notice any changes to how they see the world. Operators should be aware that if the Linear Calculator is not serviced every 500 years it can cause miss-jumps.

Using the Telepathic circuits, The TARDIS automatically compensates for any traditional jet-lag its crew might experience. However certain malfunctions in the TARDIS systems can cause crewmembers to experience extreme jet lag.

The Auto-Gravity System [LINK] automatically adjusts the gravity, within reason, while in the Vortex to acclimatize the crew to the local gravity of the destination. Again the telepathic circuits prevent the crew from noticing these changes.

While this version of the PAST has been used for some time, it does allow unknown stowaways to also share in this Time Lord gifts. For this reason some more modern capsules (Type 65 and later) are equipped with a scanning booth which must be used by any newcomer to be added to the Approved Entrance File. This is necessary if they wish to safely enter the Vortex.



Control Rooms

"Well, I must congratulate you. This is really a most splendid machine. I do notice there's been a few changes though?"

"Oh yes, Doctor. In fact this one is fitted with automatic drift control."

-The Doctor and The Monk

A Control Room is located in the Control Sphere [LINK] and is the nerve center of a TARDIS and serves as the

bridge or cockpit. It takes 95% of a TARDIS's processor power is used to comprehend the universe from its operator's three dimensional point of view, and thus understand what the operator wants it to do. To reduce errors and miss communications all major functions and almost all minor ones can be monitored and controlled from the time and space mechanisms in this room.



The design of this Control Room is a threedimensional model of a TARDIS's 4 dimensional Heart. Dominating the center of every Control Room since the Type 20 TARDIS is a large freestanding Master Control Console. Most (if not all) of these timeships are designed to be operated with six pilots. At least one, if not all, of them should be Time Lords who are symbiotically linked to the TARDIS. This is why almost all control assemblies have 6 sides. The console is equipped with numerous controls, read-out displays and screens. Some consoles are equipped with a central Time Column that provides continual data on the Dynamorphic Generators. The casings of the Control Console is resistant to time winds that would badly damage even a Time Lord. Most of the controls are made of steel or plastic. The console is directly connected to a TARDIS's power source.

Inside, their biomechanical and tri-gamma circuitry is held together with Mergin Nuts. Laser operated relays transmit light along fiber optic cabling. The Heisenberg Circuits control a console's form and structure and are quite useful during bicentennial refits. If the psychosculpture illusion of the Environmental Metaphor's Desktop Theme is relaxed the Control Console appears to be a multidimensional "thing" that would drive lesser species insane. The Heisenberg Circuits are even capable of reducing or increasing the total number of panels if desired.

Each of the six panels or "stations" on a console is assigned a number. However these numbers can be assigned clockwise or counter clockwise depending on the Mark number of the Console. Each of these six panels has a standard designation that is independent of the number, which varies from refit to refit. The official designation of each panel dates back to the Time of Legend.

Tradition keeps this terminology in use even though modern console designs varies greatly from those original classifications. The following list outlines the controls found on each type of panels. For lists of the alterations and variations found for different desk-top themes and differ marks of refit see the sections of Desk-Top Themes [LINK] and Refits [LINK].

Communications: More accurately known as the **Exterior Monitor Panel**, it usually had the following controls...

- Analogue Crosstime Telephone (Link to Superphone / Cross Time Phone)
- Analogue Radio Waves Transceiver (Link to Emergency Tranceiver)
- Atmosphere Analyzer
- Audio Unit
- Chameleon Circuit Controls
- Digital Communicator (Link to Telepathic Circuits)
- Emergency Power Booster Interface
- Environment Governor [LINK]
- External Scanner Control Keyboard [LINK]
- Gallifrey Recall Indicator
- Gyro-Series and Dials
- HADS [LINK]
- Scanner Switch
- TARDIS Log [LINK]
- Telescoping Microphone
- Translevel Communications Systems [LINK]
- Voice Integrator
- Voice Recorder (Link to TARDIS Information Systems)
- Access panel for Visual Stabilization Circuit

Diagnostic: More accurately known as the **Internal Ship Systems Panel** it has Auxiliary Support Systems. This panel usually has the following controls...

- Attitude Control
- Audio Unit
- Auxiliary Power Control [LINK]
- Auxiliary Support Systems [LINK]
- Booster Switches
- Bunsen Burner
- Cooling Systems [LINK]
- Failure Diagnostics [LINK]
- Fault Locator Readout [LINK]
- Gravity Control
- Life Support Systems [LINK]
- Mic / Water Dispenser (Link to Food Dispenser Room)
- Organic Diagnostic (Link to Protyon Core)
- Power Status [LINK]
- Power Systems [LINK]
- Progress Lights
- Repair Systems [LINK]
- Access to Power outlet [LINK]

Fabrication: More accurately known as the **Information Systems Panel** it usually has the following controls...

- Architectural Configuration [LINK]
- Audio Unit
- Automatic Log [LINK]
- Computer Readout Screen
- Databank Access [LINK]
- Dimension Scale Control
- Dimension Scale Stabilizer
- Environmental Controls [LINK]
- Fabrication Dispenser [LINK]
- Harmonic Generator
- Heisenberg Focusing Device (Link to Mean Free Path Tracker)
- Materialize / Dematerialize Fabrication (Link to Fabrication Dispenser)
- Materialization Indicator
- Power Response Dials
- Radiation Detector
- Sump Flush
- Time Altimeter (Link to Mean Free Path Tracker)
- Twin Navigational Locks
- Zig-Zag Plotter (Link to Mean Free Path Tracker)
- Access to Fluid Links [LINK]
- Access to Banshee Circuits

Helm: More accurately known as the **Dematerialization Systems Panel** it has controls for the drive systems that function when the TARDIS is dematerialized. It also has advanced navigational controls that can be brought into play during exceptional circumstances. This panel usually has the following controls...

- Audio Unit
- Door Switch
- <u>Drift Compensators</u>
- Eyepiece (link to Mean Free Path Tracker)
- Guidance Systems Computer [LINK]
- Helmic Regulator [LINK]
- Internal Lighting Control
- Master Dematerialization Switch [LINK]
- Steering Mechanism [LINK]
- Time Rotor Handbrake (link to Pause Control)
- Time Vortex control [LINK]
- Tremulator Switches [LINK]

Mechanical: More accurately known as the **Master Control Panel**, it has overrides, reprogramming, and cross-connect controls for all of the (usually automatic), TARDIS systems. This panel usually has the following controls...

- Audio Unit
- Central Computer [LINK]
- Display Dials (Link to Transpower System)

- Door Master Control (Link to Real World Interface)
- Engine Release Lever (Link Dynamorphic Power Station)
- Dimensional Gyroscopic Stabilizer (Link to Auto Gravity Systems)
- Locking Down Mechanism (Link to Fail-Safe Switch)
- Overrides for all systems
- Oxygen Control
- Parallel Control Board [LINK]
- Power Response Dials
- Telepathic Circuits [LINK]
- Time Path Indicator
- Time Sensor
- Vortex Loop [LINK]
- Access to the Heart of the TARDIS [LINK]

Navigation: This panel contains the coordinate input controls, basic navigation and steerage systems. This panel usually has the following controls...

- Astrosextant Rectifier
- Atom Accelerator
- Audio Unit
- Auto-Log Indicator
- Course Acceptance Unit
- Digital Time/Place Orientation Printout
- Directional Pointer (Link to Mean Free Path Tracker)
- Directional Unit
- Fast Return Switch
- Indicator Lights
- Materialization Switches
- Navigation Slide Controls
- Safety Precaution Switch
- Stasis Switch
- Time and Space Forward/Back Control (link to Navigation Slide Controls)
- Vortex Position Display

Normally the panel with the Main Door Control is the one closest to the Main Doors, but the Console can be set to rotate if the operator would prefer a different orientation. The console can be reconfigured to alter the location of the instruments and controls if the operator desires. A switch on each panel triggers the opening of the panel for easy access to the internal components and circuits. Entire panels can be swapped around to match a configuration that the operator would prefer. It is possible that all the controls of a console are labeled in a way that can only be "seen" using on a Time Lord's 22 temporal senses.







For more complex or lengthy programming a larger and easier to use data-bank keyboard can be extended out of a control panel using a switch located beneath the console. If the Isomorphic Security System has been set, then only the proper Time Lord may use the controls. Parts (or all) of the console can be electrified using the Immobilizer Switch. A digital TARDIS manual can be accessed from the console by pressing a button marked "Manual". The interior lights can be controlled from a switch on the console and can be raised to painful brightness.

TARDISes can interface with lower tech devices (such as image translators, radios and cell phones) fairly easily and a large collection of sockets and connectors can be found beneath a hatch on the console.

The Main Doors are always located in the active control room. From the Control Room the Time Lord operator can access the rest of the TARDIS via a dimensional bridge which leads to the Core Service Module. The Master Control Console can be made to appear outside the TARDIS's Exo-Shell if the operator uses the Architectural Configuration Program to locate the Console outside on the end of a dimensional juncture link.

Once configured in this manner the Console can be physically transported independently from the rest of the TARDIS and yet still maintain its link. Traveling the Vortex with just a console and no proper exo or endo shell is very dangerous. The console can be used to form a spherical materialization field around it when it travels but protection is minimal. It is recommended that safety belts be worn.

The pedestal the console is attached to is called the Console Stem. There is a slot in the console's stem for

playing large data cartridges as well as a computer interface plug behind a panel. The power outlet sockets are located beneath the Power Monitor Panel on the Console. They can instantly adapt to the power needs of any apparatus requiring energy. Using the TARDIS's power conduits some types of space ships can be recharged. This takes 3-4 hours.

If the operators are expecting a large amount of turbulence, Safety Belts (also known as seatbelts) can be connected to the Master Control Console and hold the operators next to the console. If there are more then six crewmembers then two padded couches with safety belts can extend out of the wall by activating a switch on the Control Console. In an emergency Oxygen Masks supplied by tubes will drop from the ceiling. There will be one mask for each crewmember.





capabilities, and destroy the control room.

A large hexagonal Power Source hangs above the Master Control Console. It collects unused Artron Energy from the central column and recycles it back into the transpower systems. A switch on the panel closest to the door lowers the device to assist with regenerations by providing Artron Energy to the crewmember. There is also an bed that can be

extended out of the wall, for use when the Source is in operation. While active the lights will strobe and a high pitch screech will be heard. This piece of TARDIS technology is considered to be a vital part of regeneration for without this assistance regenerations are much more random and recovery takes much longer. It should be noted that excessive bursts of regeneration energy (say, caused by a the regeneration of Time Lord who'd died of extreme radiation poisoning), can exceed the source's collection

All TARDISes created after the Type 24 have more then one control room. These other control rooms all occupy the same space but each is located in different time phase. They can be reached by traveling through the TARDIS's pedestrian infrastructure, but for safety purposes, there's always about 2.4 to 4.8 miles of corridor between the Secondary (or Number 2 Control Room) and Primary Control Rooms. The Main Door can be shifted from one Control Room to another from any of the console rooms or from the outside using a TARDIS key.

NOTE: For information and pictures of the various console refits and how they can be customized, see the Desktop Themes [LINK] in the Environmental Systems Chapter and the Refits, and Upgrades Chapter [LINK].

Primary Control Room



The Primary Control Room (or Number One Control Room) is designed for standard flights. It contains a more stylized Control Console, which is mostly automated. Later marks of these consoles have few advanced options. Indeed many versions lack even a Time Rotor. This lack of functionality has resulted in at least one Time Lord restoring his TARDIS to earlier Mark III specifications.

Like almost all TARDISes created after the Type 19, the Console is a freestanding hexagonal structure, The interior design of a control room (and the rest of the TARDIS) is decorated using Psychosculpture. The Psychosculpture is driven by device similar to a Chameleon Circuit - thus the interior has about as much possibility for variation as the exterior does. In the case of the

Primary Control Room, the aesthetics of the operator often take precedence over functionality. This is expressed by users choice of Desktop Theme [LINK]. In later refits this resulted in it being more difficult to control secondary systems from the Primary Control Room. The overall décor of the Primary Control Room is always fashioned to fit the whims of the Time Lord operator. Sometimes the console isn't even a hexagon. Despite this the lack of functionality offered in the primary control room

Secondary Control Room



The Secondary Control Room (or Number Two Control Room) is a much simpler Block Transfer program than the more aesthetically oriented Primary Control Room. Since it is designed to function as something of a Safe Mode, the Secondary Control Room, desktop theme can't be altered from default. The casing of this Control Consoles is constructed of Pseudometal and only minor modifications can be made to its décor and the console can only be altered by upgrading to a higher Mark number. For Mark IV and

later TARDIS refits the simplified controls of the Primary Control Room limited access and control to several secondary systems. The extra functionality resulted in many operators preferring Control Room Number 2 to the Primary one and viewing the Primary Control as being secondary. Some operators even chose to revert to a Mark III refit to avoid this problem (see Refits and Upgrades [LINK]). Number 2 Control Room has six walls that are about 4.6 meters tall and is about nine meters in diameter. There is a large wall locker located to the left of the Main Doors. In the center of the room is the Master Control Console. This hexagonal console has many technical capabilities that the Primary Control Room lacks. Located on the underside of this Control Console are the circuit breakers for all of a TARDIS's major systems and a silver switch that triggers a localized but powerful electromagnetic pulse. The supporting plinth contains a small storage locker.

Tertiary Control Room



The Tertiary Control Room is found near the center of a TARDIS's interior. It has a smaller Control Console with only four sides and a miniature Time Rotor. Some Tertiary Control rooms have green lighting and a console made of stone. This Control Room can generate its own exo-plasmic Shell and split off from the rest a TARDIS. In this form it can serve as a short term escape pod. When launched, it will home in on the "closest" habitable planet. It is also capable of locking onto and returning to its TARDIS if the operator wishes.

Control Relay Rooms



In addition to the Primary, Secondary and Tertiary Control Rooms there are also several Control Relay Rooms which have consoles that look like smaller versions of the one found in Secondary Control Room. If a severe trauma, such as a rupture of the dimensional interface, severs the operator's symbiotic link and disables the main control room one of these emergency console plinths will be generated in a randomly chosen storage room. The original architecture program will reboot once the symbiotic link is renewed. Given time, a TARDIS can rebuild/grow new Control Rooms to replace one that has been destroyed.

Switch Room



The Switch Room is located in the Control Sphere directly beneath the Control Room. It routs signals from the Master Control Console to rest of the TARDIS via transdimensional circuits and links. A hatch in the floor of the Control Room provides access to the Switch Room. The Artron energy stream from the Dynamorphic Generators travels through the middle of the Switch Room and connects with the Master Control Console's Heart (the Main Space-Time Element). From there it is released into the

Vortex as counter-magnetization thrust which propels the TARDIS through the Vortex.

The Navigator

While most TARDISes do have voice-interaction circuits that can control minor systems (for example the Main Doors) the Navigator represents a significant advancement. While the Type 46A's CPMI had been deemed a failure, the less ambitious Navigators voice control circuits found on the Type 70 and subsequent models used voice control circuits that allow the crew to operate a TARDIS using only vocal commands. Like the earlier voice-interaction circuits, the voice command systems have a voice lock so that only someone with the right voice print can operated the TARDIS.

When activated the TARDIS can implement almost any command, including complex flight instructions. The circuits will vocally confirm the completion of each action. Despite coming into existence well before the Time War most operators of that era found it quicker and more reliable to input commands directly into the console. But by the beginning of the Time War, voice interaction is much more popular on non-military TARDISes. The popularity was such that the control rooms were no longer designed for manual control. Optional controls were still available for use in an emergency.

Dematerialization Procedures



Though there are 387 Stages to a TARDIS Vortex Flight, almost all of these are automatically handled by the infrastructure sub-systems. There are only 5 steps an operator must undertake to dematerialize a TARDIS from N-Space and initiate Vortex travel. Each of these steps has a progress light which illuminates when that step is completed. The process should not be taken lightly however because, if a dematerialization is performed improperly, there's a possibility of lesser species inside the Control Room being rendered unconscious. A

warning lamp and buzzer will signal if one the demat-stages hasn't been completed correctly. Despite this, security procedures require that a TARDIS Information System does not contain any flight instructions.

1. Programming of the Navigational Instruments

The current spatial coordinates (relative to Gallifrey's Eye of Harmony, at the center of Mutter's Stellian Spiral) and the current temporal location (relative to Gallifrey's Present) are programmed into a TARDIS's Directional Unit using the Navigational Slide Controls. These are usually the last set of coordinates used. If the Space-Time Coordinates of the current location have changed since the last materialization, then the new coordinates will have to be input. If the current coordinates are not precisely known, then an accurate course is impossible to plot. Once this is completed the Space-Time Coordinates of the desired destination (again relative to Gallifrey's Eye of Harmony and Gallifrey's present) are also programmed in (for more information see Navigation Slide Controls). If the operator desires, he can file a Forward Reference instead of setting the coordinates. This allows a TARDIS to dematerialize without setting any coordinates. In this case a TARDIS will remain in Limbo after dematerialization until coordinates are patched in.

2. Computer Acceptance

The Directional Unit then uses the Space-Time Coordinates to calculate the Epsilon Coordinates, which serve as a path or a "road map" through the Space-Time Vortex. A TARDIS's computer usually does these calculations, but some Time Lords can compute Epsilon Coordinates in their heads. Calculating the Epsilon Coordinates is very complicated and requires good math skills. The Input Bar is then depressed to feed the coordinates into the Course Acceptance Unit.

If the Input Bar is omitted, then a TARDIS will assume a Forward Reference has been filed. The vessel will dematerialize and remain in Limbo awaiting Epsilon Coordinates and other Flight Data. While multiple sets of coordinates can be inputted into the Directional Unit, any previous coordinates must be canceled or the Unit will ignore the newly inputted coordinate program until it has completed the previous programmed flight. To ensure the coordinates aren't accidently altered after being set, one of the twin navigational locks can be enabled. One locks manually inputted coordinates and the other is responsible for the Fast Return Switch [LINK].

Once the Epsilon Coordinates have been input, the course can be checked with the Destination Monitor. The full destination display uses the format show below:

TARDIS

Flight Data. Programmed Journey

Departure: <planet name> <location on planet>
Local Dateline: <local date> <the era in Gallifreyan dating>
Destination: <planet name> <location on planet>

Local Dateline: <local date> <the era in Gallifreyan dating>

3. Power Build-up to required Levels

The Transit Switch needs to be toggled to activate the Vortex Primer, which provides the power boost for travel. It takes a TARDIS 12 minutes to build up enough power in the Time Rotor's Energy Storage Unit to dematerialize after materializing. The TARDIS drive systems can be tested to ensure the energy storage unit has enough power for successful dematerialization. The Booster Switches can be used to alter the default power levels. When the total power is reduced a TARDIS's trips through the Vortex take longer. Care must be taken (especially with older capsules) not to "over rev" in the third phase.

If the Transit Switch is not toggled a TARDIS will have insufficient power to travel more than a few hundred meters or seconds. If departing the planet the TARDIS would rematerialize a few seconds after it left. If departing a moving vehicle (such as a space craft) the TARDIS would materialize a few seconds later at its original spatial coordinates - likely being left behind by the vehicle.

4. Dematerialization

The Master Dematerialization Switch can now be activated. This will engage the laser trigger of the Dematerialization Circuit and dematerialize a TARDIS. The Dematerialization Switch can be set on a time delay or remotely activated by a pre-determined signal from a portable device that is plugged in to the console when not in use. Some operators build this device into their sonic screwdrivers. If using a sonic screwdriver the operator must be careful least he fuse coordinates in the Directional Unit.

The Molecular Dematerialization Codes are necessary to properly trigger the Dematerialization Circuit. They are essential to initiate successful travel in the Vortex. This is usually done automatically by the Symbiotic Relationship Circuit's Briode-Nebuliser, which pulls the codes from the operator's Rassilon Imprimature in the form of a Symbiotic Print.

If the sound of the dimensional stabilizers will be heard inside the TARDIS (as opposed to only outside). Dematerialization (a process that usually takes 3 seconds) can be aborted if the switch is reversed before the TARDIS has completely disappeared. However, care should be taken. Reversing the switch in the 3 seconds after dematerialization has been completed causes a Vortex Crisis (also see Time Ram). Creation of a Vortex Crisis is expressly forbidden by the Second Law of Time. The TARDIS will start to shake itself to pieces due to the massive forces forcing the capsule from one loop of the time spiral to the next. The re-materialization command must be canceled to save the capsule. Once canceled the TARDIS will initiate an Automatic Landing as soon as it is safe, materializing relatively near the dematerialization point.

For more information about Dematerialization see the entry (LINK) in Navigation Systems.

5. Vortex travel

While within the Vortex the TARDIS operates in Walrus Mode. The Spatial Drive will activate automatically when a TARDIS has entered the Space-Time Vortex. It is impossible (save using the Emergency Unit [LINK]) to alter the coordinates once the ship has activated the Spatial Drive. The Break [LINK] can be used to temporarily deviate to an time zone. But the original course will have to be completed eventually. In theory, once the coordinates and course are programmed in, a TARDIS will travel to its destination and materialize automatically. In practice, Time Lord supervision is sometimes necessary to avoid dangers in the Space-Time Vortex. For example, collision with other objects in the Vortex is prevented using the Anti-Collision Control. An operator can monitor the consumption of this energy via the Neutronium Counter which displays the power in omegas. Once in the Vortex, a TARDIS requires a minimum of one quarter of full power (1000 omegas) to travel. The Velocity Override regulates the velocity when traveling through a wormhole. Traveling at minimum power greatly increases the ETA.

Travel through a Vortex wormhole can be displayed on the Scanner. A red tinted tunnel is displayed for traveling forwards in time and a blue tint indicates travel into the relative past. There are also two blue lights on the console that indicate forward or backwards time travel. These lights will register even if the TARDIS isn't responsible for the temporal shift.

For more information on this stage see the Space Time Vortex entry [LINK].

Rematerialization Procedures

Though there are 387 Stages to a TARDIS Vortex Flight, almost all of these are automatically handled by the infrastructure sub-systems. There are only 5 steps an operator should undertake for rematerializing a TARDIS into the Multiverse. While the TARDIS Information System does not contain any flight instructions it does have detailed notes on the landing protocol.

1. Synchronic Feedback Unit Activation

The Main Materialization Indicator begins to flash brighter and brighter one minute before Rematerialization. It will continue flashing until the materialization is complete. At this point the Synchronic Feedback Checking Circuit should be activated. This uses the gyroscopic stabilizer to orient a TARDIS relative to the nearest gravitational force to ensure that it does not arrive "upside down."

2. Multi-Loop Stabilizer Activation

To prevent Materialization a few inches above the intended coordinates the Multi-Loop Stabilizer must be activated prior to landing. The Multi-Loop Stabilizer adjusts a TARDIS to land on a surface. The TARDIS can be put in a Parking-Orbit above a planet before materializing on its surface. If this is desired, then Hover Mode should be substituted for the Multi-loop Stabilizers.

3. Release the Pause Control

Before re-materialization the brake (aka Pause Control) should be released. This prevents the sound of the dimensional stabilizers from being heard within the TARDIS. As it doesn't have any effect on the sound outside the capsule many Time Lords skip this step.

4. Re-Materialization

Re-Materialization is the most dangerous part of Vortex flight. A TARDIS has an Automatic Landing Procedure for Materialization, but it is advisable for the operator to use manual materialization since even minor malfunctions in the Automatic Procedure could destroy the TARDIS by sending it outside the Time Spiral.

An indicator light will signal that Switch #1 can be toggled. Manual materialization can be enacted by toggling Materialization Switch #1, which extends the Dimensional Stabilizers into

the Multiverse. A second light indicates that the operator can use Materialization Switch #2, which uses a materialization field to displace the atmosphere from the area and causes the dematerialization circuit to extend the Exo-Plasmic Shell into real space. After Materialization, a TARDIS's Artron Mainframe sends a very subtle telepathic signal to the crew to alert them to the fact that the ship has landed. A chime alert can be set to sound when Materialialization has been completed. There is also a small indicator light on the console

that shows when the TARDIS has completed the materialization. Zeroing the co-ordinate

differential automatic systems to reactivate the real world interface is the 387th and final stage in a TARDIS's space-time flight.

The operator should never initiate a Re-Materialization by deactivating the temporal stabilizer and pulling down the transitional element control rod. This would result in a TARDIS exiting the interstitial continuum at the perihelion of a temporal ellipse, which can induce buffering in the TARDIS's harmonic wave packet transference. In some cases it can even sever the main Fluid Links.

For more information about Rematerialization see the entry (LINK) in Navigation Systems.

5. Deactivate Drive Systems

After landing, power to the Time Rotor should be switched off by reversing the Rotor Control. The Transit Switch should also be toggled to power down the TARDIS's drive systems, and the navigational controls should be returned to their off positions. In Mark II and later upgrades the engines will automatically shut down as soon as the crew have departed this ship.

At this point is it standard procedure to consult the console's, Astrosextant Rectifier, and Digital Time/Place Orientation Readout to insure the spatial and temporal coordinates are correct. The Scanner controls on the External Monitor Panel will allow the operator to verify the exterior levels of oxygen, atmospheric pressure, temperature, radiation and the like. It is also customary to use the Scanner screen for a visual overview.

Astral Map

The Astral Map contains temporal, thirty-seven dimensional charts. It can access data from a TARDIS's Scanner, Astrosextant Rectifier, Time/Place Orientation Printout, Absolute Tesseractulator, Time Scanner, Emergency Tranceiver, and Information Banks. This data can then presented to the operator.

Star systems are noted in simplified 4 digit coordinate systems (e.g. 0069 for Atrios/Zeos, 4180 for Cyrrenhis Minima, and 4940 for Ribos). More detailed coordinates are needed to actually visit a specific place or time in those systems.

These more detailed the Space-Time Coordinates are calculated using advanced N-Dimensional Mathematics and are given relative to Galactic Zero Center (the Center of Mutter's Stellian Spiral). A TARDIS's Galactic Positioning System works using a time signature of Galactic Zero Center. This signature can be fine-tuned if (in addition to the current spatial coordinates) the relative locations of several Landmark Worlds are entered into the programmer. Such worlds include Gallifrey, Dagusa, Caresh, Erekan, Gau-Usu, and Cern. For this reason a TARDIS occasionally materializes in space to "get its bearings." Under such circumstances the journey can be continued by toggling one of the co-ordinator vector switch at the correct time.

Space-Time Coordinates consist of fifteen digits. While it may seem unlikely that a fifteen digit set of coordinates could precisely locate any point in space and time it should be noted the Gallifreyans might not have a base 10 counting system. The first two digits designate the Vector,

the second two the Quadrant, the next seven digits represent the exact spatial location, and the last four digits represent the temporal location. These last digits advance steadily as a TARDIS "moves" forward in time. It should be noted that the Directional Unit doesn't do 'BC' and all dates will need to be positive.

Since the Astral Map is mounted on a control table with wheels, the data can be viewed any room in a TARDIS which is equipped with power outlets for the Map's time-space plugs. With long enough time-space links it is even possible to remove the Astral Map from a TARDIS. Data from the Astral Map can also be displayed on the Scanner screen.

Freak surges in the Vortex can create time spikes. While only a minor inconvenience for fully trained Time Lords, inexperienced operators can end up losing their TARDIS's Time Signature when they collide with the time spike. Without out the Signature the TARDIS wouldn't know where Galactic Zero Center is and it would be impossible to plot the rout-map home.

Navigation Slide Controls: aka Space-Time Coordinate Programmer



Also known as the Helmic Orientators, these slide controls (some consoles have a keyboard) and binary selectors are used by the operator for setting the Space-Time Coordinates. The coordinates must take into account the motion of objects relative to a TARDIS's current location, gravity's distortion of the Space-Time Vortex, and the exact time the operator wishes to travel to.

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Once the numerical sequence is known, setting the coordinates with the Slide Controls is a simple matter. The first eleven digits are inputted into the Geographical and Interstellar Destination controls. The remaining four are inputted into the Temporal Destination controls. In theory a fully functional and properly tuned TARDIS can be navigated to a temporal precision of a millisecond, and within a meter of a desired spatial location. As might be expected it is quite tricky to materialize on a ship in flight. The navigational systems can be set up to follow a program that was preset in the computer or stored on an external data source like a DVD. A timer can also be set to engaged the program if desired. If the TARDIS receives a signal from a Spacio-Temporal Alarm Beacon then its triangulated coordinates can be used as the destination coordinates.

Care should always be taken when setting the coordinates. A hard impact to the navigational panel could knock the xion crystals out of alignment, causing the passivator to go into flux and leak green coolant into the aethiopathic chamber. Without coolant the positioning system will overheat and the thermal cut-out would trigger, preventing any space-time trips from being made. To ensure the coordinates aren't accidently altered after being set, one of the twin navigational locks can be enabled. One locks manually inputted coordinates and the other is responsible for the Fast Return Switch [LINK]. If the coordinates should become fused a TARDIS would only be able to travel between its current coordinates and the last time zone it visited. This would probably achieved by using the Fast Return Switch. If the coordinates are miss-set in such a way as to present the Directional Unit with an unsolvable equation a symbolic resonance could occur in the Trachoid Time Crystal, trapping a TARDIS in a fractal Zenos Paradox forever. Such a paradox would send a TARDIS into the cracks between dimensions and prevent the TARDIS from ever materializing. The TARDIS would remain trapped until the Vortex had eroded away everything except its foundational principles.

The operator should always avoid traveling back in time without first altering the spatial coordinates. If this is not done the TARDIS might materialize inside its younger self. The TARDIS will use the Cloister Bell to warn the operator if this is about to occur. It will also ring the bell if Coordinates are entered that would require the TARDIS to materialize inside solid matter.

All flight information is stored by the <u>Banshee Circuits</u>, which serve as a flight recorder. Proper maintenance is necessary to ensure accurate space-time jumps. If this maintenance is neglected for too long, the Programmer will wear out. For this reason it is recommended that an operator have their TARDIS's navigation systems recalibrated and serviced every 500 years.

Directional Unit

The Directional Unit is part of the Main Time Mechanism. It takes the Space-Time Coordinates for departure and arrival and converts them into Epsilon Coordinates for travel through the Space-Time Vortex. For this reason it is essential to accurately know your current location to ensure a successful flight. The shorter the trip, the simpler it is to calculate the Epsilon Coordinates. Executing a short hop, however, has other difficulties. The resulting Epsilon Coordinates serve as a path through the Space-Time Vortex allowing a TARDIS to avoid any unknown regions or areas of intense time spillage. A fully functional and precisely tuned TARDIS is accurate to 1 millisecond and 1 meter. But in practice the Directional Unit is accurate down to about 3 meters or so. The "closer" a TARDIS is to Gallifrey's Time Zone (3.5 billion years ago and the center of the Mutter's Stellian Spiral) the easier it is to navigate the Vortex. A TARDIS's computers require 12 minutes to re-orientate after materialization.

A fully functional Directional Unit is essential for precise navigation and landings. If the TARDIS hasn't been recently overhauled then the operator might need to changed the relativity unit before attempting a space-time jump. If this isn't done the TARDIS could end up temporally overshooting its intended time zone. A TARDIS that missjumps often finds itself at a Temporal Nexus Points (a time zone where history is easily changed). There are some locations that can only be reached by traveling through dangerous areas of the Vortex. Using Manual Override, a course can be plotted to these locations.

A directional unit from a Mark IV TARDIS Console requires more power then one installed on a Mark I. If a Mark IV Directional Unit is used on a Mark I Console it will burn itself out after one use to prevent the destruction of the central column. Even using the Fast Return Switch, a TARDIS with fused coordinates can only travel back and forth from its current location to its previous landing point. (with a leeway of about 18 months in either direction).

Governing Circuit

This circuit is part of the TARDIS's Main Space-Time Element. TARDISes are built not to change history and this circuit is designed to prevent the operator from breaking the First, Second, Third, and Fourth Laws of Time. These protocols are not physical laws per se, but rather something built into the Governing Circuits of all Gallifreyan time travel technology.

The Third Law of Time prevents anyone from traveling into Gallifrey's past, and ensure that a Time Lords personal time is always synchronized with Gallifrey's time. It also ensures that Time Lords will be synchronized when the meet outside of Gallifrey. In order for the Governing Circuit to function as it does, it's likely that TARDISes know significantly more about where they are going then their operator does. For example, they would need to know where other TARDIS and Time Lords have also traveled. To be effective, they would have to have the power to alter destinations times to ensure that Time Lords never violate the Protocols of Linearity.

The Time Track Crossing Protection Protocol is a pre-set circuit that (in a normally functioning TARDIS) constantly prevents a TARDIS from crossing its own timestream by arriving before it left in the same general area. Due to the Blinovitch Limitation Effect, any time a TARDIS violates the 1st Law of Time by crossing its own time stream a large amount of chronal energy is released. This chronal energy can damage space-time. Some Type 40 TARDISes have faulty Protocol circuits that have unreliable connections, causing them to disengage and allow the TARDIS to break some of the Laws of Time.

Removal of the Relativity Differentiator will allow a TARDIS to travel into Gallifrey's distant past (before the Eye of Harmony), but it will prevent the TARDIS from changing its spatial coordinates relative to its current planet. The Temporal Limiter is also a key component of the Governing Circuit. A Temporal Limiter is required Vortex travel forward or backwards in time, and sabotage to it can effect the temporal aspect of a space-time jump.

It takes a major surge of power from the Prime Eye of Harmony to override this circuit (this must be authorized by the High Council). Despite this, a clever Time Lord will find these limitations easy to avoid. For example, the Time Track Crossing Protection Protocol can be overridden (though the operator then risks causing the TARDIS to vanish into a temporal nullity).

Fast Return Switch



This device uses sequential regression to return a TARDIS to the approximate location and time of the previous landing site. Travel using the Fast Return Switch is considerably less energy intensive than most other flights. To operate this Fast Return Switch turn it in a clockwise direction. Earlier landing sites can be reached by depressing the switch multiple times. A stuck Fast Return Switch will force a TARDIS to travel back in time until it collides with, and is destroyed by, the formation of a galaxy or even the entire

universe. For this reason some models of the Fast Return control have a crystal which flashes to indicate when it is in operation.

Psycho-Telemeter

The Psycho-Telmeter use the psycho-telemetric circuit to allow a TARDIS to home in on the planet of origin of a given item. A genetic sampler can also use this system to feed Bio-Data into the Console allowing a TARDIS to track a specific strand of DNA or Vampire factor, through space and time.

Pause Control: aka Time Rotor Hand Brake



Before the Master Dematerialization Switch is engaged, the TARDIS can be put in Pause-Control mode. In this mode the TARDIS will refrain from dematerialization even after the switch is engaged. Dematerialization will proceed automatically as soon as the Pause-Control is canceled. The control can be canceled by using the console to switch it off, or by inserting the TARDIS Key into the Locking Mechanism for 20 seconds.

If used during Vortex Flight it will suspend the TARDIS in Time and Space until released. Normally it impossible to alter the coordinates once the ship has activated the Spatial Drive, but for Capsules using the Mark VII (or later) refits, the Pause Control and Emergency Dematerialization Switch can be used to temporarily deviate to a

different time zone. This might occure during and Automatic Emergency Landing [LINK]. A pause period will have to be set before the TARDIS can be diverted. Once the pause period has expired the TARDIS will automatically depart for the original destination.

If a TARDIS is trapped in mid-materialization for too long, the chronometric particles being released from the event horizon will cause the TARDIS to "bleed to death." However a Type 70 Model A TARDIS has an improved Pause Control that can freeze a TARDIS in mid-rematerialization for up to 2 microspans.

Emergency Dematerialization Switch

If this switch is thrown, a TARDIS will dematerialize immediately. It will then wait in Limbo until the Epsilon Coordinates are inputted and the Transit Switch is thrown. Emergency Dematerializations bypass the Multi-Loop Stabilizer, resulting in "rougher" and noisier landings. They can also cause the lights to go out and might burn out the visual stabilizer circuit.

It is possible, but difficult, to alter a TARDIS's time curve (aka Wormhole) - and thus its temporal destination - whilst in the Vortex. This is done using first the Pause Control and then Emergency Dematerialization Switch during a programmed flight. This allows new coordinates to be inputted into the Directional Unit and thus change course. A pause period will have to be set before the TARDIS can be diverted. Once the pause period has expired the TARDIS will automatically depart for the original destination.

Vortex Shields

These shields help to protect a TARDIS during Vortex travel. Without them the TARDIS will be vulnerable to any passing danger in the vortex. Despite the fact that the Vortex Shields interfere with telepathic communications between people who are in the ship and people who are in Normal Space, switching them off while in the Vortex is not recommended. If the Vortex Shields are overloaded the sub-neutron circuits will start to fail. With great difficulty Vortex Shields can be extended to imprison another Time Travel Capsule operating in the Vortex, however the shields can only hold the other capsule for 2 minutes. The TARDIS Defense Mechanism also acts to hide the TARDIS from potentially dangerous life forms that exist in the Vortex. The Exo-Shell has a Temporal Field, which protects its interior from temporal attacks. Vortex Wraiths would be destroyed by the TARDIS's defenses if they attempted to invade the interior. (also see Defense Force-Field Prisms)

Estimated Time of Arrival (ETA)

Once a TARDIS has dematerialized and the Epsilon Coordinates are input the ETA will be displayed on the console. Since the Artron Mainframe usually calculates the Epsilon Coordinates, the Estimated Time of Arrival is based (in theory) on the space-time distance covered, and the efficiency of the Epsilon calculations. The TARDIS also uses data from the Mean Free Path Tracker to plot the ETA. A TARDIS travels forwards in time faster than backwards because it isn't fighting the flow of time and, in general, the larger the temporal jump the longer the flight. However because of difficulties in creating a safe path through the vortex physical distance has little affect on travel time. A trip of 1 mile often takes longer then crossing half the universe. While a TARDIS journey can take 9 weeks, in practice, it is rare for a trip to take longer then two days. ETA also varies on the current state of agitation of the Vortex. Some operators claim the "mood" of the ship affects the ETA. This claim could have some basis in fact. Being fourdimensional beings TARDISes actually prefer traveling in the Vortex to inhabiting the Multiverse. However TARDISes have Curiosity Circuits. Without these circuits a TARDIS would never leave the Vortex. Despite all these variables, the displayed ETA will be accurate to within 5%. The materialization indicator will light up and begin to grow brighter and brighter during the last 60 seconds of a journey. It should be noted that the ETA display will not be updated if the TARDIS's course (and arrival time) is altered by some outside force.

Regardless of a TARDIS' current position in the Vortex a flight to Gallifrey never takes more then 10-30 minutes. For example it takes 10 minutes to get to Gallifrey from 21st century Earth.

Using the Space Time Throttle it is possible for an Operator to control the effective "speed" of the TARDIS by altering the "length" of the route (and thus extend perceived travel time) through the Vortex. The Time Altimeter is used to monitor these changes in the "speed" of the TARDIS. When the total power is reduced a TARDIS's trips through the Vortex take longer.

Helmic Regulator

A TARDIS leaves temporary wakes and time ripples in the Vortex during travel. To ensure safe travel the TARDIS uses the helmic regulator to set up the proper Boolean constraints to regulate the Planck-Collapse within the Vortex, and stabilize the chronon beam to avoid complete overload of the Time Spiral's polyhelixes on the macrotransablative level. While the regulator normally works automatically there is a manual control on the console which can override the navigational instruments. This control is quite sensitive and rotating it will change the timeship's course through the Vortex, sending it thousands of years off course.

Absolute Tesseractulator

This device is responsible for keeping track of a TARDIS's dimensional location. It uses the Interstitial Antenna to collect data from the Vortex. A TARDIS knows where it's going by using digitally-modeled time-cone isometry parallel-bussed into the image translator, with local motion being mapped over every refresh-cycle. This information is displayed on the Gyro-Series Dials. It will detect time travel induced by exterior forces (even if the TARDIS's drive is not activated). It is possible that a TARDIS occasionally materializes in space to "get its bearings."

Mean Free Path Tracker

Using data collected from the Interstitial Antenna, the Tracker used the Heisenberg Focusing Device (also known as the Zig-Zag Plotter) to show a TARDIS's planned path through the Space-Time Vortex. It presents cosmic graphics that allows the operator to spot approaching turbulence in a TARDIS's flight path by displaying the position and direction of movement of temporal particles outside the TARDIS. When turbulence is expected it is recommend that the blue stablizers be activated to preserve gravitational stability in the control room.

If the Time Lord wishes they can directly view the cosmic graphic of the wormhole outside the TARDIS using the Eyepiece which is set into the console. This is sometimes done in the case of scanner failure.

Time-Path Detector: aka Time-Curve Indicator

C A V C C C O O d

The Time Path Detector is found only in the Secondary Control Room. The Time Path Detector uses the Interstitial Antenna to collect data from the Vortex. With the aid of the Vector Tracker, the Time Path Detector can scan the time curve (aka wormhole) and track the position and course of other "nearby" Time Travel Capsules in the Vortex via their disturbances. It can also be used to track and follow other objects and vessels traveling in the same time track. (aka wormhole) It does not provide enough information to identify

the type of timeship detected but can be used to predict the destination and ETA of the timeship. A quick transference jump can sometimes be used to lose anyone tracking a TARDIS.

The detector can allow the operator to detect the cross-tracing of another time ship on the time-space axis. If this occurs an emergency rematerialization can prevent the other timeships wash from destroying the TARDIS. Using this display as a guide, a TARDIS can safely "pulled alongside" another Time Ship in its time curve. This will cause the Vortex shields of the two ships to begin jamming each other and eventually the sub-neutron circuits of one (or both) ships shields will fail.

The Time Path Detector is not available in Mark I TARDISes and other Vintage Capsules, but many operators construct and install their own. The Indicator can be removed from the console and used as a portable "alarm" to detect approaching Time Travel Capsules.

Digital Time/Place Orientation Printout



Right before materialization a Temporal Probe determines the current year of destination. The resulting time print is displayed on what some operators refer to as the Yearometer screen when the time calculator button is pressed. Unless the voice integrator's text translation option is active, the readout is given in Absolute Time and a formula is needed to convert the date to Earth Time.

Right after materialization, the Astrosextant Rectifier will attempt to confirm that a TARDIS

has arrived at the correct space-time coordinates. If the sky is visible, the Spectrum-Mixer can also be used to roughly determine the current spatial (and presumably temporal) location by analyzing the position of near by stars.

There can be significantly delay in confirming the coordinates if the TARDIS is 'unsure' of the current time zone. The digits will be read out as precisely as the TARDIS Probe and Rectifier can determine. Information that can't be fixed will continue to fluctuate. If the current location is not know at all the readout will state "Location Unknown" in green text. Gallifrey (or maybe just the Death Zone) shows up as "no time" and "no place" on the TARDIS instruments. A reading of all zeros on the yearometer indicates that the TARDIS has jumped a time track.

A damaged Sterometer will reduce the accuracy of the Rectifier to within a few thousand light years. Similarly localized time friction can cause yearometer's safety device to reset to zero. But its built in memory will restore its function when the TARDIS leaves the time zone. A collision with an entity in the Vortex, such as the Madragora Helix can thrown the Rectifier out of phase. Malfunctions can sometimes be compensated for by manipulating the time Tachograph.

Jibbert Cathocode Troisieme Timepiece



This component is usually part of the Control Console. It records the passage of time aboard a TARDIS. When a TARDIS is near death the flow of time between the interior and exterior breaks down. The effect of this is similar to Temporal Orbit. In such cases several minutes will pass inside a TARDIS for every second that passes outside.

Extreme Emergency Lever



If used by the Linked Time Lord Operator this lever triggers the Distress-Call which sends an emergency All Frequencies Alert to the High Council of Gallifrey. This lever also serves a secondary purpose if the Symbiotically Linked Time Lord is drifting free in the Space/Time Vortex. Such action should be undertaken any time a TARDIS is captured by an advanced species. In such a case a TARDIS will use the time contours to

automatically lock onto the linked Time Lord. Once this link has been established a crewmember can pull the Extreme Emergency lever, and the TARDIS can rescue the Time Lord, materializing around him.

Fail-Safe Switch

When the Locking Down Mechanism is activated, a TARDIS will seek out and lock on to the nearest habitable environment. This step will be omitted if the TARDIS is already materialized in such a location. Once locked on, Failsafe prevents any dematerialization or materialization of a TARDIS until the switch is deactivated. Emergency doors will be generated in any areas of the TARDIS that (due to dimensional instabilities) have been cut off from the Main Doors in the Control Room. These doors will lead to the

outside of a TARDIS and will appear integrated into the local environment. The existence of these doors will be unstable until the emergency bypass device is engaged.

Though it can be manually activated by the operator, the TARDIS will automatically initiate Fail-Safe if the TARDIS is about to break up (possibly due to a complete failure of the Main Space-Time Element while in the Vortex). Removing the Primary Refraction Tube from the Locking Down Mechanism prevents the Failsafe setting from being changed.

Emergency Emergency Systems

When activated these systems generate a temporary transportation porthole, which has the appearance of a large orange ball of energy. This porthole transports anyone who passes through it to the "nearest" habitable environment. The system is completely random and crew members will often be sent to different planets (though they will all arrive at the same temporal coordinates). As there is no way to return to a TARDIS via the portholes, the device is only used when a TARDIS's destruction is imminent.

Priority Deactivation Code

This is a code chosen by the Time Lord operator allowing him to forcibly deactivate (or reset) specific parts of a TARDIS. Some systems (such as the Banshee Circuits) are immune to this unless the Automatic Systems Override is activated.

Automatic Systems Override



Actions that have a good chance of destroying a TARDIS or its crew are automatically prevented by the Banshee Circuits. However, all of a TARDISes automatic functions can be overridden, at the crew's own risk, using the Automatic Systems Override. This large switch is located behind a wall roundel near the Secondary Control Room. While manual override is enabled the operator will find the TARDIS easier to control if it is in hover mode. The operator should also avoid reversing the polarity of the neutron flow. Override mode significantly increases the chances of a misjump.



Chapter 4: TARDIS Drive Systems



"What did you expect? Some kind of space-rocket with Batman at the controls?" -The Doctor

Travel through space and time takes a fair bit of power. This section explains where a TARDIS gets its power from, and how it makes use of it.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie.
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

The Prime Eye of Harmony: aka Rassilon's Star, The Caldera, The Time-Sun



Rassilon's Star was originally a Population III star named Qqaba. Rassilon and Omega used the Hand of Omega to turn this star into a rotating Black Hole. Using Amaranths, transdimensional physics, and Stasis-Halos, Rassilon brought the nucleus of the universe's first Black Hole to Gallifrey. The Eye was stabilized in an eternally dynamic equation against the mass of Gallifrey. This star became known as the Eye of Harmony because it sits outside History and watches the rest

of the Universe. The Eye makes up the largest structure on Gallifrey - so large that it needs its own fold in space micro-universe to contain it. This chamber is known as the Caldera and is located under the Panoptican (assembly hall) in the Capitol. Rassilon also created the ebonite rod known as the Rod of Rassilon (sometimes translated as "Great Key") which allows a Time Lord physical access to the Power Mast of the Eye of Harmony. The Caldera itself can be accessed via the Vaults found beneath the Capitol. The Security Codes needed to enter the Caldera change every microspan. If a lesser species was to enter the Caldera they would be killed. Indeed, due to density of strands in the Web of Time it is unhealthy for even a Time Lord to stand too close to the Eye.

Within the Event-Horizon of the black hole are a singularity and a universe of antimatter. Outside the Event-Horizon of the spinning star is an area called the Ergosphere. In this area energy that escapes the singularity's gravity is accelerated and amplified to almost infinite levels. Rassilon surrounded the Ergosphere with an iron sphere 10 kilometers in diameter. This sphere was mirrored on the inside. Rassilon allowed a light beam to enter the sphere. This light was amplified by the singularity's Ergosphere, reflected off the mirrored sphere, was amplified again, and so on. Each time the light beam gained energy. A small hole at the top of the sphere releases the amplified light beam. Using transdimensional physics, the Eye was shifted slightly into the future turning it inside out through the 5th dimension. This process is known as singularity eversion and it is done so that the near infinite power of the light beam emerges in a slow controllable osmotic stream. Without the Singularity Eversion the eye would turn into an exploding quasar.

After being converted into Artron Energy, the power is ready for use. Artron energy is measured in units called Omegas. This near magical use of superradiant scattering allows the Eye of Harmony to provide energy for all of Gallifrey's needs (including time travel). The destabilization of the Eye of Harmony would cause Gallifrey to turn into antimatter, creating a quasar that would destroy a hundred worlds.

Power Rooms



A TARDIS has a total of fifteen Power Rooms that contain all of the machinery that powers and operates the ship. They are located deep in a TARDIS's interior and serve as the "nerve center" of the capsule. The following power rooms are known: The Cloister Room, Power Stacks Room, Dynamorphic Power Station, Ancillary Power Station, Protyon Unit, Life Support Systems, Internal Scanner Room, Fault Locator Room, the Primary Control Room (link), the Secondary Control Room (link), The Tertiary Control Room (link). There are also several Control Relay Rooms which look like smaller versions of the Secondary Control Room.

Cloister Room



The Cloister Power Room is the most important Power Room on a TARDIS, for it is here that a TARDIS's miniature copy of the Eye of Harmony is found. The room is located deep inside the TARDIS at bottom of the Transpower segment of the Time Sceptre.

However there is a short cut from hear that leads to Control Room #2. Artron energy from the Eye travels up the Time Sceptre's central shaft to the Transpower Systems and from there onwards to the Control Room Sphere. The Cloister Room of a TARDIS can take any appearance but it will always hold a TARDIS's Eye of Harmony. Most of these have what appears to be an open sky.

This room is the nexus point where all of the TARDIS's internal dimensions meet and are balanced. Because it is the equilibrium point for all of the vast forces of time, space, dimensions, matter, and antimatter this location is also known as Point Zero. A side effect of these forces is that the closer one gets to the Cloister Room, the stronger the dimensional "pressure" gets. This "pressure" can have minor effects on the nervous system.

Other devices found in this room include the <u>Cloister Bell</u> and special telepathic circuits, which are keyed to the biorhythms of the symbiotically linked Time Lord operator. These circuits can allow for some limited communication between the Time Lord operator and his TARDIS. The interior lights will be dimmed when a TARDIS communicates with its operator. These circuits can also act as an information retrieval system, and provide (through Temporal Projection) a direct audiovisual connection with the Time Lord operator. When used in this fashion it relays whatever the operator sees or hears to the Cloister Room. If a TARDIS "dies", the Cloister Room will be the last part of it that disintegrates.

The Eye of Harmony Copy: aka Point Zero, the other Heart of the TARDIS



that is a mathematically constructed copy of the Prime Eye of Harmony on Gallifrey. In modern times it is often referred to as an Eye of Harmony (which can cause some confusion). Because of this some Time Lords refer to it as Point Zero. These Eye copies can be found on all TARDISes after the Type 24. The Eye's iron-like Containment Sphere [LINK] is located beneath the Cloister Room [LINK]. While the Prime Eye's Containment Sphere is 10 km in diameter the TARDIS's sphere only about the size of a

One of the Hearts of a TARDIS (like Time Lords a TARDIS has two) is a massive energy collector

house.

Artron Energy created by the Prime Eye of Harmony on Gallifrey is broadcast into the Space-Time Vortex. This energy travels though the Vortex's Time Contours. Attached to a TARDIS's Containment Sphere is the Receptor Antenna, which collects artron energy using chronon transduction. The naked singularity at the Heart of a TARDIS is directly linked to the Space-Time Vortex, and uses Chronon Transduction to collect the energy.

This creates a link between a TARDIS's Eye and the Prime Eye on Gallifrey. The TARDIS's Heart then emits the beams of Artron Energy to power a TARDIS. The Eye is equipped with a Flux Comparator to ensure a steady flow of energy. The Eye also serves to slowly vent the potential energy stored from dematerialization. This Hawking Radiation is leaked from the Eye's event horizon. As long as the Prime Eye of Harmony on Gallifrey remains in existence, a TARDIS's energy source will never stop producing power.

This room, sometimes known as Point Zero, is the nexus point where all of the TARDIS's internal dimensions meet and are balanced. The closer one gets to the Heart of the TARDIS, the stronger the dimensional "pressure" gets. This "pressure" can have minor effects on the nervous system. If someone were to actually look directly into the Heart, while it was transducting energy from the Prime Eye of Gallifrey, their consciousness would be destroyed by the intense blasts of Artron Energy, leaving only a mindless body behind. Like the other Heart of the TARDIS, the Main Space-Time Element the Eye can, under the right circumstances, restore the dead back to life. For more information see the entry on the Main Space-Time Element.

When a TARDIS is de-registered and made non-operational, the Eye is opened for a short time to de-energize it. Once de-energized, a TARDIS can only be reactivated using special Gallifreyan technology. Even with a plentiful fuel supply a drained TARDIS can't hold a charge and will need a "jump-started" to dematerialize. This is usually done by inserting a charged Neutron Rod into the receptor socket on the Console, but other power sources, such as a Time Ring' can also be used. Whatever the source, the power reading must be well above 0.2 omegas for a TARDIS to be energized. Even with a plentiful fuel supply a TARDIS can't hold the charge and will need a jumpstart to dematerialize.

The Eye is protected from unauthorized tampering by a retina print lock that only allows Time Lords to open the Eye. This lock can only be changed by altering the Security Matrix on Gallifrey. If the Eye is opened outside of a Dry Dimension Dockyard, it will cut off the flow of Artron energy to the Dynamorphic Generators. Having the Eye of Harmony open alters the molecular structure of any nearby planets. The TARDIS will attempt to contain the Eye's energies but if it is left open, the containment fields will drain all of the Auxiliary Power within three hours. At the end of this time any nearby planets will be destroyed in a massive burst of Gravitational Energy. If the Eye is left open for too long the TARDIS will die. Stasis Halos (similar to the Sash of Rassilon) should be used by the operator whenever working with an open Eye.

There is a switch labeled "Do not push" that will collapse an entire TARDIS into the Eye of Harmony. A Time Lord who is very close to their TARDIS can probably send telepathic messages to cause its Eye of Harmony to detonate in a massive explosion that would destroy everything for miles. A TARDIS being destroyed in the Vortex might buckle causality in the Web of Time for centuries in either direction, and with the right technical knowledge and temporal abilities it would be possible to sabotage a TARDIS so that it would destroy the entire Universe. This would be done by allowing the temporal energy to burn simultaneously at every point in space and time. As the moment of total event collapse approaches cracks in the fabric of the universe would begin to appear throughout space and time. Anything exposed to the temporal power of these cracks would be erased from history becoming a never-person or never-object. Some of these cracks would be big enough to consume whole planets.

Since the Heart of the TARDIS is a copy of the Eye of Harmony, it can also serve as an temporary independent power source if the Prime Eye of Harmony is out of range (see Noosphere Parameters) or has been disabled. However the fuel supply of this Copy Eye is not unlimited. Given that the iron sphere that holds the Prime Eye is about 70 million times as big as the one holding a TARDIS's Eye it is possible that the Heart of a TARDIS has only 1/70,000,000 the fuel capacity of the Prime Eye. A fully fueled TARDIS can travel at least 200 trillion years without completely exhausting the fuel supply. If specifically re-engineered, a TARDIS can just make it to the Universe's outermost planetoid, Hindmost. In any case, it appears that the Copy Eye is capable of supply independent power for at least a few years.

Without the Prime Eye of Harmony a TARDIS would eventually have to refuel itself. A TARDIS can travel at least 22 billion years before refueling. When nessecary the Eye's Receptor Antenna is also capable of collecting temporal energy from temporal instabilities, fault-lines running between dimensions, scars on reality, or rifts in time and space that found throughout this Universe. Time Rifts make the best fuel source. Such a rift occurs when two or more dimensions are pressed against each other creating a rift or a scar like an earthquake fault line. The TARDIS can drain off the energy created by the competing forces. Depending on the current energy level of the rift it can take a few minutes to a few days for the TARDIS to power up completely. The rift energy collected by the copy Eye is processed into Artron Energy to make it usable by the Transpower System. This energy is stored it in the TARDIS's other Heart (aka Main Space-Time Element) located in the Console. A TARDIS's Emergency Procedures will automatically try to divert any large explosion or energy release that occurs inside the TARDIS into its Eye of Harmony.

It should be noted that if a TARDIS that relies on scavenged fuel (as opposed to the Eye of Harmony on Gallifrey) travels into a another universe it would leave it without power. Fuel collected in this Universe can only be used in this Universe. The TARDIS would be dead unless a

source of Gallifreyan energy or a local source of rift energy could be found. If any of the TARDIS's small Power Cells retain power, they can be charged up if the operator donates a dose of artron energy equivalent to 10 years of their life. Once the cell has finished its recharging cycle (about 24 hours) and powered back up, it can be used to give the TARDIS five minutes to attempt a space-time jump.

Should power from the TARDIS's Heart be unavailable, the TARDIS will have to rely on the Ancillary Power Station for emergency energy.

Amaranth



Addendum).

An Amaranth is a golden sphere about the size of a Cricket ball. It serves to stabilize the interior of a TARDIS from the de-rationalizing effects of the Eye of Harmony. It is capable of rebuilding small areas of the Universe along rational lines using its own very high Reality Quotient. If the Amaranth finds itself surrounded by a dangerous amount of irrationality, it will teleport its user to a safe location. The Amaranth (or similar technology) might also be used by the Chaotic Limiter in a War TARDIS to alter the reality quotient of time travelers. (see <u>Time War</u>

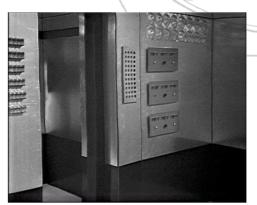
Transpower System



The artron energy from the Eye of Harmony travels from the Cloister Room up the shaft of the Time Sceptre, and enters the Transpower System [LINK]. The system is lined with the transitional element Zyton-7 which processes the rift energy collected by the copy Eye to generate the Artron Orbital Energy.

This processed energy is routed through the Secondary Control Console's 2LO Energy Distributor Circuit (see illustration) and is stored

it in the TARDIS's other Heart (aka Main Space-Time Element) located in the Console. From here the Transpower System uses the internal power regulator and artronic resonators to monitor, reroute, and distribute this energy to the rest of the ship. The residue of the energy used by the Transpower System are vented into the Artron By-Product Waste Shaft.

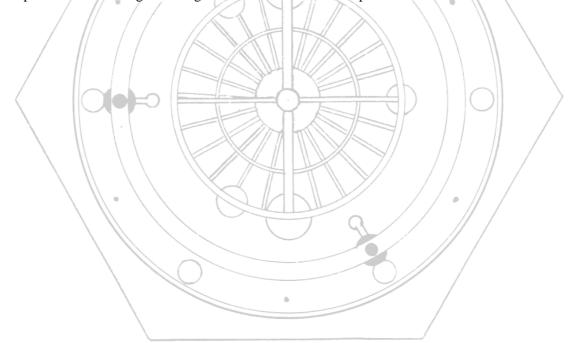


The Power Stacks Room contains the power gauges and Power Response Display Dials that show the distribution of power by the Transpower System. Among other things, these dials show engine frequency (in cycles per second), engine temperature, and Time Rotor speed. In addition to these other devices, an artron energy capacitors is kept in the power room behind ruby colored windows. If the TARDIS is properly configured then its symbiotically linked Time Lord can serve as medium to transmit vast amounts of artron energy. Such an action will likely kill the Time Lord.

The Transpower System is usually controlled and monitored with the 5 Booster Switches and the Power Response Display Dials in the Control Room. The most important of these is the main power switch. There are also several filter switches that can be engaged to reduce the risk of overloads.

The power used by the Dynamorphic Generators during Vortex travel should not exceed 1000 omegas. Otherwise a TARDIS will begin draining the Ancillary Power Systems and possibly vaporize the mercury in the fluid links [LINK]. The amount of power necessary to enter and travel through time is dependent on the size of the object being transported. A full sized TARDIS requires a steady output of several hundred omegas to travel in the Vortex, but if only the console is flying a mere 500 watts is sufficient. If the TARDIS diverts all power to its drive systems it will be unable to activate is defense mechanisms. It would then be possible for intruders to breach the main doors.

Magnetic fields cause fluctuations in Artron energy. Strong telepathic signals may interfere with the flow of Artron Energy within a TARDIS and cause all sorts of malfunctions. Attack by a massively powerful telepathic force can cause the Relative Continuum Stabilizer to fail. Failure of the 2LO Circuit will not only prevent travel but stop a TARDIS's lighting, heating, and food dispenser from working. A red light indicates failure of main power.



Note: all numbers in **bold** are within 30% of being canon.

Power Production Chart

TARDIS Eye of Harmony max output 1,000 omegas

Transducer Cells 1 omega

Total power of the Ancillary Power 701,000 omega*secs
Total Power of the Back-up Systems 60,000 omega*secs

One deleted interior room -500,000 omega*secs (depending on size)

Deleting 17,000 tons (25% of interior) 153,000,000,000 omega*secs

Power Demand Chart

Space Time Jump Minimum 700,000 omegas*sec

Dematerialisation 160,000 omegas (for 3 seconds)
Rematerialisation 73,000 omegas (for 3 seconds)

(Note: it takes the Eye of Harmony 12 minutes to charge the console's Energy Storage Unit for

flight)

Flight in the Vortex (average) 990 omegas
Spatial Drive only 500 omegas

Minimum power for travel 240 omegas

Temporal drift into the past

240 omegas

995 omegas

Temporal drift into the future 0.7 omegas

(Note: travel into the past requires at least 1440 times more power than travelling into the future)

5 omegas

Other required systems in flight

Life Support whilst on a habitable 1 omega

planet

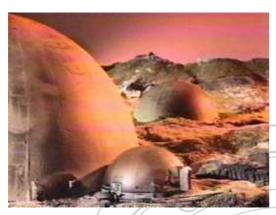
Drain of opening the Eye of Harmony 70 omegas

Creating a Time Field for Axos 3,000,000,000 omegas (70⁹ mega K-Tons)

(Note: it takes about three hours for the Ancillary system to be drained by the Eye. So about

760,000 omegas*sec are stored)

Zyton-7: aka Zeiton-7



Zyton-7 is a crystalline mineral that is essential to the operation of a TARDIS's Transpower Systems. The mineral is found naturally only on the planet Varos which is located between the Constellation/Galaxy of Cetes. It can also be synthesized artificially using compressed nitrogen as the base, but the formula is complex. Zyton-7 has the extremely rare capability to transform the Eye of Harmony's energy into orbital artron energy. Similarly Zyton 7 also shifts and amplifies an organic mind's artron energy into a form of energy that can have a physical effect on a that being over time.

Extensive exposure to this energy will alter a person's morphic field.

Morphic fields are created by the crystallization of history through observation by a conscious mind. The shape and nature of every lifeform in the universe is influenced by the morphic field of that species. The Artron Energy created by a living being creates the morphic field as a sort of collective psionic aura which acts as a species equivalent to an individual's biodata. The longer a particular species has been around the stronger its morphic field. These fields build up over several generations (probably as a sideffect of the crystallization of history caused by observation).

Continual exposure to Zyton-7, will alter a being's morphic field, causing its biological nature to change. The subject's own body will begin to metamorphose to reflect their subconscious desires and insecurities. Such manipulation requires a living organic mind capable of adapting to the irrational changes caused by the alterations. Ideas and concepts that are strongly believed in can become real. It is the radical amplification of this effect that allows the conceptual base mutations caused by a Cell Mutator. For this reason, Zyton 7 should be handled with care.

Zyton-7 lines the Transitional Elements, allowing them to generate Orbital Energy for Vortex travel. High quality Zeiton 7 allows a TARDIS to boost its 'thrust.' The Orbital Energy's ability to alter morphogenic fields is essential part of TARDIS travel. While a TARDIS's transportation of its crew through time and space is usually described as a "Journey" it is just as accurate to say that a TARDIS actually works by recording is crew's biodata and reprocessing/manipulating their future to take into account a different location in space and time.

A standard supply of Zyton-7 usually lasts for centuries. A TARDIS will need to be recalibrated after new Zyton 7 is installed. This recalibration involves verifying the current space-time coordinates of the TARDIS, and can take if hours if most of the TARDIS systems haven't been maintained. If maintenance is neglected, the transitional elements lose their capacity to generate orbital energy and the TARDIS will stall in the Vortex, possibly trapping the crew forever.

Artron Energy



Artron Energy is a form of psionic/temporal energy hidden deep within the mind. It is the energy of thought and perception - thus it is the very stuff of History itself. Because of this Artron energy can be used to translate thoughts and emotions into History itself. Artron energy is both technological and barely distinguishable from Time Lord Biology. Artron energy per unit time is measured in units called Omegas. A common rat can generate one atto-Omega (1 x

10⁻¹⁸ omegas) of Artron Energy. Artron Energy can be maser-modulated into thermal energy. When converted, the thermal energy of one atto-Omega is enough to instantly kill a cat. From this is can be determined that one Omega equals (within an order of magnitude) about 3x10²¹ watts. Artron Energy's crystallizing abilities could make it a kind of anti-entropy. The White Guardian is the Guardian of order and structure. Given how Artron Energy crystallizes history it is possible that Artron Energy is connected to him in some way.

Since it is resistant to the effects of the Space-Time Vortex, it is the primary energy used in TARDISes. It is essential to the operation of the TARDIS. Because of this a TARDIS generates a low intensity telepathic field. The power necessary for a TARDIS to make a trip through time is many orders of magnitude more then that of a star. For comparison, Earth's sun puts out 4×10^{26} watts.

All Time Lords possess at least a quantum of Artron Energy due to their genetic structure, but because of this shared artron field, a symbiotically linked Time Lord's artron energy levels are greatly elevated. During Vortex travel the DNA of crewmembers will be lightly irradiated with Artron Energy from the universe's background chronon radiation. For this reason traveling in a TARDIS has significant effects on the brain of any lesser species. The radiation incrementally increases the amount of artron energy they possess. Aside from providing greater reserves for certain telepathic situations there are no side effects from this irradiation. Although it will continue to accumulate and never fade, it will never reach dangerous levels. These effects will show up very plainly in certain types of very advanced brain scans and the effect can be used to date the exposure.

Since Artron Energy is used by both TARDISes and Gallifreyans, a TARDIS can use its power to help a Time Lord regenerate. However, if a Time Lord's exposure is too great, he must die or regenerate within a day. A Gallifreyan can save an irradiated victim by absorbing the energy from their body into his own. After doing this a regeneration will be necessary to get rid of the excess energy. If the TARDIS is properly configured, its linked Time Lord can serve as medium to transmit vast amounts of artron energy (though this will likely kill the Time Lord). Artron energy flows in a TARDIS can be disrupted by some types of magnetic field and lead shielding.

The Doctor's TARDIS might be attracted to the Artron Energy produced by the conscious minds of sentient beings collapsing quantum waves into History. That would explain why there is sentient life everywhere she materializes.

Complete Systems Shutdown

Standard Systems Shutdown is enacted using a lever found on the Console. When used it deactivates almost every system and circuit (including most of the life support systems). Only the peripheral reserves will be accessible while in this state. Complete Systems Shutdown involves folding back the omega configuration, halting the exponential cross-field, closing the pathways to conditional states seven to seventeen and ending the Main and Auxiliary Drives.

Main Space Time Element: aka The Heart of the TARDIS



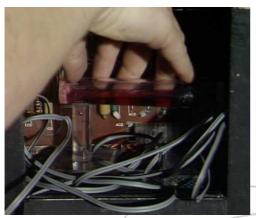
This power source appears to be a fist-sized block of circuitry with a red fluid filled cylinder attached. It is considered to be one of the "Hearts" of a TARDIS (like a Time Lord, a TARDIS has two). The fluid filled cylinder attached to the heart is the main cut-out stack which acts as a control on the space-time element. The Element is located inside the console in the Control Room. (The other Heart is the copy of the Eye of Harmony, which is located deep beneath the console - at the other end of the Time Sceptre). Orbital Artron Energy from the Transpower System is stored in the Main Space Time Element (aka the Heart). The energy in the

TARDIS's Heart is the soul of the TARDIS. The Heart of the TARDIS also contains Huon particles.

The Time Lords invented Huon Energy for their time travel technology. Huon Particles need something living (like a TARDIS) to catalyze inside, Catalyzed Huon Particles magnetize to other Huon Particles drawing them across Time and Space. They also turn the Dynamorphic Generator's energetic muons into counter-magnetization thrust. When inert Huon Particles are safe, but, if given a chance to catalyze in a sentient being, they become deadly. Billions of years ago the Time Lords wiped out virtually all Huon Particles (outside of their TARDISes) and Fluon Radiation in the cosmos by unravelling their atomic structure. Fluon Radiation can be used to amplify and purify Artron Energy. It is possible that Huon Particles generate Fluon Radiation. The energy of the Heart can also be used to neutralize anti-time.

Using the magnetism of Huon Particles the energetic muons created by the Dynamorphic Generators are accelerated into counter magnetization thrust. This energy is released through the Heart's space-time portal into the Vortex to push the TARDIS through the 5th Dimension. This makes the Space-Time Element is an essential component for Vortex travel.

The <u>Recall Circuit</u> is part of the Main Space-Time Element. Remote operation of a TARDIS drastically reduces the life span of its Space-Time Element. This problem can only be solved with a Stattenheim Remote Teleport Control. A replacement Element must be coded to match the specific Type of the TARDIS's Time Rotor.



Even a minor temporary glitch in the Heart will trigger an Emergency Materialization [LINK].

When a TARDIS has materialized, the Element is easily removed, but removal in flight requires deactivating several safety systems in the corridor outside the Secondary Control Room. If the Element's cut-out is even partially detached while in flight the Time Column will jam (possibly causing the TARDIS to leave the Time Spiral) and the internal dimensions will start to destabilize. If this should happen the operator should immediately activate the safety cut-out or a TARDIS will begin to break up from Armageddon Dimensional instability. Repairing a partially detached cut-out

is a time consuming process. If a breach were to occur in the force fields surrounding the Heart (say if the Time Column came all the way out of the console), the released energy would be enough to blast an unprotected person to atoms in seconds.

If one gazes into the heart (without first activating the safety systems) one sees not only the Heart of the TARDIS, but also the Space-Time Vortex. The TARDIS will be able to directly understand the viewer's thoughts and emotions by converting them into the language of Time itself. It is the only way for a being to have complete rapport with the soul of a TARDIS. The energy of the Vortex would give the viewer power over Time, Space, and the Vortex. They would be able to use the Power of Creation to alter all of History with a thought. Ideas and concepts that are strongly believed in can spontaneously become real through the use of orbital energy. A single being (or even and entire species) can have its biological nature instantly changed by altering its morphic field. This has been referred to as the Bad Wolf Scenario.

Morphic fields are created by the crystallization of history through observation by a conscious mind. The shape and nature of every lifeform in the universe is influenced by the morphic field of that species. The Artron Energy created by a living being creates the morphic field as a sort of collective psionic aura which acts as a species equivalent to an individual's biodata. The longer a particular species has been around the stronger its morphic field. These fields build up over several generations (probably as a sideffect of the crystallization of history caused by observation).

Such manipulation requires a living organic mind capable of adapting to the irrational changes caused by the alterations. If the viewer was not equipped with symbiotic nuclei they would become one with the Vortex - a dimension of pure thought with a complexity that borders on sentience. They would be under the direct control of the Vortex. If a Time Lord absorbed the power they would become a vengeful god.

Unfortunately it is also incredibly dangerous to look into the Heart. Every time the TARDIS 'speaks' to the viewer it runs the risk of altering the subject's biodata, possibly reversing the aging of a viewer, turning an adult into an infant. The viewer will also be exposed to all the artron energy flowing through the Heart and into the Vortex - irradiating them with a lethal amount of energy. A Time Lord can funnel most of this radiation back into the TARDIS and burn up the rest with a regeneration. However a member of a lesser species would find themselves slowly dying.

But the danger goes beyond that of the individual. Because morphic fields don't follow the normal laws of space and time such changes are difficult to control or limit. Ripples can be generated that would randomly effect species in different star systems. If the field is strong enough it will influence the evolution of other life forms, even species who are thousands of light years away.

A TARDIS can "catch" anyone who dies by entangling their time stream within time fields created by the Heart of the TARDIS. Using morphic fields, this allows a TARDIS to bring those who die back to life. By manipulating the victim's morphic field they can be fix or locked down at a specific point in time before they died. There are several ways this can happen. The most likely situation occurs when a TARDIS is accidently positioned obliquely between two irrational time interfaces. It can also occur if the TARDIS systems are preset properly (though this would constitute a violation of the Laws of Time). A third possibility requires someone to gaze into the Vortex in the Heart of the TARDIS (aka the Space-Time Element) gaining power over Space and Time.

People resurrected using the power from the Heart of the TARDIS are effectively immortal. If killed by, say a bullet to the brain, they will quickly recover. They can never stay dead because their physical being is anchored into history itself. They might also be able to heal others. Because they are fixed in time they are seen as an obscene violation of the Laws of Time such that it takes a significant effort of will for either a TARDIS or a Time Lord to knowingly interact with such a person.

Time Travel Power Requirements Equations

$E = mc^3$	$\Delta 10^{33} \to k_{w25}$
$\frac{b}{C} + \pi \operatorname{Sx2}^{k} \implies \frac{S(2_{k}Z)}{KCE_{K}}$	$Z_{\tilde{e}} 4x \sum \int S$
$\frac{[4_8 \text{ K}\pi] \sum_{A(1x\sqrt{21}^{98})}$	$ \cancel{\mathbb{E}}_{\scriptscriptstyle{\theta}} T(K 68B) \ \Rightarrow \ K_{S1} 2y_{\scriptscriptstyle{\infty}} $
$A(1x\sqrt{21}^n)$	$\frac{30}{62} s(k) 5\partial_8$
$\frac{CE}{3} \int \frac{bc}{S} > P^{rr}(2)$	$ZK+(-CE)^{\Delta}$
	$T \neq \sqrt{T_K}$

Fluid Links



The Main Fluid Links are made up of glass tubes filled with mercury. Mercury is an element that can serve as an interface between the forces of thought and energy. Since Artron Energy is the energy of thought, the mercury in the links acts as a "fuse" to transfer power to the Dematerialization Circuit. All early model Capsules suffered from frequent failures of their fluid links. If the drive systems receive over 1000 omegas of power for more then a few seconds there is a good chance the Fluid Links will overload and release vaporized mercury into the control room. Sometimes these overloads required replacement of the entire link. The Links are located in the base of the console in the

Secondary Control Room and can refilled by pouring mercury into the appropriate port on the console. The fluid links require ten milliliters of mercury to function. In addition to refilling the Links, after an overload the operator will have to repair several other systems (located in the Power Stacks Room). This problem was rectified with the Type 60 and later models.

Dematerialization Circuit



This is the device responsible for shifting a TARDIS into and out of the Vortex. The Molecular Dematerialization Codes are needed to activate the laser trigger found inside the circuit. The Symbiotic Relationship Circuits automatically input these codes if the operator is a Time Lord. Minor errors in the code will probably result in poor accuracy in navigation. If the TARDIS is equipped with a symbiotic bypass it is relatively simple to bypass the codes and activate the laser trigger using a Light Accelerator. Once the circuit is activated Dematerialization begins.

Components of the circuit include a laser trigger, macromat field integrator, directional memory wafers, and stabilizing dio-nodes connected to transceiving telo-circuits. The Dematerialization casing is attached to artron filaments using a steady-state micro-welding technique, first pioneered by the Lamadines. In an emergency a properly engineered piece of quartz can be used to replace a burned out macromat field integrator. On the Mark I Console, the dematerialization Circuit is located beneath the Main Door Control.

A Demat Circuit can be as a dematerialization booster to separate two ships that have suffered a hyperspace collision – though this has only a 60% chance of success. With the right technical knowledge it is possible to convert a Demat Circuit into a temporal bomb that would spread a TARDIS across 1000 years of time - destroying any solar system that happens to occupy that time zone. A circuit fitted with a Dematerialization Cut-Out or a Return Circuit might be more susceptible to this sabotage. It should be noted that a dematerialization circuit designed for a Mark II console won't work with a Mark I console and vice versa. It would be necessary to upgrade the entire TARDIS console to make a newer circuit compatible.

Dynamorphic Power Station

This is the location of the Dynamorphic Generators. The Power Station is a chamber with a mile-high ceiling and no discernible walls. The room is filled with millions of Trachoid Time Crystals, each one a few meters from the next. They look like thick green crystal columns that reach the ceiling. The control system consists of machinery with buttons, lights and meters. Power is supplied to the Generators via the Dynamorphic Relays. The Dynamorphic Generators use revolution-induced gravity to convert the Artron Energy into energetic Muons, which provide counter-magnetization Thrust for travel in the Space-Time Vortex.

The green crystals in the Dynamorphic Projector transmit the energetic muons to the TARDIS console where the thrust is controlled and modulated by the Time Rotor using a form of Block Transfer math known as Forced-Matter Calculations. Since the projector provides all power to the heart of the TARDIS it is essential to the TARDISes semi-living, semi-sentient core.

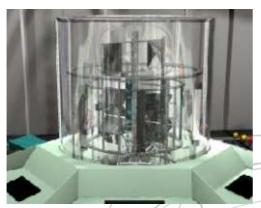
An operator can monitor the consumption of this energy via the Neutronium Counter, which displays the power in omegas. Once in the Vortex, a TARDIS requires a minimum of one quarter of full power (1000 omegas) to travel. Traveling at minimum power greatly increases the ETA. Due to the Protocols of Linearity it requires much more power for a TARDIS to return to a point in time right after it left if a large amount of time has passed for the TARDIS since it last visited that time zone. If the TARDIS diverts all power to its drive systems it will be unable to activate is defense mechanisms. It would then be possible for intruders to breach the main doors. Located in the Dynamorphic Power Station is an Emergency Door that leads out of the dimensional gateway (see Main Doors). This Dimensional Gateway is located on the opposite side of the Exo-Plasmic Shell as the main Gateway.

The Generators can't handle more than 1000 omegas for more than a few seconds. If the Generators are being overloaded then the operator can use the Engine Release Lever to try to regain control. Alternately the engines shut down automatically when ever the entire crew departs the ship. If that fails then, as a last resort, the Time Vector Generator can be physically removed to prevent major damage. The ringing of the Cloister Bell can indicate that the engines are phasing. Under such circumstances the operator should make a micro-jump 5 minutes forward in time. This will allow the Dynomorphic Regenerator to stabilize the engines.

The magnetic containment systems of the Dynamorphic Generators continuously discharge temporal plasma fields in a wave-loop pattern. When the main drive on a Type 40 is active the orthogonal readings of the Hyper Time Ratio should be ZS+ 101 EQ. Because later models of TARDIS have larger shift ratios in the wave loops, its possible to identify the specific Type at a distance by analyzing the ratios. The same identification can be carried out by checking the molecular patina of its Shell.

Dynomorphic generators can be exhausted requiring them to be replaced. In an emergency it is possible to use less sophisticated materials to replace the green crystals – this would result in TT Capsule that was more like a Space Inter-Time Dimensional Robot All-purpose Transport (SIDRAT) then a standard TARDIS. When running in a TARDIS with a new Dynomorphic Generator, the operator should navigate an already established vortex wormhole (such as a Time Contour or a Time Corridor) to check out the temporal dimensions. This is a good way of testing the engines on low power as it requires less energy.

Time Column: aka Time Rotor



Time Columns are found in the Secondary and Tertiary Control Rooms. Many (but not all) Primary Control Rooms are also equipped with them. The central Time Column is made of glass and contains a crystalline assembly made up of multiple motors and rotors, including the Time Rotor, the Energy Storage Unit, Codium Links, Conceptual Geometer Relay, and navigational insturments. All Type 97 TARDISes have their Time Vector Generator installed in the central column. For this reason the Type 97 column looks very different than the one found on a Mark I Console. Indeed each Type of TARDIS has a unique Type of Time Rotor that must

be matched with the Main Space-Time Element to ensure proper operation.

Codium Links are found in the heart of a Time Rotor. They can be used to compress dark matter like WIMPs (Weakly interacting Massive Particles). The Conceptual Geometer probably measures imaginary spaces and might be necessary to travel through Time (but not space) in the Vortex. It must be deactivated before major modifications are made to the TARDIS. The Geometer is equipped with an agronomic trigger and field separator. The Conceptual Geometer can be found near the Ancillary Power Station and its Relay is found inside the Time Column. The base of the rotor's pedestal is connected to the Sonic Booster. The interior of the Time Column pressurized a transparent gas that turns white when exposed to a G Type environment. Should the glass of the column be breached this gas will escape into the control room. While not dangerous to Gallifreyan's the gas is toxic to humans.

The power necessary for a TARDIS to make complete a trip through time is many orders of magnitude more then that of a star (the Earth's sun has an output of $4x10^{26}$ watts). Because of its immense power requirements the Time Column is located directly over one of the Hearts of the TARDIS - the Main Space Time Element. Thus the Rotor provides access to the richest source of temporal energy on a TARDIS. The Rotor holds the power of the Heart of the TARDIS in check by "weighing it down" to prevent its escape. In this way it controls the power of the countermagnetization thrusts emitted by the Space Time Element. Each space-time jump drains the Time Rotor's Energy Storage Unit to the point where it can only travel a few seconds into the future. It takes a TARDIS 12 minutes to charge the Energy Storage Unit with Temporal Energy for another space-time jump. This is done using the Temporal Reactors fueled by Artron Energy. The Temporal Reactors are filled with chronoplasmic energy, which is contained by Zybanium shields.

The Time Rotor has a progress display on the console. Using this, the drive systems can be tested to ensure that the time rotor is primed for dematerialization. During flight the Time Rotor rises and falls in time with the cycling of the Dimensional Stabilizers. The time rotor pulses with artron energy during Vortex travel. When it lowers, it performs a complete scan of all TARDIS power "thrust" systems. When it rises it provides the operator with a status report on the time changes of these systems and indicates the amount of the power-thrust delivered. The frequency of its cycling slows as a TARDIS prepares to materialize. The Column can only move when the power to the drive systems is on. When fully materialized the column will be retracted and unlit. But if a TARDIS is in hover mode the rotor will continue to glow. The central column appears not to

oscillate when traveling through Inner Time (such as on Gallifrey). When some types of 5 dimensional Scanning Modes are enabled, the Time Rotor with rotate within the Column, presenting the operator with and approximation of the ships current space-time coordinates.

If the Time Column was to stop moving while in the Vortex the TARDIS could fly right through the Time Spiral. The column holds the power down and prevents it from escaping. But this restraint could be overridden with a magnetic field if it was as strong as the fields of an entire solar system combined. It would take 5 minutes for such a field to pull the Time Column all the way out of a Console, releasing the power from the Heart of the TARDIS. The escaping Artron Energy from would flood a TARDIS, and the crew would be blown to atoms in seconds.

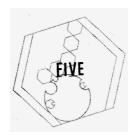
To remove the TARDIS Locking Mechanism while in flight, the Time Rotor must be disconnected. This is necessary to override the fail-safes designed to prevent tampering with the lock while in the Vortex. Care should be taken when removing the protective Column form the Rotor. Contamination of the Time Rotor by psychic pollen can lead the crew to experience severe telepathic hallucinations caused by the symbiotically linked Time Lord's unconscious. In such a case the Dark Side of the Time Lord's mind might rise above his normal repression to inflict damage.

Emergency Power Booster

This small red box contains the maximum power-drive switch. When plugged into the console and activated it diverts all of the Eye of Harmony and Ancillary power to the Dynamorphic Generators in a massive surge. This is a dangerous device to use, as the Generators will overload if they receive more than 1000 omegas for longer than a few seconds. This could cause the mercury in the Fluid Links to vaporize, and will lead to the eventual destruction of a TARDIS. If the TARDIS diverts all power to its drive systems it will be unable to activate is defense mechanisms. It would then be possible for intruders to breach the main doors. For these reasons the Power Booster is not usually plugged into the console.

Power Outlet Socket

The power outlet sockets are located beneath the Power Monitor Panel on the Console. They can instantly adapt to the power needs of any apparatus requiring energy. Power from the TARDIS can be used to recharge some types of space ships. This takes 3-4 hours



Chapter 5: TARDIS Environmental Systems



"So this is what you've been doing with UNIT funds all these years" -Alistair Gordon Lethbridge-Stewart

The TARDIS is not just a vehicle for travelling through time and space, but is also an entire living environment. This section describes the systems which create and maintain this environment.

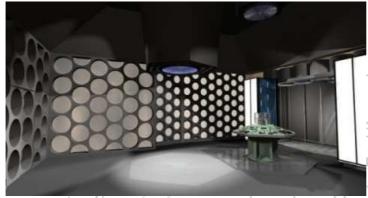
Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie.
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Dimensional Transcendence

Properly speaking TARDISes are best described as "spaces," rather than "objects." Most TARDISes are Dimensionally Transcendental, meaning that they are bigger on the inside than the outside. This effect is achieved by making a TARDIS's interior a quasi-dimensional continuum located outside of Time in a different dimension then the exterior. This Micro-Universe is created



using Transcendental Block-Transfer Equations that don't interface with Normal Space in a traditional way. A Time Lord can tell when one is in a dimensionally transcendental chamber by looking for a slight warping on the edge of his field of vision. Crewmembers will find that for every month they spend inside a TARDIS they will age

slightly less then a week.

Dimensional Transcendentalism is achieved using the Relative Dimensional Stabilizer, which time maps the para-dimensional interior though null-space and the Vortex and onto the Exo-Shell's exterior outlet. This Time Mapping forms the Dimensional Gateway. The dimensionally transcendental nature of a TARDIS can be thought of as a hypercube (i.e. a 4 dimensional square).

A TARDIS's interior is composed of a complex web of bio-mathematics and exitonics with a finite multi-dimensional mass, which usually totals about 68 thousand metric tons. The size can be altered using the dimension scale control on the console. While a TARDIS's minimum interior volume is about the size of an atom, its maximum volume is about one trillion cubic kilometers.

The interior of a TARDIS is incapable of holding an object that is several miles across without extensive block-transfer modifications. In such a state one could walk for 10,000 years with only a few hours of rest a day and never reach the end. The great size of a TARDIS interior is also rumored to be linked to the vast depths and capabilities of a Time Lord's mind.

During the Time War the matter used for the internal structure of a TARDIS can withstand a full-on thermonuclear blast. It is theoretically impossible for there to be a breach between the TARDIS's micro-universe and the Vortex. This is because the Internal Dimensional Units act to prevent internal trans-dimensional breaches. Nevertheless such breaches have been known to occur under extreme circumstances, and there is a high-pitched alarm designed to alert the crew if the structural integrity has been breached. While a TARDIS interior can't be breached by a Vortex Infarction or a Time Scoop, it is possible for a charged vacuum embodiment to cause a wormhole that could penetrate the interior. Such a breach in the endo-shell of a TARDIS could (among other things) allow all the air to leak out.

Time Vector Generator: aka Dimensional Control Unit, External Integrity Stabilizer



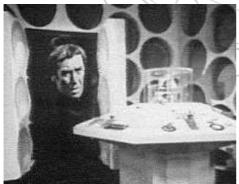
The Time Vector Generator (TVG) is an 18 inch long black rod with gold and white caps. It connects the Exo-Plasmic Shell with the interior Micro-Universe. The caps at either end of the Time Vector Generator can be removed to release the vast amount of power stored in the Time Vector Generator. It will release a dazzling light and burst of radio static (enough to burn out advanced communication gear). This power could be adapted to be used by primitive technologies. In a Mark I TARDIS the Generator can

be found behind one of the roundels in the secondary control room. In Mark IV console the dimensional control can be found on the underside of the console. In a Type 97 the Time Vector Generator installed in the central column, giving it a very different appearance from the column found on a Mark I.

Removal of the Time Vector Generator collapses a TARDIS's interior, making it the same size on the inside as the outside. Such a removal would cut all power to the Dynamorphic Generators. If the Time Vector Generator is removed for too long the TARDIS will suffer severe damage. If reinstalled, the interior of a TARDIS will quickly "re-grow," but the internal configurations are sometimes scrambled and redecorated.

A malfunctioning Time Vector Generator can allow time warp fields to leak out of the console, possibly displacing the operator forward in time. Malfunction of the <u>Fluid Links</u> can render the Time Vector Generator inoperative. Faced with attacking Reapers a TARDIS will separate its Exo-Shell with the interior universe to protect itself. This is done by disconnecting the Time Vector Generator. It should be noted that there is no spare Time Vector Generator, nor can one be constructed (in a reasonable time) in the Workshop. Adapting the emergency one used by the Tertiary Control Room is impossible.

Relative Dimensional Stabilizers



The primary and secondary Relative Trans-Dimensional Stabilizers (RDS) inside the control assemblies of their respective Control Rooms. They are accessed from the underside of the console. They are responsible for creating the size, shape and form of a TARDIS's interior. The sphere of the Core Service Module is surrounded by a grid of matter control projectors which the Dimensional Stabilizers use to maintain the Module. Because they allow the operator to cross three dimensional barriers a TARDIS can not travel the vortex without them. The field created by the

stabilizers are also an essential part of the Temporal Grace effect. Because of its role as an interface between the four dimensional TARDIS and its three dimensional crew the Relative Dimensional Stabilizers is essential for the TARDIS to understand the desire of its operator.

Monitoring and controlling the RDS takes up more of the Artron Mainframe's processing power than any other function, leaving only 5% of the processing capacity for other functions. Vintage Mark I consoles have very primitive Stabilizers in comparison to later models. While the Primary RDS can handle normal operations when the TARDIS is fully materialized the secondary stabilizers can be cored in to operation if the operator desires.

The Relative Dimensional Stablizers cycle continuously when a TARDIS is in flight and can sometimes be faintly heard in the Control Room. The sound is clearly audible on the exterior when a TARDIS materializes or dematerializes. This sound is slightly different for different types of TARDIS. If the TARDIS is badly in need of an overhaul the Dimensional Stabilizers will be unbalanced and sound different almost every time there is a materialization.

The Dimensional Stabilizers can be used to fix some kinds of space-time anomalies. They can seal cracks in Time that lead to Parallel Universes, repair damage to the time lines, and act as temporal decrystallizers. It should be noted that the TARDIS's exo-shell can also be used to temporarily plug some types of holes in space-time. In an emergency (and using codes available only to the Lord President) the Stabilizer can be used to control Gallifrey's defense barriers.

Like many pieces of Time Lord technology, the stabilizers will interface with alien technology automatically. The stabilizer can to use sonic vibrations at specific frequencies alter the space between atoms – effectively altering the size of people or objects with only a few simple modifications. They possible compression factor can be up to a million or possibly even higher. The Relative Dimensional Stabilizer's generator appears to be able to bank matter (or at least mass and inertia) in some sort of a holding account. The result is that even though the number of atoms remains the same the mass and inertia is reduced an object, or persons, dimensions are compressed. A skilled technician can reverse such compression with a sonic screwdriver – but this will take a great deal of time. This same frequency based technique appears to be used by the Master's Tissue Compression Eliminator and Laser Screwdriver.

Removal of the Stabilizers' Dimensional Control shrinks the interior micro-universe (all the rooms within it) down to the size of doll house (see illustration). Dimensional Stabilizers can suffer failures of synaptic adhesion or their chronostat can fail. The stabilizers are controlled by a series of blue buttons on the console. They should all be engaged to ensure a smooth flight. If a TARDIS dematerializes without the Stabilizers being properly reset, then the internal gravity will go into a "spin." Under such circumstance the operator should pull the manual override for the stabilizer that is found behind a small hatch at the base of the console's stem. If the Stabilizers are completely disabled, then the life support systems become inoperative.

If the Dimensional Control should fail while the crew is not on board they will be unable to enter the TARDIS to perform repairs. In this case it is recomened that the operator access the Scanner Circuits from outside the capsule and visually link the dimensional integrator circuits through the scanner linkages to act as a temporary stabilizer. This will enlarge the interior enough that proper repairs can be made. In an emergency the Gravitic Anomaliser from the Force Field Generator can be used as a dimensional stabilizer if the main stabilizer is fused. Because Warp Drives a designed to also bank matter to achieve light speed travel, it is possible to construct a primitive Relative Dimensional Stabilizer out of the drive circuits of a space ship equipped with a warp drive using the following procedures:

- 1. Deactivate all drive circuits
- 2. Reverse the polarity of the main warp feeds

- 3. Regrade the deoscillation digretic synthesizers by minus 10 points
- 4. Realign the maxivectormeter on drags so they cross connect with the radia-bicentric anodes
- 5. Switch the conceptual geometer from analogue to digital mode
- 6. Begin triggering feedback responses from the conceptual geometer until a reading of 57-836 results
- 7. Reactivate all drive circuits

Time Sceptre



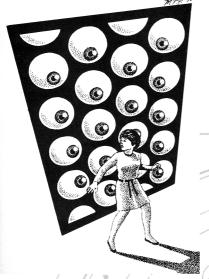
All TARDIS have a core known as a Time Sceptre. It contains the control rooms, the power and drive systems, life support, and basic crew facilities. Each segment is an independent micro universe whose size dependent upon the requirements of the systems it contains.

The tower of the Time Sceptre is enclosed in a spherical chamber that is several miles in diameter. The surface of this chamber appears to be made of grey and black clouds. Any rip in this chamber's structure would reveal the Vortex outside. This sphere is covered with numerous pods connected by rods. These are the extra rooms and corridors. New customized modules (rooms) are added when needed. Depending on the configuration there can also be multiple Corinthian columns within the chamber.

All Time Sceptres have the following major segments. From top to bottom these are:

- Interstitial Antenna [LINK]
- Control Sphere
 - Control Rooms
 - Switch Room
- Core Service Module (CSM) [LINK]
- Power Rooms
- Dynamorphic Generators
- Life Support
- Basic Crew Facilities [LINK]
- Artron Mainframe
- TARDIS Information Systems
- Transpower System
- Eye of Harmony Containment Sphere

Protyon Core: aka Power Room #5, Central Cortex Element



Even the simplest TARDIS needs to be intelligent just to navigate the Vortex and keep itself whole. But more then sentience is required, to truly master dimensional stability in Space and Time an organic component is needed. For this reason, TARDISes are alive and semi-sentient. The Protyon Core serves as the Central Cortex Element and functions as the "brain" and "soul" of a TARDIS.

A TARDIS's Sentience Matrix is created with a Block Transfer System using specific artificial intelligence code. Using birthing matrices the block-transfer artificial intelligence is rendered and physically formatted into several organic Protyon Units of morphologically unstable living protein. Each Protyon Unit is made up of a matrix of single-cell binary activators which function by flexing one way or another. Organic matter is used because only an organic mind can process Block-Transfer Mathematics. The matter needs to be morphologically unstable to adapt to the

complex needs of a TARDIS. These Units are then implanted in the TARDIS's Core Service Module.

All the organic Protyon Units together form a Protyon Core that has a mental capacity and speed far beyond the human brain. This serve central cortex element or the brain of the TARDIS. The Protyon Core takes the form of a massive room filled with billions of organic eyes that wink on and off in binary. Due to its organic nature, each bit has some very limited decision making powers based on the input it receives. This makes it far more complex then traditional circuitry. It works on principles similar to the Matrix on Gallifrey and consists of a nonlinear series of time-frames, which serve as neural pathways. The Central Cortex can make essential predictions concerning the currents and complexities of vortex travel. Dangerous Hadron Power Lines are used to supply power to block-transfer generators.

As an 4-dimensional life form that is capable of perceiving 11 dimensions, a TARDIS has casual probabilities instead of thoughts. These probabilities are only capable of replicating the most rudimentary of 3-dimensional thought processes.

A TARDIS cortex displays about the same amount of mental activity as a Time Lord. Most of that activity consists of monitoring and controlling the Relative Dimensional Stabilizers. Because of the RDS's role as an interface between the four dimensional TARDIS and its three dimensional crew the Relative Dimensional Stabilizers is essential for the TARDIS to understand the desires and instructions of its operator. Control of the RDS takes up more of the Artron Mainframe's processing power than any other function, leaving only 5% of the processing capacity for other functions. Given the opportunity, a TARDIS will voluntarily communicate to other TARDISes, but attempts to fold this 11th dimensional matrix into some sort of mechanical verbal interface usually meet with failure.

A TARDIS's understanding of Time Lord thought processes is extremely limited (as are the Time Lord's understanding of a TARDIS). A TARDIS-Sentience Matrix can think, but in a manner similar to a machine, not that of a human. While sentient, its not a true self-aware, sapient

artificial intelligence. It tends to have a lot of trouble grasping the idea of personal identity and appears to lack a fully developed sense of consciousness. A properly maintained TARDIS doesn't have emotions. However, due to its four dimensional nature, it can however anticipate some of the needs its crew will have.

This organic computer processes the Block-Transfer Equations from the pre-programmed TARDIS's <u>Grey-Prints</u>. A TARDIS, and almost everything inside, is generated by these equations. Even an outdated block-transfer modulator (with a few sticky-backed matter augmenters) can create massive (if simplistic) structures. Matter created by a TARDIS using block transfer has enhanced temporal properties and are resistant to being retro-annulled. This also makes it immune to the normal Vortex energies. During the Time War the matter used for the internal structure of a TARDIS was capable of withstanding a full-on thermonuclear blast. The Protyon Core's matter generation technology is used to generate custom designed modules and upgrade modules which are then linked (via space-time bridges) to the Core Service Module. A Protyon Unit uses the raw matter that makes up the walls of the Time Sceptre and unused secondary corridors and rooms to generate new modules as needed. The interior is constantly being reformed and remodeled. The Protyon Core uses the auto-scan circuits to keep in constant communication with all parts of a TARDIS via Artron transmissions.

Any object the crew brings into a TARDIS will be replaced with a block-transfer duplicate if left alone long enough. Since it is now part of the TARDIS, this matter can be manipulated and deleted by the TARDIS.

A fully functional TARDIS is prohibited from creating mathematically modeled life-forms. And, it is indeed impossible to create living matter using only block-transfer computations. However it is possible, and once created such life-forms can be reconfigured into other "species." It is even possible to use the organic protein of a Protyon Unit as a 'seed' to be reconfigured into other types of living matter. However, life-forms created by a TARDIS will have very simple programming. For this reason, it is impossible for a Protyon Unit alone to create fully sapient life-forms. Any life-form that is taken out of the confines of the TARDIS's micro-universe runs the risk of encountering complex ideas that it was not programmed to handle. In such circumstances the construct will overload and it will begin to convert into artron energy. It would require an TARDIS's entire power reserves and the merger with Gallifreyan Biodata just to create one stable human. It would be impossible to create a full Gallifreyan using this process.

The TARDIS Matrix and the Protyon Core is protected by warning messages, a firewall, and Teleplasmic Minefields. This is a necessary precaution because damage to the Protyon Units can disable the link with the Prime Eye of Harmony. It can also be infected by creatures like the transmittable Virus of the Purpose - but it will quickly purge its systems with a rather explosive energy discharge in the control room. Outright deleting a TARDIS Matrix would blow a hole in the Universe. Because of the danger of outright deleting a TARDIS Sentient Matrix some criminal elements have discovered that it is possible to transfer the sentient matrix into the body of a lesser species, such as a human, so that the matrix would burn out while a safe distance from the main control room. A TARDIS which loses its sapient matrix will lose almost all power, with little more then the lights remaining operational.



Cramming a TARDIS Matrix into a human body that has been emptied of its original consciousness is dangerous. The Matrix will have a tendency to burst the mind's conceptual frame work. The human body will begin to suffer kidney failure and other complications and will be dead in under two hours. Secret Time Lords research has discovered that the life span can be greatly increased by carefully preparing the lesser being and by leaving it's original consciousness intact before implanting a TARDIS Sentience. But this physical stability

came at a cost. Despite trying over 50 different lesser species in all but 2 cases the resulting being was completely insane. This was due to incompatibilities between the neural configuration of each being. Even a Time Lord will find his mind destroyed if forced to contain a TARDIS sentience. There is at least one know case of a Time Lady linking herself to her TARDIS's Protyon Core at the exact moment of her regeneration. The artron energy was channeled into the TARDIS causing the two of them to become, in essence, one being, with the TARDIS functioning as her body. While the subject suffered massive psychological damage the network was stable, and remained so until outside input disrupted it.

Damage to the Protyon Units can disable the link with the Prime Eye of Harmony. Such damage can be repaired using morphologically unstable organic matter. Some of the very few races that can create this type of matter are the Time Lords, Axos, and possibly the Nestenes. However, care must be taken that this matter doesn't contain any dangerous contaminants.

Multidimensional Grey Prints

These are the complete schematics and plans for a TARDIS. After a TARDIS leaves the Neural Construction Docks, they are locked within the Master Control Console and used by the Molecular Stabilizers to repair a TARDIS. Like the Eye of Harmony, physical access to them is usually limited to occasional overhauls every 3000 years.

Architectural Configuration Program



The Spatial Distribution Circuits use the Architectural Configuration Program to control the interior space allocation with in the Pedestrian Infrastructure (LINK). Since a TARDIS's rooms and corridors are made from mathematical building blocks, its architecture can be remolded. The operator can exert direct control of the interior architecture, designing things as he sees fit. The Protyon Core's matter generation technology is used to generate custom designed modules (aka Storage Rooms) and upgrade modules which are then linked (via spacetime bridges called Dimensional Junctures) to the Core

Service Module. Using these Matter Control Projectors that surround the Core Service Module,

the Dimensional Stabilizers can control any add-on modules. Once the changes are programmed in they can be implemented by pushing the red EXECUTE button.

The Power and Storage Rooms of a TARDIS are accessed with service tunnels (aka corridors), galleries, walkways, stairways, escalators, and lifts. Using Dimensional Junctures the rooms don't even have to be connected in any logical or mappable fashion. Multiple doorways can lead to the same room, and a single doorway can lead to two different places depending on which way you walk through it. Some Time Lords frown on these sorts of configurations and believe that a properly stabilized Pedestrian Infrastructure should be able to be easily mapped in three dimensions.

Temporal Locks are another way to customize the architecture. They can be used to separate part of the TARDIS interior, such as a Storage Room. Temporal Locks can even be used to connect that room to Normal Space via a Real World Interface. Once set up, a Temporal Lock is activated or deactivated by pressing the three green light-up buttons, found inside the room in question. The interior can also be reconfigured to trap hostile entities in dead end corridors.

Using this Architectural Configuration Program the operator can lock or unlock any door in a TARDIS interior from the console (there is a white flash around the frame when a door locks or unlocks). Pass keys for the locks consist of a series of mental images that the TARDIS reads telepathically. And example might be: Crimson 11 delight "smell of dust after rain." It is even possible to set up a temporal bubble around a particular room, effectively trapping everything within the room inside an endless time loop. Under certain dangerous situations the TARDIS will put the inside of the control room into a time loop to protect the crew within a temporal bubble. It should be noted that complex modifications are very difficult, and the operator must have a Rassilon Imprimature or (at minimum) be telepathically linked with a TARDIS to ensure success.

While it is possible to vary the total interior volume of a TARDIS (see <u>Dimensional Transcendence</u>), a standard TARDIS has a million rooms and at least 12 levels. The total volume of rooms and corridors of a complete Type 40 TARDIS has been described as being about the size of a small town. It's also been described at being at least twice the size of San Francisco's Chinatown at the beginning of the 21st century. A fully guided tour of a Type 40 TARDIS could take a couple of years. Regardless of how the lifts and stairs are configured, a person will feel they are moving deeper the closer one gets to the Cloister Room.

Since the interior of a TARDIS is a Micro-Universe, if one sets off in one direction, one will eventually return to one's point of origin. For this reason a TARDIS could (like the N-Space Universe) be considered practically "infinite." This phenomenon is called infinite recursion.

The Protyon Core keeps in constant communication with all parts of a TARDIS using Artron transmissions. The individual rooms of a TARDIS can be located using the spatial distribution circuits, which detect the unbalanced energy each room has with respect to the outside world. These rooms are monitored with the Architectural Configuration Indicators, ensuring that every part of a TARDIS is in constant communication with every other part. It should be noted that while Storage and Power Rooms are detectable, Zero Rooms are balanced to zero energy, and thus don't appear on the Architectural Configuration Indicators.

A TARDIS is constantly reforming, remodelling and redecorating various parts of its interior. In theory these redecorations are done in a manner that will be pleasing to the TARDIS's operator,

but sometimes they are due to random dimensional feedback. The dimensional scale stabilizer controls the time frequency in an attempt to minimize such alterations.

Minor alterations to the architecture can also occur when a TARDIS diverts Artron Energy to assist in a Time Lord's regeneration. Being four dimensional beings TARDISes are even able alter the architecture to accommodate new passengers before the ship's Time Lord knows there will be a new passenger. Under these and other circumstances the TARDIS will perform an automatic architectural reconfiguration. This can extend to rearranging and creating new living rooms. A TARDIS with Time War era upgrades automatically reconfigures the architecture to make sure the room he needs comes to him. And some renegade units will create rooms the operator will need centuries in advance of when they are needed. Over time a TARDIS grows, acquiring additional polychoral facets. When a TARDIS acquires extra internal dimensions its acronym changes from Time and Relative Dimension in Space to Time and Relative Dimensions in Space.

Every TARDIS comes with a default tangential formation which determines the location and floor plan of its power and storage rooms. Despite the changes outlined above, the interior is always organized according to a specific geometry, which can be followed if you understand the pattern. The Time Sceptre is the central structure which contains the Interstitial Antenna, Control Rooms, Switch Room, Power Rooms, Dynamorphic Generators, Life Support, Basic Crew Facilities, Artron Mainframe, Transpower System, and the Cloister room. All other storage rooms are located in pods around the outer surface of the spherical micro-universe. Other things that remain fairly constant are the general floor plan (which does tend to vary slowly over time), and the color, which by default is off-white. It is not unknown for a rebellious TARDIS to hide rooms from the operator's internal schematics. Virtually all of the artronic, communications, and power linkages in a TARDIS pass through Dimensional Junctures to get wherever they need to be. It takes a deliberate program by the operator to alter the fundamental tangential formation. See the Chapter on Storage Rooms [LINK] for more information.

Using the Architectural Coordinate Selector, specific rooms can be deleted. Deleted rooms can either be jettisoned into the Space-Time Vortex or they can be converted into Artron Energy. A hardwired failsafe ensures that any living things located in a room that is being deleted will automatically be deposited in the Primary Control Room. When a room is delete the door (or doors) will remain behind in the service tunnel; opening to a roundel covered wall. Deletion of a room is accomplished by collapsing its shell and feeding them into a Mass Converter. When calculating the energy release the operator is reminded that in the extra-temporal physics of the 5th dimension E = mc³. Since the mass of unused rooms can be converted into energy it is possible that a TARDIS creates the extra rooms to serve as an auxiliary power source. It would take the TARDIS less then a decade to regenerate several thousand tons of interior mass. The multidimensional mass of a complete TARDIS has been known to reach 68 thousand metric tons, but no upper limit has been discovered. It should be noted, that if the Architectural Configuration Program is used while a TARDIS is in the Vortex only the number of rooms to be moved/deleted can be specified but the actual choice of which rooms are moved/deleted is completely random. Under such circumstances the failsafe will not function.

If the Pedestrian Infrastructure is destabilized then the corridors and internal doors of a Timeship will be connected to different places depending on what angle you approach them. The Master Control Console might even appear in one of the storage rooms. If an outside stimulus ever forces the TARDIS to perform an automatic architectural reconfiguration the Time Lord will suffer trauma through his symbiotic link. These mental instabilities can release his past

incarnations from inside his mind. These multiple personality disorder will last until the architecture is restored to as stable state. The destabilization can be repaired by having the operator form a direct telepathic connection with the TARDIS. Once this is done the architecture will reset to its normal configuration.

Desktop Theme: aka Environmental Metaphor

A TARDIS interior micro-universe is created using Transcendental Equations that don't interface with Normal Space in a traditional way. The Default State a TARDIS interior includes an Psychosculpture Environmental Metaphor. The three dimensional form of the Pedestrian Infrastructure is created by the Hynoleptic Interface and driven by a device similar to a Chameleon Circuit. The Imagery Enhancer Systems fine tune the process. Without the illusion of the Environmental Metaphor the interior TARDIS would be seen as a multidimensional bioentity. Thanks to their time brain, Time Lords are able to function in this environment without significant problems. But the multi-dimensional psychic nature of the interior will drive lesser species mad with visions of sinuous and churning monstrosities. Non-sentient beings (i.e. entities without proper biodata) will only be mildly nauseous when viewing the interior without the Metaphor.

The interior has about as much possibility for variation as the exterior does. The Wallpaper Controls are used to alter the Environmental Metaphor's Desktop Theme. The color for the default interior is off-white. Since six is a very important number in Gallifreyan culture the hexagonal form is a common structural shape in Gallifreyan architecture. Hexagons can be found in the shape of many consoles, control rooms, and are often used to decorate the walls. However, individual rooms (and perhaps the entire interior) can be remodeled by changing the Desktop Theme. Default-white, Coral, Leopard-Skin, Wood-Paneled, and Gothic are just some of the many standard options. Depending on the complexity of the upgrades it can take anywhere from less then a day to several months for the TARDIS to redecorate its console room. During this time the TARDIS will place a sign on the door to that room that says "Closed for refurbishment". The TARDIS key will glow to indicate that the redecorations are complete. Normally all storage rooms and corridors follow the control room's theme, but systems faults can result in some areas retaining older disused themes. Some renegade timeships have been known to secretly archive old control rooms (and sometimes even new themes that haven't been selected yet). Since it is designed to function as something of a Safe Mode, the Secondary Control Room, desk-top theme can't be altered from default.

A TARDIS can automatically redecorate various parts of its interior. In theory these redecorations are done in a manner that will be pleasing to the TARDIS's operator, but sometimes they are due to random dimensional feedback. Minor alterations to the architecture can also occur when a TARDIS diverts Artron Energy to assist in a Time Lord's regeneration.

Some types of customization can be implemented instantly. For example, the hardness of the floors and walls are adjusted for the comfort of the crew. The interior lighting is controlled from a switch on the console and can be raised to painful brightness. Operators who decide to paint the inside of the TARDIS should be careful as paint can easily jam a TARDIS's systems. During the Time War the matter used for the internal structure of a TARDIS can withstand a full-on thermonuclear blast.

NOTE: For information and pictures of the various Marks of Refits available for use in the Secondary Control Room see the Chapter on Refits and Upgrades [LINK].

WOOD-PANELED



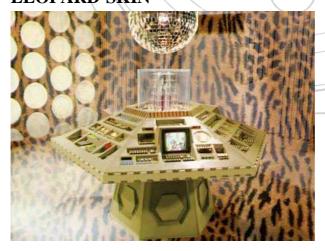


BUMPS





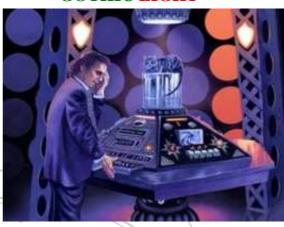
LEOPARD-SKIN





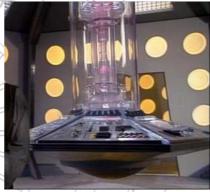
GOTHIC LIGHT





SUSPEND

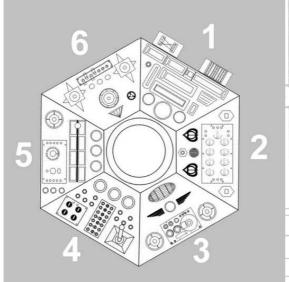




GOTHIC







Panel 1: Navigation

Panel 2: Diagnostic & Internal Ship Systems

Panel 3: Mechanical & Master Control

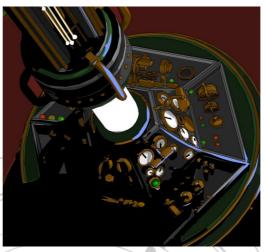
Panel 4: Communications & Exterior Monitor

Panel 5: Helm & Dematerialization Systems

Panel 6: Fabrication & Information Systems

STEAM



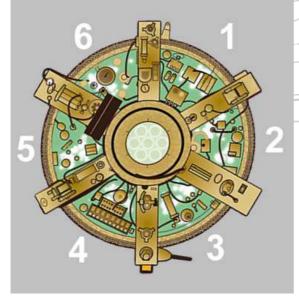


Tertiary Console Room and Mark IX Console Room pictures courtesy of <u>Daryl Joyce</u>

CORAL







Panel 1: Mechanical & Master Control

Panel 2: Diagnostic & Internal Ship Systems

Panel 3: Fabrication & Information Systems

Panel 4: Navigation

Panel 5: Helm & Dematerialization Systems

Panel 6: Communications & Exterior Monitor

BRASS & GLASS







Panel 1: Helm & Dematerialization Systems

Panel 2: Mechanical & Master Control

Panel 3: Fabrication & Information Systems

Panel 4: Communications & Exterior Monitor

Panel 5: Diagnostic & Internal Ship Systems

Panel 6: Navigation

Auto-Systems

These devices and programs are responsible for the interior Environmental Metaphor of a TARDIS. These include the Protyon Unit, Relative Dimensional Stabilizers, Time Vector Generator, and Architectural Configuration Program.

The Auto-Systems also ensure that a TARDIS's Reality Quotient remains stable at .9 and that the crewmember's quotients remain at 1. If displaced from their proper time state the Auto-Systems will attempt to correct the problem, but they will need a Standing Wave (created by a binary induction system) to home in on.

Life Support Systems: aka Power Room #6

The Life Support Systems are located in another of the Power Rooms. These systems include the Dimensional Stabilizers, Atmosphere Monitoring Subsystems, and the Auto-Gravity System. The Life Support Systems can support several thousands of humanoids. Minor life support needs, like interior lighting, are usually powered by the auxiliary power source.

Aside from the glowing roundels there are no obvious light sources in a TARDIS - nevertheless the interior will be quite well lit. This is due to Visual Stabilizer Circuits which are capable of generating and controlling photons anywhere in the TARDIS. The interior lights can be controlled from a switch on the console or by voice commands. The light levels can be raised to painful brightness. A TARDIS has an optional diurnal (day/night) cycle. Interior lighting, are usually powered by the auxiliary power source.

Normally the interior of a TARDIS is quite sterile. Given that there is only one case of the TARDIS crew spreading an organic virus from one time zone to another the TARDIS must have some sort of anti-viral software. The beneficial environment of the TARDIS can help in prevent wounded people from passing out.

The environmental systems always plays a very light melody in the background to soothe and relax its crewmembers. This melody sounds like a steady hum to non-Gallifreyans. The tone of the hum changes depending on whether the TARDIS is materialized or in the Vortex.

Atmosphere Monitoring Subsystem



This system uses the Relative Dimensional Stabilizers to control the type and amount of atmosphere pumped into a TARDIS. The Subsystem has an automatic-cleaning device so used air is recycled, purified, and reclaimed by the Automatic Oxygen Supply System. A dial on the consol acts as a barometer and thermometer.

It automatically adjusts the internal temperature and humidity for the comfort of the crew. Despite this, humans often find the internal atmosphere somewhat drier than what they are used to. Trakenites, on the other hand find it uncomfortably warm and humid. If a TARDIS lands on a

habitable planet it will draw air from the outside and filter it. The air is kept antiseptically clean though some complain about the high levels of static electricity.



If the interior hum is ever deactivated, then the life support system can be faintly heard. It sounds like very slow breathing. Individual rooms can have the air evacuated. An alarm will sound if the life-support systems are about to fail. For such occasions there is a portable Emergency Unit with enough air for six hours. In the Mark X upgrades, emergency life-support masks will drop down in the control room for each crew member.

The TARDIS's circuitry (especially the Protyon Core) is vulnerable to high temperatures (over 40 degrees Celsius). The exo-shell is equipped with coolant systems run by the thermal protection circuits.

But when the internal environment's temperature rises beyond a TARDIS's engineering tolerances, then the thermal cutout will switch in and disable all automatic controls. The thermal cutout will deactivate when the thermal protection circuits have returned the TARDIS to a safe temperature (this usually takes a few hours). This cooling time can be reduced by venting the Thermo-Buffer which will return interior of a TARDIS to normal temperature in much less then an hour. If exposed to freezing conditions for too long (say if the main doors are left open) the thermo-couplings might become chilled. This can result in a rocky dematerialization. For this reason it is important to keep the main doors closed if the exterior environment is sub zero.

Autocleaning Systems

Any object brought into the TARDIS will be replaced with a block-transfer duplicate if left alone long enough. Since it is now part of the TARDIS this block transfer matter can be manipulated and deleted. A TARDIS's autocleaning system uses Block-Transfer to remove all unnecessary dust, mud, and debris from its interior. If the operator desires, the systems can be balanced to allow dust and cobwebs to gather in disused rooms. The Autocleaning systems' Laundry Circuits automatically repair, clean, and iron any clothes left overnight in the sleeping quarters.

Auto-Gravity System



This system can use the Internal Gravity Compensators to create a stable gravity field within a TARDIS regardless of the exterior gravity field. It can compensate even if positioned on the surface of a neutron star.

The Attitude Control automatically uses the pitch gyroscopic stabilizer, pitch stabilizer, and the Internal Gravity Compensators to act as inertial dampers to prevent serious damage due to acceleration/gravity disruption. The corridors have an anti-grav function so it is difficult to hurt oneself by tripping. It should be noted the system is not foolproof, and injury or death can still result from bad falls.

Normally this system automatically adjusts the gravity, within reason, while in the Vortex to acclimatize the crew to the local gravity of the destination. The telepathic circuits prevent the crew from noticing these changes. It might be possible for the crew to be given a non-gravitational existence that would persist outside the TARDIS. The gravity can be manually controlled and the setting of individual rooms can be configured separately. The Internal gravity can be increased to the point where it will kill a Time Lord.

Some Type 40's had intermittent faults in their Attitude Control resulting in damage and injury from exterior acceleration/gravity disruption. The operator can compensate for this by frequently re-setting the pitch stabilizer's manual control to automatic.

The Ancillary Power Station



This Power Room contains the Emergency Storage Cells. These quantum-field generators serve as a non-Artron auxiliary power source if the Eye of Harmony should prove insufficient. The Transpower System charges them whenever a TARDIS is in Normal Space. Minor life support needs, like interior lighting, are usually powered by the auxiliary power source. The emergency lighting system uses red lights. A TARDIS can be put on Emergency Power to prevent it being detected (See Stealth Mode).

Assuming some power is available, using the Architectural Coordinate Selector, specific rooms can be converted into Artron Energy, by collapsing their shells and feeding them into a TARDIS's Mass Converter. If these Emergency Power Units fail, there are also Back-up System of emergency storage cells that can provide limited power.



In the event of a sudden loss of all power, a red light on the consol will illuminate. In the Mark X upgrades, emergency life-support masks will drop down in the control room for each crew member. Aside from these masks the only source of air, gravity, heat, and other life-support needs is what "leaks" in from the outside environment. The Block-Transfer equations that make up the interior and exterior of a TARDIS are mathematically stable. Should all

power in a TARDIS fail, the interior will remain structurally sound but the flow of time on the interior will slow down relative to the exterior.

Transducer Power Cells



These Power Cells are among the first thing to grow on a newborn TARDIS. If these Emergency Power Units fail, there are also back-up system of emergency storage cells that can provide limited power. Using a hyperspatial loop this power can be transferred to the Transpower System. These transducer power cells can allow the TARDIS to absorb thousands, if not millions, of megawatts of almost any type of energy (including electrical output from a nuclear

reactor). The Power Cells are even capable of absorbing the raw artron energy of a Time Lord's future. It takes 24 hours to charge a Power Cell.

Internal Scanner

The Internal Scanner has it's own Power Room. This Scanner allows the operator to visually inspect all 15 Power Rooms.

Fault Locator

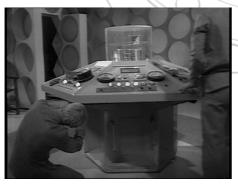


When programmed to run a Basic Reality Check, this device gives a Ship Status Report, which lists all of the ship's instrumentation in green alphanumeric code (A14D, QR18, K17, etc.). The Codes are listed consecutively. Three lights show the status of the instrumentation: green for normal, yellow for standby, and red for malfunction. Malfunctioning parts are also denoted by a flashing text. Systems marked with a standby (yellow) notice should be examined as soon as possible. Malfunctioning systems (red) are partially or completely unusable. A single red light indicate the failure of individual component. But if all the lights on the Fault Locator were to activate it would mean the ship was about to

disintegrate. The Locator can also provide the operator with a printout. While the scan takes only 3 seconds, it takes about ten minutes for the Locator's visual display unit to display the status of every instrument on a TARDIS. Operators are cautioned that the Fault Locator can't pinpoint stuck switches or misaligned controls.

The Fault Locator is made of an entire wall of computer banks, found in the Fault Locator Power Room, near the Secondary Control Room. There is also a readout display under a flap on the console. To ensure reliability the Fault Locator operates on a completely different system and has its own power source. The Fault Locator is also used to activate Self-Repair Mode (LINK).

Service and Checkups



TARDISes should receive service every 500 to 1000 years. Most of a TARDIS's exitonic circuitry is accessible behind the roundels in the walls. The roundels will remain lit even when removed. Time Lords that skip this maintenance are likely to experience total system breakdowns and possibly even the destruction of their TARDIS. A TARDIS that is abandoned for over 3,000 years will breakdown and die from lack of maintenance. For this reason they should receive a checkup and overhaul every 3000 years. It takes about a month to overhaul a TARDIS.



When making modifications, it is important to shutdown everything, except that which is not necessary to shut down. Operators are warned that some TARDISes gets quite upset when their parts are removed and used in other devices. They tend to hold a grudge about this and operate unpredictably for quite some time after being used as a technology donor.

Molecular Stabilizers

These are used by a TARDIS when in Self-Repair Mode (also known as Regeneration Mode) to "regenerate" and repair itself when damaged. The process relies on nano-technology similar to a Time Lord's regenerative biogenic molecules. The Molecular Stabilizers undertake a regeneration cycle that repairs its systems on a molecular level. This form of circuitry regeneration is one of the Time Lord's most advanced techniques. The Molecular Stabilizers can even be used to accelerate the circuit regeneration of technology other then a TARDIS if it is linked through a frequency modulator. If the TARDIS is severely damaged the self-repair circuits might require so much power that the Scanner will not operate.

For their own safety, crew members should remain outside their TARDIS while it is self-repair mode. For this reason the Control Room is deprived of oxygen during self-repair. Though TARDIS scar tissue bears a strong resemblance to mercury, the Molecular Stabilizers cannot manufacture some raw elements such as Mercury or Zyton-7.

Given time a TARDIS can rebuild/grow new Control Rooms (if one is destroyed or jettisoned). Indeed, even if a TARDIS suffers enough damage to reduce it to a 1 inch cube the stabilizer will still be able to re-grow itself. For more on this see TARDIS Cloning [LINK] under Life of a TARDIS.

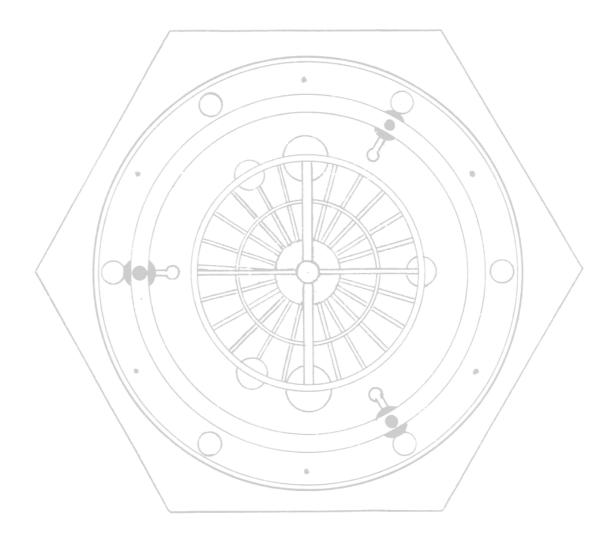
Time-Link

If possible, a badly damaged TARDIS will automatically time-link itself to a healthier one to stay alive. When Time-Linked the dying TARDIS's chameleon circuit and desktop theme will instantly be re-configured to match the pattern of the healthy one. This will stabilize the flow of time inside the capsule. When two TARDISes are time-linked it is possible for the healthy TARDIS to aid the dying one in traveling the Vortex by generating a wormhole within the Vortex for it to travel along. This can be done by synchronizing the coordinates, making sure the calibrators are online, and dematerializing at the exact same time as the wounded capsule.

Dimensional Collapse

Dimensional Collapse occurs when a TARDIS's internal dimensions collapse in on themselves and the Exo-Plasmic Shell suffers isomorphic mass-degeneration. Internal Dimensional Collapse can occur when a TARDIS experiences a severe trauma (such as the death of it's operator) or because of the removal of the Time Vector Generator. When the damage is repaired, a TARDIS will draw power from the Prime Eye of Harmony on Gallifrey and use it to re-grow. The internal configurations will probably be scrambled and redecorated. Without the Prime Eye of Harmony,

it will take about a century to re-grow itself using only the Artron Energy of its operator. A TARDIS will need to be in close contact with a Time Lord during that time. For more information on this re-growth see the entry on TARDIS Cloning [LINK]. A TARDIS will "die" if it remains in Dimensional Collapse for more than a few decades [LINK].





Chapter 6: TARDIS Defense Systems



"The physical form of a TARDIS is largely a matter of opinion." -Unknown Time Lord

One of the logical consequences of travelling throughout space and time is that sometimes a TARDIS will find itself in situations that are dangerous, either to the TARDIS itself, or to its crew. As a result, TARDISes have a number of systems designed to protect themselves and their

occupants. This section describes these systems.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie.
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Automatic Defense Mechanism: aka Banshee Circuits



The Automatic Defense Mechanisms (ADM) consists of all of the defensive systems normally controlled by the Banshee Circuits. These include the Cloister Bell, Safety Precaution Selector, Temporal Grace Field, Chameleon Circuit, HADS, and the Warp Ellipse Cut-out Circuit.

In an emergency the Banshee Circuits allow a TARDIS to use any resources available (including temporarily altering or controlling people, places, dreams and memories) to ensure the survival of the Capsule and its crew. The ADM has been known to put images on the Scanner to warn the

crew of a dangerous location or situation. Its detection systems are know to be quite accurate, but sensitive enough that some operators disconnect certain systems to keep it from interfering.

Sometimes it will double-lock the doors (preventing entrance or exit) until the danger has passed. If necessary, parts of a TARDIS interior will dissolve into viscous metallic liquid as a TARDIS diverts resources to the Molecular Stabilizers. In certain extreme situations the TARDIS will dematerialize as soon as the operator enters the ship. In one case a rovie mouse was exposed to a time fallout from a leak in the capsule's temporal relays. Rather then being aged to dust the TARDIS did its best to reprocess its biodata to keep the mouse alive. This resulted in the mouse undergoing thousands of years of evolution in less then a minute.

This mechanism is a optional extra built into Mark I TARDIS systems. The Banshee Circuits also serve as the Temporal Flight Recorder which stores any flight codes that are used.

While it is easy for Gallifrey to get a signal lock on a stolen TARDIS that has switched off all of it's defense systems some operators use a switch on the console to keep the ADM disconnected because they resent how overly sensitive to threat it is. There are some emergency systems will switch themselves back on even if deactivated by the operator. If the operator diverts all of a TARDIS's power to its Drive Systems it will be unable to activate is defense mechanisms. It would then be possible for intruders to breach the main doors.

Cloister Bell



The Cloister Bell is a signal to the crew that a catastrophe that could threaten even a TARDIS is occurring or will soon occur. In short it is a call to "battle-stations." Cloister Bells can be found on all TARDISes since the Type 22.

The bell will ring for events ranging from is the phasing of the TARDIS engines, to the detection of a vortex discontinuity, to the imminent heat death of the universe. Though it is located in the Cloister Room, the Bell can be heard from anywhere in a TARDIS. Normally controlled by the Main Logic Junction, the Cloister Bell is linked to

the flow of the Universe and thus able to predict many disasters before the occur. Even when the TARDIS Sentient Matrix is unconscious the Main Logic Junction can still trigger the bell. The Cloister Bell can also be manually rung from the Control Room by crewmembers. The High Council of Gallifrey can send a signal that will cause every Cloister Bell in the Universe to ring.

Warp Ellipse Cutout Circuit



A TARDIS has a Warp Ellipse Cutout Circuit, which triggers an Automatic Emergency Landing and an alarm if a TARDIS is about to collide with a vessel in spatial-temporal warp ellipse orbit. It was erroneously believed that vessels with the ability to enter spatial-temporal orbit were never built. Operators should be aware that a difficult temporal deviation will be required to escape from a spatial-temporal warp ellipse.

Safety Precaution Switch



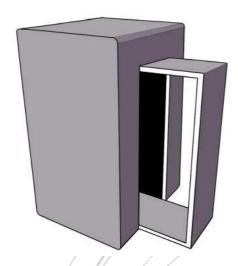
The original version of this system was invented by the Doctor and can be found on all timeships with Mark IV status. When enabled this system collects data 1 microsecond after Materialization Switch #2 is toggled and prevents a TARDIS from materializing around or embedding itself in an object. It also triggers when other threatening circumstances can be found in the arrival area. In such circumstances the Safety Precaution Switch (SPS) prevents the demat circuit from extend the exo-plasmic shell into real space.

A later version of the SPS automatically shifts the TARDIS to a secluded and reasonably safe

materialization site. It will avoid materializing underwater, or in solid rock. If such an arrival seems likely the Selector will instead find a submerged vessel with a breathable atmosphere or (in the case of being underground) will find a cave. The Selector can be fine tuned to prevent a TARDIS from materializing on the edge of a cliff, or even on planets where the local technology falls below a pre-selected level.

As with most systems the operator has the option of overriding the Selector. In this case, if the TARDIS is going to materialize inside a solid object, the cloister bell will ring. If the TARDIS was to materialize inside a wall it could take 5 days or more to safely separate the timeship.

Exo-Chronoplasmic Shell



The exterior of a TARDIS is made up of a Chronoplasmic Shell composed of atoms of rare TARDIS metals (including mercury and in some experimental capsules, Validium) and inorganic polymers. It exists as a Real World Complex Space-Time Event that is Time Mapped onto the interior using Real World Logic Gearing, made up of Complex Block-Transfer equations. The Time Sensor Control fine-tunes the exact space-time coordinates of the molecules that make up a TARDIS. The shell holds the dimensional threshold that connects to the Micro-Universe within.

The Chronoplasmic Shell is driven by the Chameleon Circuit. The default state for the shell of a Type 15-52 TARDIS is a silver-grey metallic cube

3 meters on each side. For a later Types, the exterior is a white domed topped cylinder 2 meters tall and 1.2 meters in diameter. When in its default state the outer surface of the shell will appear, on close examination, to be rippling and changing like something unreal or dreamlike. Similarly the Exo-Shell's mass is distributed over the first 5 dimensions. This means that, from a 3 dimensional point of view, the outer shell has variable mass that tends to fluctuate over time. Thus the density of the shell tends to be different every time it is measured. While disguised as a police box a TARDIS weighs significantly less then 1,200 pounds. But the shell can reach a density of up to 2,300 grams per cubic centimeter.



It is possible to use the chameleon circuit to create a small cubbyhole compartment to store a spare TARDIS Key. The specific Type of a TARDIS can be determined by checking the molecular patina of its Shell. The exterior does emit low levels of Tachyons, which can be detected using the proper equipment. The internal energy of a TARDIS can be diverted to the outer shell, delivering a massive blast of energy to anything it comes in contact with. Under the right atmospheric conditions this energy discharge can be modulated to induce precipitation in the exterior environment using basic atmospheric excitation.

Since the shell's atoms are merely Block-Transfer constructs, the exterior of a TARDIS is immune to almost all attacks and the design specifications state that it is 'technically indestructible' (even without the Force Field). It is immune to diamond and borazon drills, thermic lances, sonic lances, laser cutters, and meteor collision. The heart of a star does produce enough heat to instantly vaporize the capsule. If the Operator desires it, the TARDIS's defenses can be disabled so that its exo-shell is no stronger then the object it is disguised as. If the exo-shell was to develop a crack chronon radiation would be released. To a lesser species this would appear to be a white glow.

The exterior is also radar-absorptive, making it invisible on some tracking systems. However, microscopic elements (such as bacteria) from each destination will often become embedded in the

Shell. The External Decontamination Function (EDF) can be used to sterilize the Shell leaving it appearing pristine and clean. Unfortunately the EDF doesn't prevent molecular or atomic level spatial elements from being embedded. While this does not weaken the Shell, it does create a time thickening effect on the underlying cosmological foam-structures of space. This slight gravitational change can be measured and used to detect the location of the materialization point of a TARDIS. Exposure to Zero Time (not developed until the Time War) removes the spatial elements from a TARDIS's Shell [LINK].

While the entire Exo-Shell can be transmatted or transducted without difficulty, the Interior cannot be penetrated by transmat beams unless the beam's power has been increased by a factor of 50 million. Certain gravitic, thermal, telepathic, and radioactive forces will be transferred to the inside (if the force fields are deactivated). Most of these forces (including gravity) can be negated by isolating this exterior shell from the interior Micro-Universe.

Certain violations of the 3rd Law of Time can stress the TARDIS's defense mechanisms, weakening the exo-shell. Under such circumstances, the corporeal shell could be shattered by something a small as a sub-sonic cannon ball. Such damage wont threaten the interior micro-universe but the TARDIS will have to abandon most of the broken shell and re-grow an new one from what's left. If possible the TARDIS will use the HADS to retreat into the Vortex while this is done. Re-growing the exo-shell can take several weeks to complete, and the new shell will remain white until the process is complete.

Some areas of space are dangerous to a TARDIS interior. The Zeg Zone is one such area of space. The Electromagnetic Pulse Signature interferes with electrical and exitonic circuitry. If exposed to this radiation for too long the console will explode. Shortly after that the TARDIS will seal its doors until it has repaired the damage and TARDIS has been physically transported out of range of the radiation.

In an emergency the TARDIS's exo-shell can also be used to temporarily plug some types of holes in space-time. In the post Time War era severe temporal paradox can attract Reapers which often leads to a break the link between a TARDIS's interior and its exo-shell. Faced with attacking Reapers a TARDIS will separate its Exo-Shell with the interior universe to protect itself. This is done disconnecting its Time Vector Generator – leaving its Exo-Shell abandoned. The TARDIS will still retain a link with its Key and its owner. If the paradox that attracted the Reapers is removed, then the TARDIS will reactivated the Time Vector Generator.

The exo-shell can be displaced from the current time-cone making it disappear. The auto-systems will try to return to the original time zone but need a standing wave generated by a binary induction system to home in on. A massive exterior gravitational force can warp the inner dimensions against the outer shell until a catastrophic schism develops in the outer shell. If this were to occur the interior of a TARDIS would break out and be randomly mapped into the area. This situation can be rectified with a sufficiently complex and powerful gravitational field that can draw the interior segments together, allowing the Endo and Exo-Shells to reform.

Chameleon Circuit

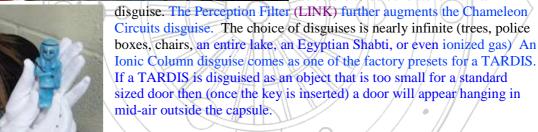


This dimensionally transcendental circuit controls the exterior shell's Cloaking Device and Camouflage Unit. The Camouflage Unit allows the shape, color, mass and texture of the Shell to be altered to blend in with its surroundings. This feature is designed to help prevent changes to history. Chameleon Circuits were developed soon after the Gallifreyans began traveling in time.



This was done because lost timeships were creating legends and mythologies of monsters and gods among the lesser species. The Chameleon Microcircuits can be accessed by removing a roundel in the access tunnel near Control Room Number 2.

Even a detailed scan of the atoms of the exo-shell will reveal its molecular structure to be consistent with its



Usually the operator chooses the disguise. The Type 40 has an early version of the Chameleon Circuit and to create a new disguise the

operator must use a retractable keypad that extends out of console when a switch under the console is thrown. This keypad allows new disguises to be created manually with machine code. Pre-used disguises are automatically accessible. Type 40 TARDIS's make a whooshing noise when their chameleon circuit alters the exo-shell.



All Type 58 and later timeships (as well as TARDISes with the Mark IV upgrade) are designed to automatically scan the target area right before materialization and automatically select a disguise that will hide it. Since every piece of matter in the universe casts an image in the Vortex, a TARDIS can scan this image. During the first nano-second of materialization the TARDIS creates a 12 dimensional data map of everything within a thousand mile radius and determines which outer shell would best blend in

with its environment. It then imprints this image on its exo-shell (or its infastructure), allowing it to precisely duplicate the appearance of the nearby object. It is possible to use the manual override codes to select a different disguise. If a TARDIS is abandoned by its operator it will deactivate most of its systems, and alter its appearance as necessary to avoid attracting attention. One operator of a Type 40 augmented his Chameleon Circuit so that it would operate automatically, but the TARDIS's choice of disguise tended to be inappropriate.

This automatic feature of a Mark IV Chameleon Circuit can be overridden by the operator if desired. And the change implemented after materialization. If a TARDIS has materialized around an object, the Chameleon Circuit can be set to automatically imitate that object. It should be noted that this will only be a loose copy of the object, and that (without complex and careful programming) the disguise will lack any true functionality. It is possible to Time Map the internal dimensions onto the external dimensions. This will increase the Exo-Plasmic Shell to the size of a small moon or planet. However it will limit the capabilities of some of the Defense Mechanisms.

Every time the Chameleon Circuit creates a new exo-shell to disguise the TARDIS a duplicate of the shell is stored in the Shell Room. It should be noted that even if the Chameleon Circuit suffers a complete system breakdown the Shell Room will still continue to collect new unused shells every time the TARDIS materializes.

The shell of a fully operational TARDIS has a very slight vibration that can be detected with the right equipment. However if the Chameleon circuit is faulty, the outer Plasmic Shell might produce an audible hum and an easily detectable vibration. Faulty chameleon circuits have also been known to leak chronon radiation out any "windows" that are part of the chameleon disguise. This takes the form of white light to a lesser species. Removal of the Visual Stabilization Circuit's fusion plate leaves a TARDIS invisible. Not only does this cause an enormous drain on the timeship's power reserves, but it makes finding the keyhole and the Dimensional Gateway difficult.

It is possible to disable the Exo-Shell's invulnerability so that it is only as strong as the object it is currently disguised as. This is not recommended since the endo-shell traditionally has only modest structural integrity. Under such circumstances a collision or attack with enough kinetic energy could penetrate the Control Room.



Older TARDISes (such as the Type 40) were prone to system breakdowns of their Chameleon Circuits, which would freeze the exterior appearance. They required regular Chameleon Conversions to combat this tendency. This involves hotbinding the fragment-links and superseding the binary coding with the right block-transfer equations. Care should be taken when performing a Chameleon Conversion. Errors in data fed into a TARDIS during the conversion will cause a dimensional spiral leading to the shrinkage of the exo-shell. Sonic projectors can be used to create a temporary zone of stasis to halt the spiral, but the only way to reverse the spiral is to correct the errors in the original data. It is also possible for a failed conversion to cause the TARDIS to try to mimic a living organism with the exo-

shell. Under such circumstances that Artron Mainframe would become completely devoted to maintaining this complex dynamic disguise and operator would have to find a way to remind the

ship that it was something more then just a simple organic life-form. For this reason, it is recommended the operator consult the TARDIS Manual before attempting any repairs. These problems were fixed with the introduction of the Type 65. Despite all the advances of the Type 65, some types of TARDIS produced after the Type 40 (specifically the models popular at the time of the assassination of President Eldhind) had much more limited Chameleon Circuits than the Type 40.



If left in the same shape for several years a TARDIS could suffer from chameleonic fluctuation, which causes the exterior to slowly alter its exterior shape

and color over time. Each alteration will be minor but the cumulative effect could be quite noticeable. A breakdown between the Basal Programming and the Autonomous Elements will cause a TARDIS to go into Chameleonic Spasm, leading to wild fluctuations in the appearance and size of the exterior shell.

Perception Filter: aka Distraction Field



Timeships conceal themselves by embedding themselves into local culture - making the capsule even harder to notice. While the Auto-Systems ensure that crewmembers' Reality Quotient remains stable at 1.0 the Quotient of the TARDIS itself remains at only 0.9. This lower quotient is achieved using the dimensionally transcendental chameleon circuit in combination with the telepathic circuits. Since the TARDIS's reality quotient is slightly below 1.0 it effectively creates a low-level Perception Filter or Distraction Field that makes people passing by the TARDIS less likely notice anything odd about it by shifting attention away from it. This field is ineffective on people who are

actively looking for something unusual or the object in question. The TARDIS use this filter to reduce it impact on history.

If a TARDIS refuels by absorbing energy from a spatial-temporal rift it is likely that the ship's perception properties will be welded to that point in space by the rift. Anything placed on the patch of ground the TARDIS was parked on will become virtually invisible unless someone knows exactly what they are looking for. Portable high-level Perception Filters can be built using TARDIS keys (LINK).

Atrium Circuits

The Atrium Circuits are and extension of a TARDIS's Chameleon Circuit. They allow the exterior shell to be shaped to create whole rooms which can be entered, but still leave the subject "outside" a TARDIS. As an added bonus they are capable of generating a powerful psychological defense around the Exo-Shell. Atrium Circuits were created sometime after the Type 53.

Stealth Mode



Despite the Chameleon Circuit a TARDIS will still generate a field of tachyons that can tip off time aware races. And, while it is possible to hide a TARDIS from the observational powers of Gallifrey by placing it near a Naked Singularity, a Grey Immensity, a Phantom Star, or a Dwindler, some operators might wish to have a greater choice of locations. Stealth mode was developed as a way to hide TARDISes located in less exotic time zones.

When activated Stealth Mode disables a TARDIS's connection with the Prime Eye of Harmony and deactivates all non-essential systems. Under normal circumstances it is easy for Gallifrey to get a signal lock on a TARDIS that has switched off all of its defense systems, however when running on only Emergency Power a TARDIS is virtually undetectable to everything, including Gallifreyan scanning devices. With the exception of basic life support, almost everything is made non-functional. As long as the discrepancy between the size of the exterior and interior is not too great a TARDIS in Stealth Mode can pass as a normal everyday building. Even Time Lord visitors who materialize another TARDIS inside are unlikely to notice. A TARDIS can be switched from stealth mode to full power in as little as a few seconds, but this is very rough on the ship's systems and will cause many circuit overloads.

Defense Force Field Prisms



The Defense Force Field Prisms are created by the Force Field Generator (see illustration) located in the console's stem. Without them the shock transferred from even minor collisions can cause serious damage to the Interior of the TARDIS. The can be operated manually but can also be set up to be triggered automatically by the HADS. When activated, these gravimetric shields surround a TARDIS and protect against almost any electro-magnetic radiation, physical, electrical discharge, sonic, magnetic, gravitic, psionic, and chronon forces. It can even deflect the blast from a starship's planetary bombardment missile. A TARDIS can withstand the destruction of a planet and the surface of a quasar or

a neutron star. The heart of a star does produce enough heat to instantly vaporize the capsule. Any biological life that touches the Force Field will be repelled with a power electric shock. Attempts to paint a TARDIS with active force-fields will fail, as the paint will simply fall off. While the Force-Fields do not completely prevent the use of a TARDIS's communications systems operators will sometimes find it necessary to deactivate them when sending complex telepathic messages. When operating in space there is a first and second line of defensive fields. The first is projected some distance away, the other is much closer to the exterior of the exo-shell.

The Force-Field Generator is found within the Stem of the Master Control Console. Even when the field has not been raised it is still operation creating a very small force-field within and above it. Any small object that was to be placed there when the shields were 'raised' would become

trapped in that area when the shields were dropped again. Operators should be aware Force Barriers are not standard equipment for Mark I TARDISes. The Force-Field system can be slaved to be activated by the HADS (see the next entry).

The Gravitic Anomaliser, shields a TARDIS from gravitic forces and can protect it from the gravity of a neutron star. In an emergency the Gravitic Anomaliser can be used as a dimensional stabilizer if the main stabilizer is fused.



The default settings for the force field can be programmed to allow the Main Doors to be safely opened even when the TARDIS is in space. The main Force Field can also act to filter the air if the Main Doors are open. However these fields must be switched off for anyone to exit or enter the TARDIS. Since the Defense Fields for the Main Doors are on a separate circuit it is possible to enter or exit a TARDIS while all parts of the Exo-Shell (except the Doors) are protected. With some difficulty, the field for the doors can be extended beyond a TARDIS's Exo-Shell. This

can be used to create a pressurized air shell or corridor with a range of about 10 meters. The force fields can also be reconfigured to generate null-gravity zones around the outside of the TARDIS. The Forcefield can be used to nudge the TARDIS from place to place. If the TARDIS is properly located, Force Fields can also be reprogrammed to serve as an energy field that will block sunlight over a very large area, replicating the effects of a solar eclipse. It can only manage this feat for a handful of seconds however.

The Force Fields cannot be penetrated by transmat beams unless the beam's power has been increased by a factor of 50 million beyond normal intensity. It would take a psionic force of tremendous (almost unbelievable) power to penetrate a TARDIS traveling the vortex. Beings such as the Guardians, Eternals, Sutekh, and higher life forms can penetrate a TARDIS's Force-Field Prisms by rotating the frequency of their attacks. Such an attack might cause the relative continuum stabilizer to fail, leading to a major power loss. A beam of Coherent Tunneled Chronons is also capable of damaging a TARDIS, as is a black hole, Dalek Temporal Disruptors, a supernova, the D-Mat Gun, or a wormhole. Time displacement waves found near a black hole can penetrate the force fields and kill the crew (though the TARDIS will be undamaged).

(See also Vortex Shields)

Hostile Action Displacement System (HADS)

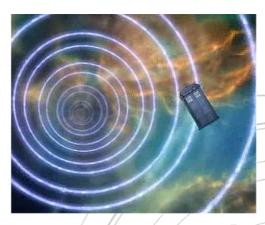
The Hostile Action Displacement System (HADS) can be found on all Type 38 and later TARDISes. If the HADS has been enabled by setting it in standby mode then the relocation device will automatically dematerialize a TARDIS if its Exo-Shell is threatened. Using the coordinate override, the relocation device will shift the TARDIS out of "range" of the threat. Under normal circumstances it will travel forward in time up to one hour to escape before materializing in a, random spot within one mile of its previous location.

As a four dimensional entity, a TARDIS is able to detect (and sometimes respond to) exterior dangers before the danger manifests itself. There are Warning Lights on the control console that indicate present or approaching danger. Some types of dangers can be detected from 20,000,000 light-years away. The system's settings sometimes need to be adjusted as its can be over sensitive. It is not unknown for cannon balls or even a hailstorms to trigger the HADS. The Anti-Collision Device can trigger the HADS. The system can also be triggered if the capsule is in the presence of a being that is immortal due to being fixed in time in space. TARDISes with Autonomous Control have been known to automatically set the HADS in standby. The HADS has an Emergency Manual Override control, which can activate the relocation device. This is the easiest way for someone without a symbiotic nuclei to perform a micro-jump. As an alternative, the Defense Force Fields or Defense Indefinite Time-Loop Option [LINK] can be slaved to the HADS to trigger instead.

Because this system will work even when a symbiotically linked Time Lord isn't onboard the HADS is often set when leaving a TARDIS unattended in a dangerous time zone. Certain violations of the 3rd Law of Time can stress the TARDIS's defense mechanisms, weakening the corporeal shell enough that it could be shattered by something a small as a sub-sonic cannon ball. The TARDIS will then have to abandon most of the broken shell and re-grow an new one from what's left. If possible the TARDIS will use the HADS to retreat into the Vortex while this is done. However the operator will doesn't need to be stranded during this time. The TARDIS will try to track down the artron signature of the last crewmember to touch her exo-shell and materialize at their coordinates. In most cases the last crewmember would be a Time Lord, however if the last crewmember lacked a symbiotic nuclei then the TARDIS would be unable to lock on materialize at their coordinates. In such circumstances the recommended procedure is for the Time Lord to initiate close physical contact with the crewmember being tracked. This will allow the TARDIS to detect the symbiotic nuclei and materialize near by.

The operator should remember that if a regularly programmed space-time jump is initiated while the HADS's coordinate override is engaged the TARDIS will dematerialize only to rematerialize at the exact same coordinated a few seconds in the future. The HADS requires occasional servicing and will have a tendency to suffer minor failures if this is neglected.

Defense Indefinite Time-Loop Option (DITO)



When activated by the operator (or the HADS), the Defense Indefinite Time-loop Option (DITO) continually shifts a TARDIS out of its current time cone and into the future (or the past), making it inaccessible. If the system has been pre-set the operator can also trigger the DITO using the TARDIS Key. Depending on the circumstances, the time shift can be from a picosecond all the way up to an entire millisecond. Setting the phase shift beyond this point is not recommended as shifting a TARDIS 1 second out of phase with the universe is very stressful for the TARDIS, causing severe gravity distortions, and the burning out of several systems.

The Time Barrier that DITO creates can be breached by constructing a Time-Bridge. Time Bridges can be constructed by dismantling and using the parts of a TARDIS.

If triggered by the HADS, the DITO will remain in operation until the threat has left the area. The Auto-Systems will then be used to return the TARDIS to its proper time cone, but if the shift is over a millisecond then the Auto-Systems will need a standing wave generated by a binary induction system to home in on.

Main Doors: aka Dimensional Gateway, Real World Interface



In accordance with the Doctrine of Non-Intervension, TARDISes are designed not to affect history. Because of this crewmembers normally can't alter history unless they leave the TARDIS. The Main Doors serve as the primary entrance/exit of a TARDIS's interior Micro-Universe. They are found only in the Primary or Secondary Control room. The physical space-time bridge between the interior and the Exo-Shell is achieved with differential layer-slippage to create the minimum of user involvement in the mathematical sub-structure.

When set properly the main doors can be voice activated and deactivated by saying "Doors." There is also a mechanical lever (officially known as Number

4 Switch.) on the console that can be used to open the doors. A properly coded remote energy impulse can also be used to open the doors if sent from inside the control room. They can be set

to automatically close if no one is in the Control Room. If all power has failed, the Main Doors can be opened using the Emergency Door Control which is a large hand crank inserted into the wall to the left of the doors. The default settings for the force field can be programmed to allow the Main Doors to be safely opened even when the TARDIS is in Space. However it is impossible to exit through the doors without first shutting off the force-fields that protect the main doors. With access to a subject's biodata, it is possible to create an exclusion field that will automatically prevent that specific person from entering the TARDIS.



Normally it is possible to see the exterior environment through the open doors, however when in airlock mode there is a spatio-temporal void known as the atrium zone between the inner doors and the exterior doors on the outer shell. The inner and outer doors can act as an airlock that functions in vacuum or even under water. The atrium zone between the inner and outer doors is usually a black void, but it can be rendered in curved mirrors or the standard roundel pattern. When rendered as a black void the exterior doors can not be seen from the control room even though there are less then 2 meters away. Likewise those standing outside the TARDIS will be unable to see into it.



The Main Doors' interior (and exterior) size can be altered by up to 50% using the architectural software. This is done with a localized mass inversion wave, which returns the doors to a raw energy state. The Doors can be programmed to be a maximum of about 15 feet tall.

An Emergency Door located in the Power Stacks Room leads out of the opposite side of the Exo-Shell from the Main Doors. This Emergency Door also functions as a more traditional airlock. (For other emergency exits see <u>Failsafe</u>.)

Dematerializing while the Main Doors are still open can result in a gravitational distortion that tries to dump everyone out into the Vortex to be disintegrated by the Time Winds. If the Door were opened while a TARDIS was traveling in the Vortex an emergency system would initiate an Automatic Emergency Landing, but this system can be overridden. If the Force Fields have been activated first, then the doors can be open while in the Vortex – though only a white void will be seen. If the doors open during a Re-materialization the dimensional space pressure would compress the dimensional stability of the interior, drastically shrinking the TARDIS and its crew. Possibly even to the point of being able to explore molecules. This dimensional compression would reverse itself when the TARDIS next dematerialized. For these reasons fail safes keep the TARDIS lock from being taken apart during flight (though this can be bypassed by disconnecting the Time Rotor).

Main Door Locking Mechanism



A TARDIS's Main Doors are protected by a double-curtain trimonic barrier, which is controlled by the Primary Threshold Systems. The lock is electronic and uses a meson projection and light refraction system to read the Trimonic Cypher-Indent Key to ensure that it has the correct crystalline molecular structure/code when compared to the locks mathematical equation. If the code is correct, the Threshold Systems unlock the outer doors.

Another security measure is the "21 position lock." When it is enabled, the locking mechanism extends out of the shell and presents the user with 21 different key holes. If the wrong key hole is used, the whole mechanism fuses. Using the control console or properly programmed sonic screwdriver, the Main Doors can be Double-Locked (aka Deadlocked) from the inside. This prevents the Key from working in the lock. Double-Locking works even when the main and ancillary power is unavailable.

The TARDIS Lock can be jammed using a Laser Pencil tool (probably some type of Laser Cutter or a Laser Screwdriver). Goggles need to be used when operating the device at this power level. A jammed lock will have all of combinations disable so that no key will open it. If the lock has been jammed, then the operator can use his "stone with great power" (usually set into a piece of jewelry such as a ring or necklace) to refract light of a specific spectrum into the lock. This will open the door, but it is only a temporary fix and a Distrab from the TARDIS Tool Kit will be needed to field-strip and fully repair the locking mechanism. The entire locking mechanism can also be removed using the TARDIS Key. To remove or repair the TARDIS Locking Mechanism while in flight, the Time Rotor must be disconnected. This is necessary to override the fail-safes designed to prevent tampering with the lock while in the Vortex.

Normally a TARDIS's safety functions will not allow dematerialization while the Key is in the locking mechanism. But if the TARDIS is in Pause-Control, then inserting the key for more then 20 seconds will cancel Pause-Control and initiate dematerialization.

Type 53 and later TARDISES have Exterior Sensor Plates that the operator can be unlocked by holding the Key against the plate. Others used palm or retina scans. Some of the newer TARDISes built around the time of "Genesis of the Daleks" (Probably the Type 7-0-6) and those which have been upgraded have pure mind locks rather than key or touch activated ones. With this system the operator needs only to hold the key in his hand to lock or unlock the doors. This is usually accompanied by a chirping sound and a flash of the materialization beacon. Type 89 TARDISes (aka Type 102s) have locks with voice prints.

Attempts to pick the lock with primitive tools will result in an electric shock being delivered to the would-be intruder. Normally if someone tries to cut out the Lock, then a defense mechanism will destroy the saw blades in a flash of blue light. But operators should be aware, that if they divert all of a TARDIS's power to its drive systems it will be unable to activate is defense mechanisms. It would then be possible for intruders to breach the main doors. Under this

circumstances and during other types of malfunction, the locking mechanism can be removed if someone has some simple electronic lock picking tools. With the entire exterior locking mechanism removed entry impossible for the operator, even if they have the Cypher-Indent Key. For this reason, it is recommended that the operator Double-Lock the doors when power is unavailable.

TARDIS keys are largely the same and it is fairly easy to use a key from one TARDIS to pick the lock of another TARDIS. This is because the total number of key/locks combinations available to TARDIS builders amounts to several dozen. With great difficulty, a TARDIS lock can be picked with a Sonic Screwdriver using the Devlin principle of randomized mathematical probability to generate the possible key combinations. A Tissue Compression Eliminator can also aid in neutralizing the locking mechanism. It is not unheard of for a TARDIS that has an exceptionally strong bond with its operator to be willing to open the door with a simple telepathic command. A being with incredibly strong psionic powers can force a TARDIS's Main Doors open from the outside. Such an attack would probably cause the Relative Continuum Stabilizer to fail. Powerful Rho Waves (of the sort used for hypnotic induction) have occasionally caused glitches making the ADM to double lock the doors.

TARDIS key: aka Trimonic Cypher-Indent Key



This key "unlocks" the double-curtain trimonic barrier that protects the Main Doors using its unique complex transdimensional crystalline molecular coding. The Key must be inserted into the Locking Mechanism to open the Dimensional Gateway. The key will vibrate when near the key-hole/sensor-plate.

The Key is isomorphic and uses beta waves to detect the metabolism, body pattern, and molecular structure, of the person holding it to sees if it fits with a TARDIS's Approved Entrance File. This list can be updated and changed using the Control Console. The operator can

desensitize a key to work for anyone by holding it against his head and sending the right telepathic command. If the Time Lord Operator dies, then the key becomes owner-neutral and will work for anyone.





If the operator desires, a secret compartment can created in the outer Shell of a TARDIS to hold a spare key. Duplicate Keys for all TARDISes can be found on Gallifrey, but it is possible, with difficulty, to construct a new key in a TARDIS Workshop. Duplicating a key takes about eight hours and the technician must ensure the new key is correct even down to atomic levels. The key can be constructed to replicate the appearance of any object or material. Once built the Key can

even morph its appearance into different shapes. Some version have the Constellation of Kasterborus inscribed on the back.

If the DITO system [LINK] has been pre-set the operator can use the TARDIS Key to trigger it. TARDIS keys are largely the same and it is possible to "pick" a TARDIS locking mechanism by modifying an incorrect Trimonic Key with small drops of telepathically programmed mercury.

Because the key is sensitized to its TARDIS it will glow and grow very hot when the TARDIS is about to materialize nearby. The TARDIS can signal the crew that an Architectural Reconfiguration has been completed by making the key glow.

It is possible to modify the key to track the location its TARDIS if the ship is within 100 years of the key's location. A TARDIS key can even be used to track a missing crewmembers who have been processed by the PAST [LINK]. A saline solution with a sample of crewmember's blood must be prepared and then used to coat the key. The residual artron energy of the key will oxidize the blood. The key can then be suspened in a bottle of clear oil. Position of the key and the alignment of the oxidized blood particles can be used to calculate the rough direction and distance to the lost traveling companion.

A portable high-level Perception Filter (LINK) can be built using a TARDIS Key, and parts from a laptop and a cell phone. However it won't work on all Time Lords.

Early Warning System



Should a TARDIS be invaded by a hostile force, the Architectural Configuration Program can lock or unlock any door in a TARDIS interior from the console (there is a white flash around the frame when a door locks or unlocks). Pass keys for the locks consist of a series of mental images that the TARDIS reads telepathical. And example might be: Crimson 11 delight "smell of dust after rain." The Early Warning System can be configured to monitor a particular door or set of doors in the interior of the TARDIS. Should the doors be breached, alarm lights and buzzers will activate in the room the Time Lord is currently in.

Internal Monitor

A Mark II TARDIS includes an Internal Monitor. This device detects the crystallization created by sapient biodata and thus allows someone in a control room to determine the number of sapient life forms inside a TARDIS. The exo-shell's Materialization Beacon can be set illuminate when there is one or more sapient being inside.

Remote TARDIS Security System

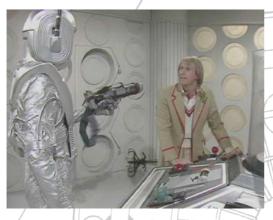


This system is found on Type 45 and later TT Capsules and functions as a more primitive version of the SID [LINK]. It provides extra security by means of electronic eyes at the Main Doors and an internal scanner. If the beams from the electronic eyes are broken, an alarm is triggered. The system is also equipped with several tanks of nerve and stun gas, which can be set to trigger remotely or automatically whenever the beams are broken. The Type 45 can also discharge a lethal energy bust killing all humanoids who are standing nearby. The Remote Security System also can be tied in with the Internal Scanner

[LINK] and the main Scanner [LINK] so that the interior and exterior of the TARDIS can be visually monitored.

The Remote Security System is often used in conjunction with the Portable Scanner [LINK]. The Portable Scanner can be set to sound an alarm when the TARDIS is entered, and use the Internal Scanner [LINK] to allow the operator to view the intruders. The operator can then remotely trigger the nerve or stun gas as desired.

State of Temporal Grace Circuits: aka Internal Weapons Deactivation System



The official name for this is the Internal Weapons Deactivation System, but many Time Lords refer to it by its nickname, the State of Temporal Grace. When activated, the system can instantly contain and prevent chemical, beam, nuclear, and psionic weapons from penetrating or being used in an aggressive manner inside a TARDIS. Depending on how you look at it, people within a TARDIS's Relative Dimensional Stabilizer field don't exist in the Normal Space anymore. It is this, and its link to the Telepathic Circuits, that allows Temporal Grace circuits to work. It can even prevent Stasers from functioning. The field is unable to affect the

Master's Tissue Compression Eliminator because it works on the same principles as the dimensional stabilizers. A TARDIS can even flood its interior with Zero Particles to prevent antimatter reactions. But it should be noted that Zero Particles cause organic cell damage. More advanced Temporal Grace Circuits will even use the telepathic circuits to stop harsh or violent language.

Normally this system only works inside the Control Rooms, but it is possible to reconfigure the TARDIS so that the effect will temporarily extend through-out the TARDIS. Some TARDIS mechanics are capable of configuring the system so it won't effect a particular person but will still limit everyone else.

A TARDIS's Emergency Procedures automatically try to divert any large explosion or energy release into its Eye of Harmony. While it can handle a cold fusion explosion a fission bomb set off inside the TARDIS will destroy the interior. In an extreme emergency the Automatic Defense Mechanisms will set up a temporal bubble around the control room (trapping it in a time loop) to protect the crew. The Weapons Deactivation System requires frequent servicing and will have a tendency to suffer minor failures if this is neglected.

Isomorphic Security System: aka Anti-Theft Protocols



The Isomorphic Security System is part of the Anti-Theft Protocols. This program is a standard system in almost all Time Travel Capsules. If the Isomorphic Security System is activated, it will use a series of voice print and finger and palm print scanners to ensure that only authorized Time Lords can operate the Control Console. An optional part of this system allows parts (or all) of the console to be electrified. Parts (or all) of the console can be electrified using the Immobilizer Switch.

Even if an unauthorized user does manage to deactivate the Isomorphic Security System, the rest of the Anti-Theft Protocols will prevent the accurate piloting of the Capsule. It is difficult, but not impossible, to compensate for this system.

Many systems rely on Gallifreyan retinal scans to prime/activated it. There are several other Security Protocols, many of which can be customized by the operator. Security Protocol 712 for example allows the ship to make a automatic flight to the coordinates outlined in an Authorized Control Disc.

Limbo Atrophier

Standard equipment on all Type 65 and later TARDISes (including Type 102/89), this device ties in with the Telepathic Circuits and the State of Temporal Grace Circuits to 'paralyze' or 'freeze' any intruder whose bio-rhythms don't correspond to pre-programmed list of 'friends.' The victim is trapped in a spare dimensional stasis field, which can only be deactivated from the Control Console. Depending on the setting the intruder might be able to speak. This system can even be extended to outside the Capsule to affect anyone who touches the exo-shell.

Biological Barrage

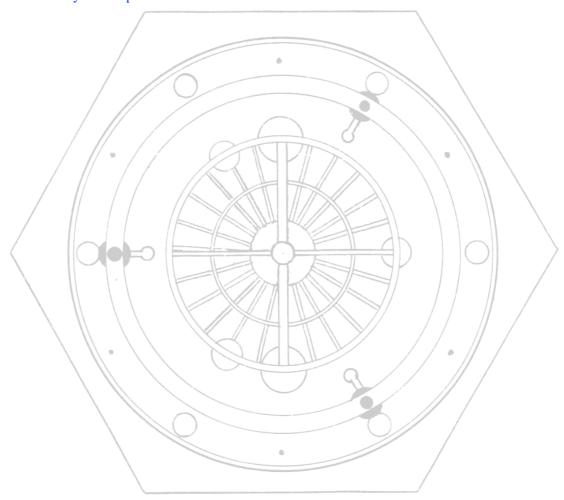
When activated, the Barrage prevents all life form scanners from monitoring the location and movement of being inside the TARDIS. To ensure reliability, the Barrage is powered by the Ancillary Power Station.

Pretend Self Destruct

All TARDISes can be set so that it will appear to be counting down to self-destruct. There is a 20-second timer.

Time Torpedoes

Time Torpedoes are also launched from the Time Warp Silos of a War TARDIS. It takes a little over 30 seconds for them to reach their target. When they detonate, their target is frozen in a microsecond of space-time. Depending on the setting this can last for months to several centuries. While these weapons are capable of breaching even a TARDIS's defenses, any Time Lord or TARDIS that arrives in the blast area after the torpedo detonates will find itself to be unaffected by the temporal stasis field.





Chapter 7: Other TARDIS Systems



"Now, if the trachoid crystal contrafibulations are in synchronic resonance with the referential difference index, then this should take us right to the heart of the trouble. And they don't make sentences like that anymore."

-The Doctor

A TARDIS is a very complex machine, and will have a whole host of systems that cannot be easily categorised. This section details such systems, from the TARDIS scanner to the Vespian Transmogrifier Ratchet Override Flangestimulator.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie.
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Artron Mainframe



This is the Artronic computer network that handles all the systems aboard a TARDIS. The Artron Mainframe Module [LINK] is located right beneath the Core Service Module and above the Transpower Systems. Because of its role as an interface between the four dimensional TARDIS and its three dimensional crew the Relative Dimensional Stabilizers are essential for the TARDIS to understand the desires of its operator. Monitoring and controlling the RDS takes up more of the Artron Mainframe's processing power than any

other function, leaving only 5% of that processing capacity for other functions. But that 5% represents a significant amount of computational power and the Mainframe also contains the interfaces for the Psionic (Telepathic) Circuits and is connected to the Navigation Systems, Guidance Systems, Drive Systems, Defense Systems, Life Support Systems, Self-repair Systems, and even the Emergency Transceiver. With a physical link to the Artron Mainframe, and the right Command Codes most functions of a TARDIS can be controlled.

With the exception of the Protyon Units [LINK], all of these systems are composed of exitonic (a.k.a. Artronic) Circuitry with Organic picotechnology elements. This circuitry is connected with fine grey, hair-like interfaces. Lights move up and down these hairs searching for faults. Older Artron Mainframes (like those on a Type 40) use Old High Gallifreyan for their programming code. Four modules stick out of the Artron Mainframe. These contain the data for the TARDIS Informational Systems. The Information-Banks, Data-Core, Data-Banks, and Memory-Store each have their own module.

While materialized a TARDIS will continual send a telepathic signal stating "TARDIS Mainframe – Waiting." While the Imprimature allows the Time Lord to detect the location of his TARDIS from several dozen meters away, most Time Lords can only clearly sense this standby message when they are inside the capsule. The Artron Mainframe is connected to the Matrix via the Telepathic Circuits, and if a Time Lord has the Key of Rassilon, he can physically interface their TARDIS into the Matrix's Thought Space.



ensured by requiring Command Codes to make major changes to the programming. The Mainframe has several firewalls, including one dedicated to protecting the TARDIS Sentient Matrix. Even with the Command Codes it would take over a year for the operator to disable all of the defenses the Artron Mainframe has. However these defenses can be vulnerable to hacking by code that involves large

Reliability is ensured by having the Fault Locator operate independently of the Mainframe. Security is

amount of prime numbers.

It is however possible to overload the Artron Center Mainframe with brute force. Powerful Rho

Waves (of the sort used for hypnotic induction) have occasionally caused glitches. And a signal powerful enough to pass sideways in time, from one universe to another, would be enough to overload any TARDIS that has its Scanner engaged. Such an overload would traumatize and disable the Artron Mainframe disabling power to almost all systems for almost 2 minutes while the system cuts back and contains the signal.

TARDIS Relational Information Systems



These easy to access systems include the Information-Banks, Data-Core, Data-Banks, and Memory-Store. The Master Control Console contains an Informational Panel designed to provide access to this information. At least one roundel in each storage room or service tunnel can be opened to reveal an visual display unit and a keyboard which has access to the Information System.



Once booted up, all of the data can be retrieved via an Index File, which is displayed on a computer readout by typing "IF". Further data is recalled using key word searches. For more complex or lengthy operations a larger and easier to use data-bank keyboard can be extended out of a control panel using a switch located beneath the console. If one knows the right command codes a Space-Time Telegraph can be used to remotely access the Informational System. A TARDIS's computer interfaces are compatible with just about any system, including CD ROMs.

Information Systems are updated automatically by the Matrix when a TARDIS returns to Gallifrey. A TARDIS in the field usually receives regular updates for the Data-Banks from the Matrix on Gallifrey. The information in these transmitted updates are sent in waves can even travel between universes (if the circumstances are right). But the owner of the TARDIS must pay a fee for the remote update service. Some operators (like the Doctor) save money by purchasing the abridged version (which suffers from several indexing inconsistencies).

All of the data in the Information Systems are stored in Memory Acids controlled by the memory management system. Memory Acids are adaptive, self-repairing, and semi-intelligent. Four modules stick out of the Artron Mainframe. These contain the Memory Acids for the TARDIS Information System. The Information-Banks, Data-Core, Data-Banks, and Memory-Store each have their own module.

Information-Banks

These contain the stellar maps and navigation data, which can be used by the operator in conjunction with the Astral Map to set the coordinates. The Information-Banks' Location Finder can be used to export coordinates to the Directional Unit. There is a large bank of flight computers that house the TARDIS Journey Logs. These logs automatically store data related to the TARDIS's navigation through the vortex. Each space-time jump is given a journey reference number for easy recall. Using the Fast Return Switch [LINK] information can then be recalled and fed into the Directional Unit [LINK] to return to a previously visited time zone. The autolog indicator light will be lit when a TARDIS is relying on this data Journey Logs. Journey Logs of the flight computer are near impossible to alter (i.e. forge a false entry) but are easy to wipe.

Data-Core

The Data-Core contains the TARDIS's technical specifications, and 18,348 Emergency Procedures. The Data-Core Query System provides access to the TARDIS Operator's Manual. However non-Time Lords will only have General Clearance, limiting which information they can accesses. For security purposes there are no flight instructions but it does have notes on the landing protocol.

Data-Banks



The Data-Banks contain encyclopedic information on important (from the Time Lords' point of view) planets, phenomenon, time zones, and people. It even has records of the fashions for various worlds. Entries include description of topic, a list of alternate nomenclature, derivation of name, space-time coordinates, and related entries. The Databank's historical records automatically updated the tenses of its sentences based on the current time zone. After materialization the TARDIS records all of a planet's radio signals and analyses the layout of any local cities. It also

automatically records all audio and visual images presented on the Scanner screen. All of this information is filed in the Data-Bank.

Memory-Store

This storage space is designated for use by a TARDIS's crew. Using the Telepathic Circuits the Memory-Store can literally store memories that are downloaded into them. Memories stored by telepathic circuits can also be uploaded into the minds of a user. While this systems is usually used by Gallifreyans for maintaining their own minds to prevent running out of storage space, the TARDIS is capable of wiping memories of severe trauma from someone. While the memories of such trauma can be removed, the subconscious damage will remain. If the field is set to high whilst a user is editing his memories, he runs the risk of accidentally copying and erasing the memories of any lesser species that is located within the TARDIS at the time. The Informational systems also store data from the Control Room Recorder which can make video and audio recordings of anything in the Control Room.

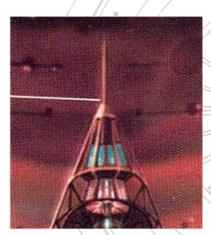
The Record of Rassilon



Every TARDIS built after the end of the Vampire Wars was equipped with the Record of Rassilon. This collection of magnetic cards contain the official history of the Great Vampire Wars. By inserting them into a slot on the console will produce a continious scroll of paper with the information printed on it. It says (in part) that the Vampires are "the enemy of our people, and of all living things." It charges all Time Lords with the Directive of Rassilon: the task of destroying any Great Vampire or its decendents - even at the cost

of his own life. The Record was withdrawn from all models of TARDIS after the Type 40.

Interstitial Antenna: aka Communication Array



This spire is located at the very top of the Time Sceptre and it part of the Control Sphere (LINK). It handles all Translevel Communications and sensor data collection while traveling in the Vortex. It receives sensor data for the Scanner, Absolute Tesseractulator, Mean Free Path Tracker, and Time Path Indicator. The Translevel Communications System incorporates all of a TARDIS's communications devices, such as the Telepathic Circuits, Voice Integrator, Telepathic Induction Circuits, Emergency Transceiver, audio units and internal communication systems. It is standard procedure for the Artron Mainframe to rout all messages into the interface in the Control Room for the operator to access. Using this system, a TARDIS can receive and translate almost any type of communications. The Translevel

Communications System can tap into local communications networks (like phone systems) by using its scanners to map the electrical signals.

Using tracking equipment the TARDIS can even be programmed to follow these signals back to their approximate source. This can be done by first setting all the coordinates in the Space-Time Programmer to zero and using the tracking equipment to upload the new coordinates. Then an Emergency Materialization can be triggered to get a TARDIS to home in on and arrive near the source of a broadcast. This can even be done with the signal form a sonic screwdriver. Precise triangulation of a transmission's origin (down to a few inches) requires an independent second radial from a separate receiver. The TARDIS is also equipped with an box shaped Wave Tracker that can be plugged into any receiver and the Control Console. Once this is done the TARDIS can generate space-time coordinates for the source of any signal detected by the receiver.

It should be noted, that releasing large bursts of Artron Energy into the atmosphere of a G type world can cause atmospheric excitation and create instant snow fall.

Space-Time Telegraph: aka Analogue Cross Time Telephone

Just like more primitive telegraphs, Space-Time Telegraphs (sometimes known as Analogue Cross Time Telephones) can send messages to one another. If one splits a quark the two resulting sub-particles behave as if they are in communication – even if they are separated by space and time. This is the key to trans-temporal communications and it can be used to allow one space-time telegraph to communicate with another one using t-mail. T-Mail (probably short for Telepathic Mail) consists of Artron signals that have been modulated into a syonic beam with spatio-temporal frequencies and extra-temperaneous wavelengths.

Because of the requirement of a quantum connection, the sender will require the receiving Time Lord's bio-data extract to send the signal. This extract is often stored within the transmitter's database. The Telepathic Circuits of another TARDIS can receive the syonic beam and the signal conversion unit controls that telepathic energy. A telepathic 'chime' tell the Time Lord that a message has arrived. After conversion the t-mail can then be presented using the audio units, scanner screen, and/or the trans-temporal projector. Or the message can simply be projected into the operator's mind. When tied in with the TARDIS's central cortex and the voice integrator the telepathic circuits can even make all of a speaker's words come out backwards – at both ends of the communications.

Once the syonic beam has been received the coordinates of the sender can be printed out on a strip of paper. If one knows the right command codes, a Space-Time Telegraph can be used to remotely access a TARDIS's Informational System. If the circumstances are right these waves can even travel between universes. But such a transmission would require the energy of a super nova.

Most Time Lords limit their use of T-mail due to the possible damage to the Web of Time that such transmissions might cause. For important information the Celestial Intervension Agency transmats Secure Delivery Capsules (SDCs) to their agents. But, when timeliness is more important then security, the CIA will send messages via t-mail. To insure the existence of back up copies, top secret message are routed through the TARDIS closest to the receiver. These messages are encoded to prevent the relay TARDIS owner from reading them.

Super Phone



A variation of the Space-Time Telegraph is a device that is sometimes known as a Super phone. With the right attachment, a radio communications transceiver (such as a <u>cell phone</u>) can be patched into the TARDIS's communications circuit, creating a "superphone." This gives the augmented cell phone universal (and transtemporal) roaming, with the ability to contact a network in another time zone that the TARDIS had previously visited. It can also send and receive text messages.

A TARDIS can also route cell phone signals through local

satellite networks allowing it to interface with local networks in new Time Zones and transmit to any other broadcast based communications network in the area. Calls from the "superphone" can

also be received by the TARDIS even if its in a different time zone then the caller, assuming the caller knows the number; for example, the number for the Doctor's Type 40 is 07700900461).

In an emergency the superphone's link with the TARDIS can be modified to be of being expanded into a fully functional door into the TARDIS. While the capabilities of the Superphone are impressive the superphone must remain within the same universe as the TARDIS to function. It should be noted that the Superphone's battery has a limited lifespan.

Emergency Transceiver



The communications circuits of this system are used when the telepathic circuits are unsuitable or unavailable. The receiver module accessed for maintenance by opening a panel beneath the Master Control Console. The Transceiver gathers non-telepathic signals through the Receiver Grid. After materialization the TARDIS records all of a planet's radio signals and stores this information is filed in the Data-Bank. The sensitivity is such that it can pick up TV broadcasts from anywhere on the planet the TARDIS is currently located on. The Transceiver can be used to "hack" into wireless computer networks, satellite communications, and cell phone networks by and land-line systems by using its scanners to map the electrical signals. The communications circuits process and intelligently sift though these

transmissions looking for specified data. Using the light-speed overdrive, the chronospatial antennae can broadcast wavelength based messages through thousands of light years of space. Th Tranceiver also allows a TARDIS to jam all but the strongest non-telepathic communications signals.

While primitive radio transmitters will be incapable of receiving external signals while inside a TARDIS's Force Field, it is possible to physically patch them into the communications circuits so that signals can be relayed (in both directions) through the Interstitial Antenna.

Telepathic Induction Circuits



These circuits are located inside the Secondary Console and are incased in a transparent cylinder that is 2.5 x 7.6 centimeters. Because the telepathic circuits are linked to the mind/brain interface of the operator, the Telepathic Induction Circuits are an essential part of the Symbiotic Relationship a Time Lord shared with their TARDIS. Through the Rassilon Imprimature a Time Lord becomes able to, predict when materialization is imminent. While materialized a TARDIS

will continual send a telepathic signal stating "TARDIS Mainframe – Waiting." Most Time Lords can only clearly sense this standby message when they are inside the capsule. The link even allows the Time Lord to detect a badly wounded TARDIS's "cry" of pain. This exchange works both ways. This shared telepathic artron

field greatly elevates a bonded Time Lord's artron energy levels. Removal of the Telepathic Circuits will sever the Time Lord's symbiotic link.

The circuits also play a vital part in the TARDIS' navigation. A TARDIS constantly generates a low-level telepathic field, which allows it to telempathically read the surface thoughts of its crew. This is done so that while traveling the Vortex the TARDIS draws on the intellect of its crew to increase operational efficiency. Some older ships have shown an affinity for the more primitive thought patterns of lesser species. If the operator is suffering from a mind altering drug (such as ginger beer) the telepathic circuits will pick up the irregular pattern formed in the interface. The space-time circuits will automatically copy this pattern and use it as an operating template to guide the TARDIS. This can cause numerous unpredictable and undesired effects.

A TARDIS generates a low intensity telepathic field of Artron Energy. The Imprimature allows the Time Lord to detect the location of his TARDIS from several dozen meters away. This telepathic field leaves a "thumb print" of the Time Lord's Symbiotic Nuclei and can be used by others to identify the operator of a TARDIS even after it departs. These prints get even more noticeable if a TARDIS makes a bunch of short hops. However this trail can be distorted by bypassing the Symbiotic Relationship Circuits.

The contra-inductor button allows the operator to broadcast an amplified telepathic message from the Time Lord's own mind to a specific target outside the capsule. The Signal Conversion Unit controls the telepathic energy that is received by a TARDIS's Telepathic Circuits. The Signal Conversion Unit can also lock on to, and jam, specific frequencies of psychic energy signals. Using tracking equipment the TARDIS can be programmed to follow the signals back to their source.

The Telepathic Circuits are capable of broadcasting a telepathic recall signal, which can be used by the operator to home in on the TARDIS. A Time Lord who is very close to their TARDIS can probably send a telepathic message which will cause its Eye of Harmony to detonate in a massive explosion that would destroy everything for miles. Using a telepathic amplifier and transmitter like the Core Circuits of a Telepathic Inhibitor a Time Lord with significant telepathic skills can transmit signals into the Vortex taking complete control of their TARDIS from a distance. This probably causes the same long term damaged that early versions of TARDIS Remote Control (LINK) caused.

The Telepathic Circuits are used to communicate with Gallifrey or other TARDISes via T-Mail. The circuits are also capable of receiving psionic beams from a Space-Time Telegraph. See the Space Time Telegraph entry [LINK]. A telepathic 'chime' tell the Time Lord that a message has arrived.

The Vortex Shields can interfere with telepathic communications between people who are in the ship and people who are in Normal Space. But deactivation of the shields while in flight is not recommended. If an incoming signal is very faint the operator can reducing the power to other TARDIS systems (including the lighting). The lack of interference makes it easier to decode a signal. Using the photon lever to channel more power into the telepathic circuits can boost reception but this will quickly overload the console and cause a burn out.

Normally transmissions use rectilinear propagation within the normative space/time continuum, but it is possible to transmit messages to alternate realities by making the signal's wavefront omnidirectional along every axis of the temporal continuum. It should be noted that this requires an external power source. Even a couple of minutes of transmission would use the energy equivalent to a supernova. The telepathic circuits can also receive messages from alternate

universes that are sideways in time, but care should be taken as such an energy signal would be enough to overload an unsuspecting TARDIS that has its scanner engaged. Such an overload would traumatize and disable the Artron Mainframe disabling power to almost all systems for almost 2 minutes while the system cuts back and contains the signal. Powerful Rho Waves (of the sort used for hypnotic induction) have occasionally caused glitches

With the addition of the Thought Projector headset the Telepathic Induction Circuits allow a Time Lord to present his thought patterns and memories on the Scanner Screen. The Telepathic Circuits are capable of assisting crewmembers in dealing with mental invasions. Sometimes this takes the form of an avatar within the victim's mind. The circuits can destroying some types of parasites within a crewmember's brain. It is even possible for a TARDIS to temporarily possess the bodies of people whose minds have been properly conditioned to receive their special signals.

Using a variation of Voice Integrator technology [LINK] the TARDIS can manipulate the unconscious minds of the natives of the current time zone so that the Time Lord and his companions will be accepted by everyone they meet as being part of this world. This doesn't prevent the locals from perceiving the crew as a threat or an enemy. But it makes if very unlikely that anyone will believe that the crew is from completely outside their sociological system. This can cause undesired complications if the Time Lord should decide to tell the natives the truth.

Some have speculated that the Time Lords augment this field to the point where the Time Lord can subtly manipulate the thought process of lesser species, allowing him to seamlessly divert conversations and ideas into a more desired direction. While there is only inconclusive evidence for this type of sub-conscious manipulation, it is know that the telepathic circuits can perform a significant slight-of-mind alteration of the natives' physical perceptions of the crew. When modified in this way so that the locals will perceive the crew as being of their own species – even if the species is completely non-humanoid. It can even be fined tuned to present various racially-based casts.

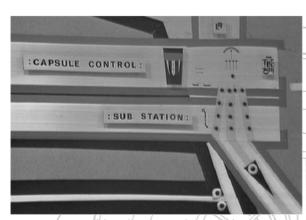
Untrained direct contact with the Telepathic Circuits links the user with a TARDIS's Artron Center, flooding his mind with memories and rendering an inexperienced user unconscious. If the TARDIS is properly configured then the Time Lord can serve as medium to transmit vast amounts of artron energy (though this will likely kill the Time Lord).

Using the Telepathic Circuits the Memory-Store can literally store memories that are downloaded into them. Memories stored by telepathic circuits can also be uploaded into the minds of a user. The TARDIS is capable of wiping memories of severe trauma from someone but they subconscious damage will still remain. If the field is set to high whilst a user is editing his memories, he runs the risk of accidentally copying and erasing the memories of any lesser species that is located within the TARDIS at the time. If exposed to theta emissions (say from a Dorganator) the telepathic circuits will fall in to a feedback loop, which can cause the minds of the TARDIS crewmembers to swap bodies. A Time Lord's knowledge of corporelectroscopy should make undoing this even relatively easy. If the operator suffers a serious mental trauma it can disable many of the TARDIS's systems including the telepathic circuits. Selkatonin can be used to repair overloaded telepathic circuits, however this substance is considered to be a restricted material by the Time Lords.

Under certain circumstances the telepathic circuits can "catch" the mind of anyone who dies inside by entangling their time stream within time fields created by the Heart of the TARDIS. This can occur deliberately if the controls are preset properly, or if a TARDIS is positioned obliquely between two irrational time interfaces. This ability, with the addition of the healing

Nanites from a TARDIS Sickbay, allows a TARDIS to bring those who die within a TARDIS back to life by healing their corpse and returning their minds to their bodies. In the case of being positioned obliquely between two irrational time interfaces the TARDIS can also reverse the aging of a sentient, turning an adult into an infant. Such events will normally occur only if the TARDIS desires it, and for this reason, it is recommended that operators avoid irrational time interfaces.

Voice Integrator: aka Psio-Linguistic Translator



The TARDIS Voice Integrator telepathically conveys the "gift" of translation to the Time Lord, allowing him to understand any language. The Integrator was invented by a Time Lord named Therde. This Translation Unit can be found on the Type 32 and all later TT Capsules.

A red switch beneath the console controls the translation circuit. If the switch is reversed it will have a "Tower of Babel" effect making it impossible for anyone within the immediate area to communicate. For this reason some

operators weld a plate over the switch to prevent tampering.

Right before materialization, a TARDIS will scan a planet's broadcast communications to gather a data for translations. The Telepathic Circuits will determine the local language as soon as a TARDIS has materialized. New languages are stored in the Language Bank for future reference. If meaning and structure is detected by the telepathic circuits, the Integrator will then provide a very sophisticated and very accurate two-way translation for the Time Lord. This is done by telepathically altering his brain so that he perceives the local language as being Gallifreyan. It will appear to the natives that the Time Lord can speak any language. The process picks up on most subtle nuances of conversation without trouble.

This Time Lord gift is shared automatically with any other sapient life-forms by the Passenger Adoption Scanning Terminal (LINK). In most cases, anyone who is onboard the TARDIS when it dematerializes is screened and adopted by the system. Thus, in theory only the crew of the TARDIS will be able to experience the Voice Integrator.

While there is a limit to the distance at which the Voice Integrator can reach the TARDIS crew its range is well beyond several light-years. The system can be re-configured to provide automatic translations for those that have not been processed by the PAST, but this is more likely to be noticed by the natives. And some TARDISes have been known to in selectively 'adopt' certain acquaintances of the crew even if they haven't traveled in the TARDIS. The system can be retuned to become delocalized, providing the crew with the simulations communications of every being within translation range. In most cases this provides little more then an overwhelming babble of noise.

Once a crew member is adopted, the rho waves telepathically alter the subject's brain. If the subject is not familiar with Modern Gallifreyan they will hear their own native language. The effect is so seamless that inexperienced members of the TARDIS crew often don't notice that

they can suddenly speak and understand alien languages. Indeed, the integrator is usually configured so that lesser species won't notice its existence – even if it is translating for them. This illusion can be much more difficult to maintain if the subject remembers being unable to communicate with a specific species or cultured before receiving the gift. This auto-conditioning can malfunction if the subject has been hypnotized or inebriated. Some people even have difficulty telling the difference between what they are thinking and what they are saying.

A fully functional Integrator will automatically alter the crew's names so that they sound normal to local aliens. It will also alter the crew's dialect to match whichever regional or cultural group they are currently speaking to at the moment. Conversely, the translated speech of local aliens is often given an additional accent in order to convey the alien's social class or educational level. The accuracy and appropriateness of these accents varies depending on the reliability of the TARDIS. Using the temporal grace circuits the translations circuits can also be set to filter swear words out of conversation (presumably by substituting less offensive words).

If a user is aware of how the Voice Integrator alters their mind, then they can, with significant concentration, bypass its effects and hear the language as it actually sounds (and see the text as it actually appears). While some Time Lords appear to be able to retain every language the integrator has ever given them most lesser species find that that their recall of previous languages (from earlier time zones) is minimal.

The Voice Integrator can translate any vocal language because the speaker has a mind that can be read, and the system can easily handle the scent based communications used by many non-humanoid species. But the Integrator can't translate extremely primitive languages without assistance from the Animal-Language Translation Circuits. Normally the TARDIS selectively disables these circuits to prevent the crew from being overwhelmed by messages from passing non-sapients animals. Artificially constructed languages, like Esperanto are often beyond the integrator's capabilities as are some extremely complex languages.

The Integrator's setting can be increased to translate written text if desired. But written text must already be stored in the Data-Banks in order to be translated. This limitation exists because text has no mind that can be read by the Telepathic Circuits. Due to an oversight in the programming Gallifreyan is not always translated because it is assumed the TARDIS crew knows how to read it. Languages whose written form are very abbreviated or ideographic (such as Osiran Hieroglyphs) can cause the Integrator difficulties. By the end of the Time War, the only written languages not included in the Data-Banks are ones that have been described as "impossibly old."

It is possible (but unconfirmed) that the telepathic systems of the Integrator subtly manipulate the local inhabitants of a given time zone so that the TARDIS crew would be accepted by everyone they meet as being part of their own world. It should be noted that the locals might still see the crew as being dangerous or hostile but they will be perceived as being a known and understood part of that world. It will be very difficult for the crew to convince them that they originate from a point outside their sociological noosphere.

The telepathic circuits can be combined with the Voice Integrator to cause a person's words to come out backwards. Since the system is part of the Telepathic Circuits it can be disabled if all the symbiotically linked Time Lords are mentally incapacitated (such as post regeneration trauma). Under such circumstances, the Voice Integrator will not function until the Time Lord has recovered.

Microphone / Projection System



A TARDIS is equipped with an internal audio and projection system. The Audio Units are combination speaker/microphones that are found on the Control Consoles. A telescoping microphone can also extend out of the console on a flexible "goose-neck" arm. This microphone is primarily used for communicating with other "local" timeships within the Vortex. A TARDIS's loudspeaker system (otherwise known at the intercom) allows someone in a control room to broadcast their voice

throughout all parts of a TARDIS's interior. These audio systems can be used in conjunction with

the Scanner and other communications equipment such as the Voice Integrator.



The Control Room Recorder uses a sample image locator to make holographic, video, and audio recordings of anything in the Control Room.

The Control room has Trans-Temporal Projector that creates a hologram-like image with accompanying sound from the Audio Units. The Projector can be used for playing messages (such as T-Mail from Gallifrey) or displaying star charts across the ceiling. The holographic projector

also displays a humanoid image for the medical bay's Automatic Diagnostic Terminal when in voice interface mode. The image presented is usually that of the operator Time Lord but, upon request, the TARDIS can use the memory store to find other avatars. The projector can be used to play pre-recorded messages if it receives the right signal or if an object containing a recognizable code is brought into the TARDIS.

A fully functional Scanner has an external speaker/microphone that is controlled by the Audio Units. It is possible to project a holographic image of the operator's face on the exterior of the TARDIS and the operator can also trigger a loud external klaxon.

Printer



This printer is built into the Console. When used it extrudes a ticker tape that is about 5 centimeters wide. It automatically prints the data stored on any Magnetic Card inserted into the Console. A large scale printer capable of producing bundled newspaper is located in one of the console room's roundels.

Scanner



The Scanner and Sub-Scanners consists of a collection of thousands of instruments designed to gather information about the environment outside a TARDIS. Chief among these is the visual signal, which is displayed on the Scanner Screen found in any of the Control Rooms. In most cases the image translator can enhance the available light so that even in darkness a color image can be produced. If the capsule is surrounded by total darkness the scanner can be switched to infrared or a traditional searchlight can be activated. The visual signal has a maximum magnification of 200 power. It can even be pre-set to visually locate specific items, but the operator should be aware that the Visual Orientation Circuits can be confused by heavy fog. The Scanner can also be

refocused with some difficulty, to show the interior of various rooms within the TARDIS. A TARDIS memory bank automatically records audio and visual images presented on the Scanner.

Other sensors built into the Scanner (but on a separate circuit from the visual signal) include audio circuits (to relay sound), a gravity dilation meter, seismic sensor, warp oscilloscope, movement detectors, magnetic field sensors, magnetic compass, metal detectors, radiation detectors, transmat beam detectors, absence detectors, a hyperspatial-mass sensor, thermal search circuit, infrared sensors, low-light sensors, terrain mappers, and an altimeter. The radiation detectors can be adjusted to measure the radiation count for an entire planet. There is a space radar that can detect ships in orbit of the current planet. Active Sensors use detector beams and have a range of about 100 miles.

When some types of 5 dimensional Scanning Modes are enabled, the Time Rotor with rotate within the Column, presenting the operator with and approximation of the ships current spacetime coordinates. The passive Time-Line Flux Adjuster detects some types of temporal anomalies and has a range of about 60 million light-years (though it must be told what to look for and where to search).

The TARDIS Scanner is keyed to its operator's brain pattern and can track his biodata movements over at least a mile or two. Some operators have preprogrammed a switch that will instantly display the location of their symbiotically linked Time Lord. The Scanner can also be reconfigured to focus on other psionic resonances.

It is standard operating procedure to check the display dials for oxygen, atmospheric pressure, temperature, and radiation before leaving the ship. The Atmosphere Monitoring Subsystem's Atmosphere Analyzers can help identify a G-Type environment (aka Gallifrey-like) and is hooked to a dial that will indicate if the air quality will be fatal to humanoids after a few hours of exposure. There is a display light on the console that warns the crew if the outside environment is dangerous. The TARDIS has a Seismic Scanner that predicts local volcanic stability over short periods of time. The materialization indictor light will continue to flash and and buzz if the capsule has arrived on a moving vessel. Some of the sensors trigger alarms that alert the crew, such as if a TARDIS is shifted into Warp Drive, or when the doors are opened and the exterior environment is extremely hostile. Some forms of danger can be detected up to 20,000,000 light-years away.



The Scanner's Image Translator (see pic), located in the Master Control Console, interprets the absolute positive value of the coordinates to create the visual image. The scanner has an interstitial beam synthesizer that is essential to its operation. Data collected by the Scanner (especially the visual signal) is usually displayed in 3D on the full-color Scanner Screen which is usually located on the wall of the Control Room. Most screens offer full color but some are only capable of black and white. Different types of scans can be made to appear on the scanner depending on which band the operator selects. Band 6 is good for observing neutron stars. The scanner can collect

data from aerial scan and use it to update pre-existing maps in the data banks. It can even create symbolic displays to represent 4 dimensional phenomenon such as time loops. This screen can also be used to display data from the Control Console. Images and data presented on the Scanner Screen can be manipulated with a light pen. Many versions of the Scanner Screen have shutters that close when the scanner has been deactivated.

There are other, less popular, ways to view information from the Scanner. An entire wall of the Control Room can be converted into a massive screen. A Trans-Temporal Projector creates a hologram-like image with accompanying sound that allows the operator and the console to appear (from the operator's point of view) to be surrounded by the outside environment.

Shortly after de-materialization and right before re-materialization the Scanner Screen can show and image of the appropriate planet. If the Scanner is used while traveling in the Space-Time Vortex, a 3D representation of the Vortex Wormhole will appear on the screen. A red tint is often used for traveling forwards in time and a blue tint usually indicates travel into the relative past. Many people find seeing all of reality spinning by to be a disturbing experience. For this reason the scanner screen is often deactivated during vortex travel.

If the Scanner hasn't been used in a long time the image will be vague and hazy as the system warms up. Strong exterior magnetic fields can interfere with the Scanner by disrupting the flow of Artron Energy. If a TARDIS is transported into Exo-Space (E-Space) it will require a local Image Translator to properly interpret the new negative coordinates. Without it the Scanner will only show positive coordinate images from Normal Space (N-Space). The Scanner is calibrated according to continuous constant time. If there is no flow of time outside a TARDIS then the Scanner Screen will show only gibberish. If the TARDIS is severely damaged the self-repair circuits might require so much power that the Scanner will not operate. Any faults in the interstitial beam sythesiser which prevent the scanner's operation. Some parts of the Scanner Mechanism, such as circuit board K17, can only be replaced by leaving the TARDIS and accessing the scanner from outside the ship.

Portable Scanner

This pocket watch-sized device links in with the TARDIS Scanner allowing the Time Lord to activate and control his TARDIS's Scanner while in the field. Since the Scanner can also be re-focused to scan inside the TT Capsule the Portable Scanner is also allows the Time Lord to monitor the interior of his TARDIS while not on board. Due to the density of the data transmission the transmission range is only 10 kilometers.

Surveillance System

Surveillance System was developed after the Mark IX TARDIS. This system allows a TARDIS to continually collect and store all data observed by its sensors. This data was then uploaded to the Matrix. Using the Matrix's processing abilities this data could be used to render visual and audio images for events occurring anywhere within its collection field (at least several miles) even if the event in question was deep underground. Despite not becoming available till after the Mark IX Refit, this function was retroactively installed in all capsules running earlier refits by Gallifreyan technicians at the first available opportunity.

Temporal Instability Detector

This device is found on Type 45 and later TARDISes. It can detect any other TARDIS (that aren't in Stealth Mode) at a range of up to 800 kilometers.

Time Scanner

Using the Metastasis Switch, a TARDIS Scanner can also be set to serve as a Time Scanner. This will allow it to view the possible future or past of current time zone. Unfortunately when configured as a Time Scanner the system will occasionally pick up completely unrelated data from any point in space and time. It is for this reason that the Time Scanner isn't considered very reliable. The Signal can also be fed into the Trans-Temporal Projector. The poor resolution of the Time Scanner feature prevents detailed observations and the range is limited to a day or two.

Poly-Directrix Lenses

Poly-Directrix Lenses are found on Type 45 and more advanced TARDISes. By controlling the Dynanometer Needles the operator can direct the lenses to spy on the interior of a 'nearby' TARDIS. It should be noted that these lenses only provide visual data, not audio.

Fabrication Dispenser



The Fabrication Dispenser is found on Mark III and later master control consoles. A fully functional TARDIS can manufacture any substance in practically unlimited quantities including gold (but probably not mercury or Zyton-7). It can even create any type of currency or complex devices such as a sonic screwdriver. It should be noted that some Gallifreyan technology is made of non-atomic matter and thus can't be fabricated with this system.

The fabrication process takes a lot of time and requires large amounts of energy. While Temporal Orbits can be used to fold time allowing any object or objects to be constructed instantaneously (from the viewpoint of anyone outside the TARDIS) this was considered to be a (minor) violation of the Laws of Time. This restriction was lifted during the Time War.

Time Safe

This small safe can programmed to send objects back in time to appear in the safe at an earlier point. A Time Safe is described as a permitted paradox under the Laws of Time. The Safe allows an operator to warn himself about an upcoming situation, but it also removes much of the operator's free will to deal with the situation.

Hover Mode



The outer shell has variable mass, and this combined with a modification of the Defense Force Field Prisms allows a TARDIS to hover or float. Using short bursts of power, a TARDIS is capable of generating kinetic movement. While in hover mode the console will generate a humming noise. Putting the TARDIS in Hover Mode makes it easier to use the Manual Override controls to navigate.

A TARDIS can be set to fly in space. If no one is at the controls a TARDIS will automatically lock on to

the nearest gravitational source and travel to its surface. It is possible to maneuver in a zero gravity environment and put a TARDIS into a spin. The acceleration is at least 9.8 meters per second squared (allowing it to hover on a G-Type world) or travel through space. It can compensate for 28 kilometer per hour winds and reach speeds of at least 100 kilometers per hour. Its maximum speed in a Type G atmosphere is about 50% faster then most 21st century cars (so about 300 kilometers per hour). With great difficulty, an operator can use a TARDIS to parallel or pursue a moving ground vehicle. It is even possible to clumsily dodge intervening obstacles.

A TARDIS can be put in a Parking-Orbit above a planet before materializing on its surface. It is also equipped with Vworp Drive for long distance travel through real space. In this mode it can escape from the gravitational field of a black hole at distances that even vessels of the year 2500 AD can't escape from. Caution should be taken, as it the response time of the inertial dampener will be sluggish if Vworp Drive hasn't been used recently.

Environment Governor

A TARDIS has a stabilizing effect on the local area (~100 miles) of the Multiverse. The Environment Governor uses the Dimensional Stabilizers, Probability Compensators, and (on occasion) even the TARDIS's own exo-shell to fix or patch some kinds of space-time anomalies.

If any object's Time-State changes or its Reality Quotient gets too low, then a TARDIS will "catch" the object and put it in the Catch-All Area [LINK]. The object (or person) will remain there for up to half an hour before a TARDIS returns the object to its original coordinates. To protect a TARDIS from infiltration, the Catch-All Area is completely cut off from the rest of a TARDIS and barricaded by the Force Field Prisms.

Using the Governor the TARDIS can seal cracks in Time that lead to Parallel Universes, repair damage to the time lines, and act as temporal decrystallizers. The Governor can also deal with time eddies, time-ships, and temporal feedback. In an extreme emergency, the TARDIS's exoshell can even be used to plug some types of holes in space-time.

Time Lock: aka Temporal Lock

A Time Lock can be used to prevent a time traveler (with a lower reality quotient) from affecting a time zone or object. Any time an event is observed by a sentient being (whether biological or artificial) that event becomes crystallized in history. The higher the observer's reality quotient the more crystallized or fixed in history the event becomes. A TARDIS normally has a reality quotient of slightly less then one to reduce its impact in any time zone. However a TARDIS's reality quotient can be boosted so that it can place a Time Lock field on a nearby object to fix it in time. An object (even another TARDIS) under a strong Time Lock is very difficult to dematerialize into the Vortex. It also becomes very hard for any timeship to enter a zone that has been Time Locked. This boost is limited to a reality quotient of 3 for a Type 40. Thus a Type 40 could trap another Type 40 but a later model TARDIS would be able to escape, sending the Type 40 spinning off into the Vortex.

Chameleon Arch



The Chameleon Arch is a piece of technology that can be deployed from the ceiling of the Control Room. With this device, a Time Lord can disguise themselves as whoever or whatever they want to be, allowing a researcher to infiltrate primitive societies without any danger of interfering with the Web of Time.

A single being can have its biological nature instantly changed by altering his morphic field. Using electrical charges and a Gallifreyan's regenerative powers, the Chameleon Arch rewrites the user's genetic structure, biology, and biodata, changing ever single cell in the subject's body. If necessary, his two hearts will be compressed into one. The process is extremely painful.

Morphic fields are created by the crystallization of history through observation by a conscious mind. The shape and nature of every lifeform in the universe is influenced by the morphic field of that species. The Artron Energy created by a living being creates the morphic field as a sort of collective psionic aura which acts as a species equivalent to an individual's biodata. The longer a particular species has been around the stronger its morphic field. These fields build up over several generations (probably as a sideffect of the crystallization of history caused by

observation). It is the manipulation of morphic fields that also allows the conceptual based mutations caused by a Cell Mutator and the Chameleon Arch.

It's worth noting that, unlike normal regeneration, the newly generated personality can be completely different the Gallifreyan's original personality. The subject's original biodata (history and biology) is stored in a Gallifreyan biodata module that appears to be a pocket watch. The shape of a pocket watch used because it is a symbol of the Time Lords' mastery of Time. It should also be noted that the module does emit a powerful psychic aura which can be detected by even untrained telepaths. If the watch is opened near the subject the subject will painlessly revert to their original biodata and memories. The user will however retain all the memories he had while in his alternate form.

Because morphic field manipulation requires a living organic mind capable of adapting to the irrational changes caused by the alterations, the process is connected the physiological information in the databanks and controlled by the TARDIS's Protyon Core. The Chameleon Arch can be set for different species (including human). It can even make and adult user into a child. Depending on the setting the Arch will insert a back-story into the subject's mind The TARDIS can be programmed to select a local where the subject's new biology and back story will fit right in.

Sonic Booster



The Sonic Booster fills most of the space in the Master Control Console's pedestal and is connected to the base of the time rotor's pedestal with high amperage cables. The Booster is controlled by the Tremulator Switches. The two Temulator Switches control the transmission of sonic vibrations to the area outside the TARDIS. They can be used to cancel dangerous vibrations, such as local earthquakes,

tidal waves, and hurricanes. In an emergency the Sonic Booster can be modified into a omnidirectional sonic weapon.

The sonic booster might also be used to aid in a Gallifreyan's regeneration in a process similar to Lazarus's Genetic Manipulation Device, which used resonances from hypersonic waves to destabilize the user's cells for regeneration.

Gravity Tractor Beam



The Tractor Beam works by turning the polarity of the TARDIS's Vortex Drive to generate a field of negative energy that takes the form of an anti-gravity spiral. This field is capable of countering the effects of a black hole at short range. The tractor beam can exert enormous amounts of gravitational energy in 5 second bursts. It is even capable of towing planets around. Operation of the system on full power puts a sever strain on the capsule. When shifting planetary or stellar bodies it requires a

full crew of six to prevent serious distortion of a TARDIS's interior spatial dimensions.



Using the dials beneath the dematerialization array the operator can use the secondary attachment to link to the energy signature of an object in space. If that object has likewise had its energy signature locked on to the TARDIS's engines the TARDIS can pull the object through the Vortex and drop it elsewhere in space and time.

Miscellaneous Systems

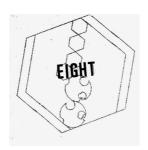
There are a number of other TARDIS systems, which include:

- Aesthetics Gauges
- Ahistorical Contextualiser
- Ambiguous Resolver
- Aprioritron
- Art Device
- Assimilation Contrastor
- Astral Inducers
- Axiomator
- Bladamite Tubing
- Calibrators
- Chronometric Astrometer
- Coaxial Stabilizers
- Conceptor Geometry Relay (with a Magranomic Trigger and Field Separator)
- Contrainductor
- Dimensional Template
- Directional Time Mechanism
- Dynomorphic Regenerator
- Gyroceptors



- Hydraulic Rams
- Interfacial Resonator
- Lateral Balance Plane Elevation Cones (with Rendel Solenoids)
- Mandrel Condensers
- Positive Cretathole Converter
- Pseudo-Timeline Narrow Focus Coils
- Quantum Accelerator
- Referential Differencer
- Relative Chronometer
- Relative Continuum Stabilizer
- Relative Dimensional Computer
- Relay Bypass Drones
- **Spatial Dampeners**
- **Tachyon Infiltrator**
- Temporal Circuits
- Temporal Energy Core
- Temporal Stabilizer
- **Temporal Transducers**
- Thermocouplings
- Time Lapse Compressor
- Time Warping Template
- Transdimensional Flux Relay Indicators
- Triple Vector Zigzag Plotter
- Time-Warp Anchorage Unit
- Transuranic Spectrum Gauge
- U-Link Couplers Vespian Transmogrifier Ratchet Override Flangestimulator
- Vortex Loop
- **Zonal Comparator**

Note: The systems on this page come from miscellaneous sources.



Chapter 8: Storage Rooms



"Just how big is the TARDIS?"
"How big's big? Relative dimensions, you see.
No constants."
-Sarah Jane Smith and The Doctor

A TARDIS isn't just a vehicle for travelling in space and time. As a TARDIS has no real contraints on the amount of space it can use, most TARDISes contain extensive areas which can be used as living quarters or storage space.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie.
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Pedestrian Infrastructure



The Pedestrian Infrastructure makes up the habitable interior of a TARDIS's internal quasidimensional continuum. The Infastructure is composed of a complex web of bio-mathematics and exitonics with a finite multidimensional mass, which usually totals about 68 thousand metric tons. Every TARDIS comes with a default tangential formation which determines the location and floor plan of its power and storage rooms. This formation is always organized according to a specific geometry, which can be followed if you understand the

pattern.

All TARDIS have a core know as a Time Sceptre [LINK]. This central structure which is made up of the Control Room Sphere, Core Service Module, Artron Mainframe, Transpower System, and the Eye of Harmony Sphere. Each segment is an independent micro universe whose size dependent upon the requirements of the systems it contains.

The tower of the Time Sceptre is enclosed in a spherical chamber that is several miles in diameter. This chamber (or endo-shell) marks the limits of the quasi-dimensional continuum that is the TARDIS's micro-universe. This spherical chamber is covered with numerous pods connected by rods. These are the extra store rooms and corridors.

The operator can exert direct control of the interior architecture, and some operators chose to alter this tangential formation, designing things as he sees fit. Despite the fact that all the rooms are physically organized into a Time Sceptre and pods on the outer chamber, dimensional junctures (aka space-time bridges) allow the operator to effectively lay out the pedestrian infrastructure as he sees fit.

The Power and Storage Rooms of a TARDIS are accessed (using dimensional junctures) via service tunnels (aka corridors), galleries, walkways, stairways, escalators, and lifts. Using Dimensional Junctures the rooms don't even have to be connected in any logical or mappable fashion. Multiple doorways can lead to the same room, and a single doorway can lead to two different places depending on which way you walk through it. Some frown on these sorts of configurations and believe that a properly stabilized Pedestrian Infrastructure should be able to be easily mapped in three dimensions. Temporal Locks are another way to customize the architecture. They can be used to separate part of the TARDIS interior, such as a Storage Room. Temporal Locks can even be used to connect that room to Normal Space via a Real World Interface. Once set up a Temporal Locks is activated or deactivated by pressing the three green light-up buttons, found inside the room in question.

The interior of the Pedestrian Infrastructure appear to be fairly standardized for even the most eccentric TARDIS and operator, such that any Time Lord will be able to find their way around with minimum difficulty. A fully functional TARDIS will guide lost crewmembers to their destination using glowing arrows on the walls. For a variety of reasons the interior layout of a TARDIS often changes slightly over time. For more information see Architectural Configuration Program (LINK). By the end of the Time War some Time Lords will have upgraded their TARDIS architecture to make sure the room he needs comes to him.



Using Dimensional Junctures the interior is organized by level, sector, tunnel, and room number. corridors (aka service tunnels) are classified by a color and a number code (i.e. Blue Section 2-5). Rooms are cataloged with a number and a letter (i.e., 23A, 23B). The letter might indicate which level the room is on. There are at least 12 levels which can be reached with stairs, escalators, or lifts. The Lift Shafts have ladders mounted on them. The interior of the shaft sometimes looks identical to the corridors only vertical. Rooms are classified as either Power Rooms

or Store Rooms. A TARDIS has a total of fifteen Power Rooms that contain all of the machinery that powers and operates the ship. They are located deep in a TARDIS's interior and serve as the "nerve center" of the capsule. The following power rooms are known: The Cloister Room, Power Stacks Room, Dynamorphic Power Station, Ancillary Power Station, Protyon Unit, Life Support Systems, Internal Scanner Room, Fault Locator Room, the Primary Control Room (link), the Secondary Control Room (link), The Tertiary Control Room (link). There are also several Control Relay Rooms which look like smaller versions of the Secondary Control Room.

Aside from these 15 power rooms and the 3 Control Rooms, all rooms are classified as Store Rooms and these make up the bulk of the Pedestrian Infrastructure. A Standard TARDIS includes bedrooms, bathrooms, maintenance bays, research labs. With exception of the Basic Crew Facilities, all storerooms are located in pods around the outer surface of the spherical microuniverse. A standard TARDIS has a million Store Rooms and at least 12 levels. On average there is a room for every 3 meters of corridor or service tunnel. The total volume of rooms and corridors of a complete Type 40 TARDIS has been described as being about the size of a small town. It's also been described at being at least twice the size of San Francisco's Chinatown at the beginning of the 21st century. This means that the volume of the Pedestrian Infrastructure is between 13,000,000 and 60,000,000 cubic meters. A fully guided tour of a Type 40 TARDIS could take a couple of years. Regardless of how the lifts and stairs are configured, as one gets closer to the Cloister Room, he will feel as if he is descending deeper and deep into the TARDIS.



This is because the Cloister Room is located at the bottom of the Time Sceptre.

Matter used to create the rooms and service tunnels is created using Block-Transfer Mathematics and has enhanced temporal properties. This also makes it resistant to being retro-annulled and immune to the normal Vortex energies. During the Time War the matter used for the internal

structure of a TARDIS was capable of withstanding a full-on thermonuclear blast. Aside from the Zero Room (which is balanced to zero energy), all rooms show up on the Architectural Configuration Indicators.

The default color for this matter is off-white; however individual rooms (and perhaps the entire interior) can be redecorated quite easily by changing the Desktop Theme. Coral (see illustration) and Leopard Skin are just two of the many options. Once the setting is changed it appears to take several months for the TARDIS to redecorate a room. During this time the TARDIS will place a sign on the door to that room that says "Closed for refurbishment".

Most walls are decorated in glowing roundels that have their own power source. Behind some roundels are medical kits, storage lockers, emergency controls, and circuitry access. Aside from the glowing roundels there are no obvious light sources in a TARDIS - nevertheless the interior will be quite well lit. This is due to Visual Stabilizer Circuits which are capable of generating and controlling photons anywhere in the TARDIS. The interior lights can be controlled from a switch on the console or by voice commands. Normally the interior of a TARDIS is quite sterile and its atmosphere is automatically-cleaned. Rooms in the TARDIS have air vents. Some have four bladed transparent ceiling fans to move the air. Using this Architectural Configuration Program the operator can lock or unlock any door in a TARDIS interior from the console (there is a white flash around the frame when a door locks or unlocks).

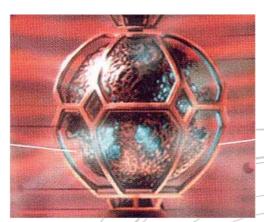


Control Sphere

Located at the top of the Time Sceptre, the Control Room Sphere contains the following:

- * Interstitial Antenna [ADD LINK]
- * Control Rooms [ADD LINK]
- * Switch Room [ADD LINK]

Core Service Module (CSM)



The Core Service Module (CSM) is a sphere located beneath the Control Sphere and above the Artron Mainframe. It holds most of the Power Rooms, the Dynamorphic Generators (and other travel systems), life support systems, and basic crew facilities. The last includes bedrooms, bathrooms, maintenance bays, research labs.

The CSM sphere is surrounded by a grid of matter control projectors. Using these Matter Control Projectors the Dimensional Stabilizers

maintain the CSM. They also control all the custom designed add-on modules, which are then linked (via space-time bridges) to the CSM.

The CSM contians the following rooms:

- * The Ancillary Power Station (LINK)
- * Power Stacks Room (LINK)
- * Protyon Units (LINK)
- * Internal Scanner (LINK)
- * Dynamorphic Generators [ADD LINK]
- * Life Support [ADD LINK]
- * Basic Crew Facilities [ADD LINK]
 - * Living Quarters (LINK)
 - * Sleeping Quarters (LINK)
 - * Rest Room (LINK)
 - * Bath Room (LINK)
 - * Wardrobe (LINK)

Living Quarters



These rooms are assigned to a TARDIS crew as needed. As Gallifreyans require almost no sleep, there are no beds in the Living Quarters. The Living Quarters do have holographic TVs. The Auto-Diary option allows crewmembers to record entries by speaking in an empty room.

The Chancellor's Suite (a type of VIP Suite) can be found by exiting the Secondary Control Room, turning left, traveling up 3 stages, down 1 stage,

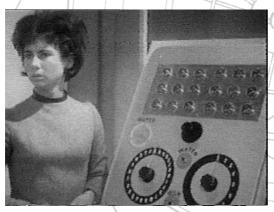
Sleeping Quarters



These rooms contain beds for crewmembers to use. The gallifreyan beds fold up into the wall when not in use. The beds are rectangular but can be remotely adjusted to flex at any point. About one third of the Sleeping Quarters are large "Master Bedrooms", the rest are regular size. The large sleeping quarters have their own bathrooms. There are at least 18 of the large rooms. A TARDIS has an optional diurnal (day/night) cycle. The duration of these cycles, if enabled, will be derived from the brainwaves of the authorized crewmembers. The lights are controlled by voice commands.

The Laundromat's laundry circuits automatically repair, clean, and iron any clothes left overnight in the sleeping quarters.

Food Dispenser Room: aka Rest Room



This room serves as a recreational lounge for crewmembers while in flight. It has couches, books, tables, games and contains the Food Machine. This machine dispenses traditional Gallifreyan food (i.e. tablets, pills, wafers, and white bars) on paper plates. Liquids are produced in self-sealing bags, plastic bulbs, or wax paper cups. All beverages except water appear as a light orange liquid. The Food Machine can produce alcohol. If given a small sample the Food Machine is capable of replicating the flavor and texture of any type of food, but the appearance and color is limited to standard pre-

programmed designs. A TARDIS will ensure that all life-forms traveling with it will get food and water. If necessary the Food Machine will use its wheels to roam around the interior of a TARDIS looking for people who are hungry. The TARDIS has devices that will alter the metabolism of its travelers so they won't gain to much weight if they over eat.

The capacity of the Food Machine is immense, able to last hundreds of years without need for restocking. Even then, given time, a TARDIS can use block transfer to restock its food supplies. It has been described as holding 4 bazillion recipes.

While there is a small kitchen annex attached to the Rest Room most operators prefer the large kitchen with stasis preserver refrigerators that can keep food fresh forever. This refrigerator used the TARDIS Fabricator to restock itself. In a Type 40 TARDIS this kitchen usually ends up being located very far from the Control Room.

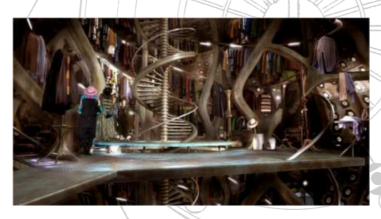
Bath Room



Bath Rooms contain Gallifreyan organic waste handling systems. The sink and holographic mirror fold up into a wall roundel. The taps dispense water at the precise rate and temperature desired. Bath Rooms have Zero-G Jacuzzis and antigravity Ultrashowers, which spray high-pressure water and muscle oil to both clean and massage the user. The Bath Rooms are also equipped with Autorazors. This small device crawls aound the user's head and in less then 5 minutes can shave a humanoid face, provide excellent customized haircuts, and style and set a crewmember's hair.

Bath Room Number 14 contains a large swimming pool. This room has a separate gravity control and super-buoyant bath water so drowning is almost impossible. The Emergency Bathroom can be found by leaving the control room and taking the third door to the right.

Wardrobe



A TARDIS carries records of the fashions for various worlds. The standard TARDIS wardrobe is equipped with samples of these fashions. This multilevel room contains a vast amount of clothes, which are organized alphabetically by planet and period. The Laundromat's laundry circuits automatically repair, clean, and iron any clothes left overnight. A spiral staircase provides access to

different levels. In a Type 40, the Wardrobe could be reached from the Primary Control Room by taking the first left, second right, third left. Continue straight ahead beneath the stairs, and take the fifth door on the left.

Sick Bay: aka Medical Bay

The SickBay has been part of every TARDIS's inventory since the Type 21. In a Type 40 TARDIS it can be found by leaving the control room, going up the stairs and taking the next two lefts. It contains the Advanced Diagnostic Terminal (ADT). This device consists of overhead medical scanners for studying the patient, extensive data files on advanced medical techniques, and three separate computer to ensure reliability. It is capable of providing excellent medical advice and instruction for almost any type or infirmity for Gallifreyans and Time Lords. The ADT can be programmed by a qualified medical expert to provide service for other races. The holographic projector can display a humanoid image for the medical bay's Advanced Diagnostic Terminal when configured for voice interface mode. The image presented is usually that of the operator Time Lord but, upon request, the TARDIS can use the memory store to find other avatars. This avatar can appear in the Control Room as well as the Sick Bay.

The beneficial environment of the TARDIS can help in prevent wounded people from passing out. Gallifreyan Medical Science has devices that can heal skin wound a few inches across in under half an hour. Bruises and cuts from a major brawl can be healed in 15 minutes. Minor skin damage can be fixed in seconds. Though the Zero Room [LINK] can heal many types of wounds, the Sick Bay contains an Surgery room with an operating theater. Within this theater is a blue Surgical Containment Web for life threatening injuries. Once the patient is placed inside the Web the lasers cut away any damaged flesh and remove any foreign objects or implants. Organic polymers are then used to replace missing flesh while namites enable the reconstruction of body tissue. Fingernails can be re-grown easily. And severed limbs can be reattached. While the polymers can re-grow missing limbs in Gallifreyans, they can not re-grow lost hands or limbs on humans because their technology isn't advanced enough. This is one of the few medical problems Gallifreyan science hasn't solved yet.

The TARDIS contains instruments for measuring Artron irradiation (useful for verifying if the subject has traveled through the Vortex). The Sick Bay is also equipped with a Quarantine Bay and the Cell Regeneration Vault. The Cell Regeneration Vault is a coffin like cabinet that uses a low-power matter transmitter with a discriminating filter at either end to absorb almost all types of radiation from its patient (including Learon Radiation). The treatment causes the subject to feel a burning sensation. It can take days to heal a severally irradiated person. The Cell Regeneration Vault is found on Type 66 and later TARDISes. For more information on the TARDIS Medical Tools see the Medical Kit in Appendix 4.

Sleep Room

This Room is often used to treat medical conditions that prevent restful sleep. It is equipped with a bed and a Neural Dampener that induces sleep. Multi-level Pacifiers can be used to sedate even a Time Lord. On setting 8 the Dampener prevents the subject from dreaming.

Utility Room



This room is usually located near the Living Quarters and stores a variety of personal equipment including a First Aid Cabinet and a TARDIS Tool Kit. A TARDIS Tool Box recharges and runs diagnostics on its tools. For security purposes the box can be set to open only for the correct operator.

TARDIS Tool Kit

A complete Tool Box includes the following:

- Sonic Screwdriver
- Sonic Monkey-Wrench
- Emergency Log (with millions of hours of recording time)
- Master and Moog Drone Clamps (for stabilizing TARDIS architecture)
- Stalos Gyro
- TARDIS Homing Beacons (which track the telepathic traces)
- Influx Booster Stabilizer
- Laser Cutter
- Magnetic Clamp
- Chronometer (which reads out correct local time no matter where the operator is)
- Neutron Ram
- Pen Torch
- Stabilizing Devices
- Astro-Rectifier
- Multi-Quantiscope (some models have extra heads for removing Mergin Nuts)
- Ganymede Driver (also useful for removing Mergin Nuts)
- Demeter Uncoupler (for 2 gauge and smaller nuts)
- spare Mergin Nuts
- Zeus Plugs
- Winklegruber Crimps
- Finkle Groober
- Crystal Transreverser
- Neutron Grips
- Electron Crank (or the newer Ion Grapple)

Workshop



This workshop is fully equipped to construct and repair many types of devices. It can even be used to construct extradimensional cubes (i.e. dimensionally transcendental) of any size, and dimensional pockets. However, because of their size, the cubes can interfere with a TARDIS's dimensional stability. The seventh Door on the right of the corridor outside the Console Room holds the Workshop. The Workshop is usually found three levels below the Ancillary Power Station.

Infinity Chamber

The Infinity Chamber is a room that can project a pandimensional hologram of a galaxy or the entire Universe at any point in its history. The Chamber on a TARDIS is limited in resolution to picking up the orbits of planets. The complex neural net that makes a segment of a TARDIS's Fuzzy Logic Circuitry (aka Intuition Circuit) is connected to this chamber. This neural net is capable of locating time rifts and (by comparing recorded data to information collected by the Scanner, can detect major changes to history. A smaller relay console can be found here that allows the operator to pilot the TARDIS.

Dimensional Induction Chamber

This vast dimensional viewing room uses trans-temporal projection to show the environment outside the TARDIS.

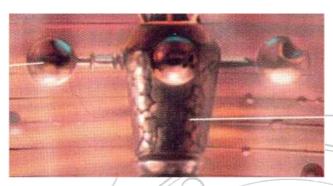
TARDIS Laboratory



This room is the size of a school assembly half. It has computers, charts, shelves of books, and four large workbenches. Attached to the Laboratory is a lead lined room filled with samples of radioactive isotopes. Among the numerous devices in the lab is a psycho-telemeter, which can use a sample to trace the origin of an object, a particle accelerator, oscilloscopes, lasers, electron microscopes, a holographic magnifier, a dimensional revisualiser,

advanced DNA testing equipment, and a scanner "capable of identifying life-forms smaller than a single proton."

Artron Mainframe



This module holds data banks, diagnostics, and self repair systems. It contains the following systems:

- * Artron Mainframe (LINK)
- * TARDIS Information Systems (LINK)
- * Fault Locator Room (LINK)
- * Molecular Stabilizers (LINK)
- * TARDIS Library (LINK)
- * TARDIS Manual Room (LINK)

Library

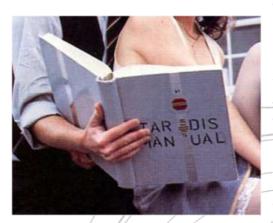


A TARDIS has at least two libraries, each a different size. The TARDIS libraries are sorted by planet with each room getting its own planet. Within each of these rooms the books are sorted by subject, then planetary region, then year, then quarter years. The larger Library takes up dozens of rooms, and each of these rooms has two shelves, which are a couple of miles long and tall. A brass ladder or spiral staircase provides access to the upper levels.

Most of the "books" are stored in trionic lattice data cubes that are kept in book-shaped cases, but some of the books are capable of reading themselves out loud. A TARDIS uses

the Telepathic Circuits and the Architectural Configuration Program to help the crew find the data they are looking for

TARDIS Manual Room



This smaller library contains the thousands of manuals (including this one) required to cover every aspect and detail of a TARDIS's operation. They are organized into 72 volumes. Among the many books are the TARDIS Manuel, the TARDIS Handbook Type ##, the Type ## TARDIS Handbook, the 726 page long TARDIS-Service Manual, the TARDIS Type ## Master Control Console Operating and Repair Manual (which some operators keep in the control room), the TARDIS Instruction Manual, numerous volumes of House and TARDIS, and the TARDIS Technical Index.

Most of the information is these books are given in 6th dimensional mathematical symbology. The Service Manual is probably a "read-this first" guide. House and TARDIS is a magazine that is bigger on the inside then on the out. Inside one can find a near infinite amount of loose-leaf advertisements. A TARDIS manual can also be accessed from the control console by pressing a button marked "Manual."

Transpower System



Energy from the Eye of Harmony travels through the Transpower System to be distributed to all the TARDIS's Power Rooms. Regardless of how the lifts and stairs are configured, as one gets closer to the Cloister Room, he will feel as if he is descending deeper and deep into the TARDIS. This is because the Cloister Room is located at the bottom of the Time Sceptre.

- * Transpower System [ADD LINK]
- * Zero Room (LINK)
- * Protyon Units (LINK)
- * Cloister Room [ADD LINK]

Zero Room



All TARDISes from the Type 28 onwards have a Zero Room. The insulated walls of the Zero Room completely cut it off from the outside universe. It is, in fact, a pocket universe within a TARDIS's Micro-Universe. The Zero room entrance is located on the lower levels, near the heart of the TARDIS. The room smells like roses and has a calming effect on all life forms. Even gravity is local and can be subconsciously controlled allowing anyone to levitate comfortably.

Inside the Zero Room healing nanites with regenerative cells can heal many

types of wounds including deafness from having one's ears boxed. However the healing only beings once the patient has fallen asleep. Skin wounds can be repaired in a matter of minutes and most other physical wounds can be healed in few hours if the subject can remain alive long enough. The regenerative cells use chemicals to heal burns and the nanites can neutralize many types of poison. If an emergency is expected a TARDIS can be flooded with healing nanites, which will begin providing aid instantly. In such a case the nanites would work with the Temporal Grace Circuits.

Zero Rooms are also used by Gallifeyans to recover from difficult regenerations. A TARDIS can also supply Artron Energy to help an ailing Time Lord. Zero cabinets can act as stasis chambers for Time Lords.

Zero Rooms probably use bio-electronics. A properly sealed Zero Room uses strong force interaction to fuse the internal interfaces together. This gives it better invulnerability then the exterior of a TARDIS and make it immune to Tissue Compression Eliminators. It should be noted that Zero Rooms are balanced to zero energy and thus don't appear on the Architectural Configuration Indicators. It takes several months for a TARDIS to produce a new Zero Room if the original one is lost.



Eye of Harmony Containment Sphere

Located at the bottom of the Time Sceptre, this module has the receptor antenna to collect energy (either from Gallifrey or a rift) and store it in the Heart of the TARDIS

* Eye of Harmony [ADD LINK]

Other Store Rooms



the Core Service Module.

The tower of the Time Sceptre is enclosed in a spherical chamber that is several miles in diameter. This chamber (or endo-shell) marks the limits of the quasi-dimensional continuum that is the TARDIS's micro-universe. This spherical chamber is covered with numerous pods connected by rods. These are the extra rooms and corridors. New customized modules (rooms) are added when needed using a Protyon Unit's matter generation technology. This allows the operator to generate a new custom designed module on the outer sphere, which is then linked (via space-time bridges) to

There is a Sports Center which contains the space and equipment necessary to take part in every type of Gallifreyan sport. Other rooms found inside a TARDIS include an Art Gallery, Conservatory, a cinema, a Studio, Central Nexus Point, a vehicle garage, a water purification plant, a wine cellar, attics, and boot cupboards (see illustration).

The TARDIS can artificially simulate almost any undeveloped planetary surface with massive storage rooms. The Artificial Jungle for example, includes crumbling stone temples, and pools of goldfish. They can have their own weather systems, and some are big enough to contain several climbable mountains. Other examples include a rose garden, an artificial forest, multiple arboretums, and a room filled with butterflies. The doors to these artificial outdoors are hidden in such a way that, when closed, it can be very difficult to find them again.

Armory

Some operators have equipped their TARDIS with an armory. This grey room is filled with metal racks holding almost every conceivable hand held weapon.

Storage Holds

Undefined Storage Holds make up most of a TARDIS's interior volume. Each Hold has an identifying number.

Memory Storage Area

Any Block-Transfer object made by the Protyon Unit is manifested as a "real" object. Those objects that are not in use are put in the Memory Storage Area. This vast room is filled with off-white, non-functional, copies of every object stored in a TARDIS's Data-Core.

Shell Room

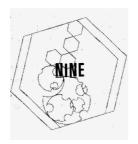
Every time the Chameleon Circuit creates a new exo-shell to disguise the TARDIS a duplicate of the shell is stored in the Shell Room. A TARDIS that has done lots of traveling will have vast numbers of shells stored in the shell room. It should be noted that even if the Chameleon Circuit suffers a complete system breakdown (as many older TARDISes were prone to do if they didn't receive regular chameleon conversions) the Shell Room will continue to collect new unused shells every time the TARDIS materializes.

Catch-All Area

The Environment Governor [LINK] of a TARDIS has a stabilizing effect on the local area (~100 miles) of the Multiverse. If any object's Time-State changes or its Reality Quotient gets too low, then a TARDIS will "catch" the object and put it in the Catch-All Area. This is a cream colored room in a TARDIS interior, which has a fountain. The object (or person) will remain there for up to half an hour before a TARDIS returns the object to its original Spatial and Temporal Coordinates. To protect a TARDIS from infiltration, the Catch-All Area is completely cut off from the rest of a TARDIS and barricaded by the Force Field Prisms.

Minus Room

The TARDIS auto-systems will automatically create a Minus Room if the interior dimensions of the ship are threatened by time. A Minus Room uses a lens of unreality to distort reality and deflect time away.



Chapter 9: Types of Time Travel Capsules



"The Type 40 wasn't on the main syllabus, you see...Veteran and vintage vehicles was an optional extra. I preferred something more interesting – the life-cycle of the Gallifreyan flutterwing.."

-Romanadvoratrelundar

TARDIS technology didn't come into being fully formed. Different components came into being at different points, and the technology has developed considerably over the millennia. This section documents the differences between various Types.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV
 Movie
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- **Green:** For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Type Numbers

A numerical Type describes each model of TARDIS as produced by the Neural Construction Docks. For example the Doctor usually operates a Type 40 TARDIS. Every TARDIS that is grown follows the specifications of its specific "Type."

The Type number is fixed. For example the Doctor's TARDIS is still a Type 40 TARDIS despite the numerous upgrades and modifications it has received over the years. Higher Type numbers indicated later model Time Travel Capsules and, in most cases, later types function more efficiently and reliably then older types. Occasionally, some entirely new feature will be installed. If useful and reliable this feature would be found on all later types and some time incorporated in to the various upgrades of older types. If a TARDIS Type is particularly successful, then over 300 of that Type might be created.

There were around 100 different types issued before the end of the Last Great Time War. The Type 89 TARDIS is the most advanced non-military TARDIS ever created. Military TARDISes are known to go up to Type 94. This classification system does not include the Space Inter-time Dimensional Robot All-purpose Transport (SIDRAT) constructed by the early Time Lords (LINK).

Because later models of TARDIS have larger shift ratios in the wave loops, it's possible to identify the specific Type at a distance by analyzing the ratios. A Time Lord can make the same identification by sight, regardless of their disguisem, if they check the molecular patina of its exo-shell. They can often tell the general condition of the TARDIS as well. The sound made by the Relative Dimensional Stabilizers during materialization is slightly different for different types of TARDIS.

While many systems can be upgraded to later Marks some components will forever remain unique to that particular model. For example, when replacing the Main Space Time Element [LINK] of a TARDIS the operator should be aware that it must be coded to match the specific Type of that TARDIS. For more details on this see Upgrades and Custom Modifications. [LINK]

Pre-TARDIS Time Travel Capsules

Less then 200 years before the anchoring of the Eye of Harmony, during the Time of Chaos, the 508th Pythia foresaw a point when the veil of Time would not be breached by thought as had been tradition. Instead time would be physically traveled by Gallifreyans. At her instigation the Academia began the Time Program.

Early researched was based heavily on psychic ways of perceiving the Astral Vortex [LINK]. But even then Gallifreyans had to take into account the fact that revolution-induced gravity exists and affects all temporal manipulation. The first Time Scoop was created after the discovery of the rare element Taranium is discovered and mined from Gallifrey's moon Pazithi. This element was be essential to early Gallifreyan temporal science. While the Time Scoop did rely on psychic power for control its was the Taranium that allowed the Transmission of Matter Through Interstitial Time (TOMTIT). Using Interstital Motive Bridges the Scoop could collect items and aliens from across time and space and bring them to Gallifrey. But the trip is strictly one way.

Taranium also allowed the creation of Warp Ellipse Field Generators. This hand held devices were capable of dilating time so that the user would experience almost 9000 seconds for each second that pasted outside the time bubble.

While still a student serving as a time plumber Omega (originally known as Paylix) realizes that to make unlimited time travel possible a nearly endless power source would be needed. He went on to discover De-materialization Theory [LINK] and constructed the first Dematerialization Circuits [LINK]. Using this knowledge the first Prototype transportation pods capable of entering the Astral Vortex were created. They were manned only with Gallifreyan Womprats and could only leave the vortex at the same point they entered. Thus they were incapable of any time travel and even returning to normal space required an external power source.

One hundred and two years before the Eye of Harmony was created, the first space-time craft capable of carrying a Gallifreyan into the Vortex is constructed by Palix. This Taranium based capsule allowed Palix (who would later be known as Omega) to become the first Gallifreyan to enter the Space-Time Vortex and return alive. Using this device he undertook his famous Odyssey into Deep Time, mapping out much of the Astral Vortex. It was around this time that Omege discovered the Popuation III Q star Qqaba (also known as Jartus).

Sixty-five years later, construction began on the first Time Scaphe. The Scaphe was a craft designed to enter the Astral Vortex and travel forward in time. The Scaphe was powered by the mental artron energy [LINK] Chronaut Crew and used forced-matter calculation [LINK] to travel in time. Like all of the early Time Travel Capsules, the Time Scaphe was constructed of real matter.

After 3 years and hundreds of simulations the Time Scaphe is launched with a crew of five under the command of Captain Quennesander Olyesti Pekkary. The mission is to travel 90 days forward in time, but it failed to arrive. While technically a valid method of time travel the guidance of the craft relied entirely of the psychic focus of its pilot. There was no proper way of mastering the direction of travel nor control over the destination.

While Rassilon led his revolution, overthrowing the Pythia, Omega energies on politics and the solar engineering of Qqaba. The Scaphe's unexpected return after missing for 10 months did little to advance temporal science, but it was seen and omen signaling the end of the Dark Time

and the beginning of the Time of Legend. Indeed, with the Curse of sterility and the first Vampire War looming the Time Program was suspended within months of the Scaphe's return.

Still key discoveries in related fields were being made. Block-Transfer Mathematics were appropriated from the Logopolitans [LINK] and the study of Tribophysics eventually allowed them the ability to slip through dimensions. After about a year the Time Program was reinstated by Rassilon, despite the Councils disinterest. Omega was made Chief of the Scientific Fraternity and several more Time Scaphes were launched. The Temporal Scientist Vanderkerian and Omega discovered the secret of time travel, but, in the end, Rassilon will take credit for this discovery. The Equation of Rassilon (as it became known) allows time travel through the Vortex via a Time Corridor [LINK].

Making use of the Equation of Rassilon, the Time Program created the Labyrinth. The Labyrinth still exists today and can be used as a primitive form of time travel, involving Time Corridors. It serves as the framework beneath Normal time - and it would eventually become the foundation of History itself. The Labyrinth consist of a network of open ended time corridors that connect numerous specific points in space and time to a maze-like complex of corridors. But to achieve unlimited time travel, Rassilon, Omega, and the Other realized they would need a massive singularity for a power source. Together they constructed a remote stellar manipulator, called the Hand of Omega.

Using early time travel technology the discovery of the Tachyon on Sol III (Earth) is taken back to Gallifrey where it is developed into Gallifreyan tachyonics.

Proto-Type 0



Less then a year after restarting the Time Program led by Omega, technicians began designing the first Proto-Time Travel Capsule.

While these Type 0 Proto-Time Travel Capsules would still be powered by Tarranium they no longer use matter for their shells. Instead they were composed of almost pure forced-matter calculations.

These were the equations of pure movement, and thus they were essence of transport. They were Dimensionally Immanent (ie smaller on the inside then the outside), and could only hold 3-4 people in any sort of comfort. Their interior resembled the interior of the "Cushing Film's" Tardis.

At the same time, Rassilon finished designing the Gallifrey based power mast that would receive the power from Qqaba. While Omega and Vandekirian were lost, the Qqaba mission was a success. Rassilon created the Universe's first Black Hole. And the anointing of time energy

created the first Lords of Time [LINK]. When completed the Proto-Type 0 TT Capsules required Taranium for power, but once Qqaba had been turned into Omega's Black Star, the capsules recieve their power collected from that detonation via Artron Energy broadcast though the Vortex by Gallifrey's Power Mast.



Rassilon entered the Black Hole to seize its nucleus using his personal Type 0 Model B TT Capsule of Rassilon himself. The capsule was capable of this feat only because one of the green crystals of its Dynamorphic Projector [LINK] was exceptionally large and powerful. This crystal, known as the Star of Rassilon. The capsule, and the Star, was lost when one of Rassilon's cousins performed a miss-jump while traveling to the planet Radirr. The Star was later recovered for a short time by the Master who planned to used it to safely violate the Laws of Time.

- * Based on Gallifreyan tachyonics.
- * Composed of almost pure forced-matter calculations and movement equations [LINK].
- * Powered by Tarranium until Omega's Black Star was detonated.
- * Dimensionally Immanent
- * Used Old High Gallifreyan for their programming code.
- * By decree of Rassilon this and all future TT Capsules would carry a Psycho-Telmeter to track vampires based only on a blood sample [LINK].
- * The first to have circuits that allowed the Ring of Rassilon to remotely override the commands of the operator [LINK]. By tradition, these circuits will be installed on all future Capsules.
 - * First TT Capsule to have Banshee Circuits [LINK]
 - * Used to create the Web of Time and the Eye of Harmony [LINK].

The Time Race

Using technology left by a temporal marauder from Gallifrey's future, Rassilon discovered the first secret of Chronoambulatory Egress. This was the key to mastering directional control of time travel [LINK-directional unit] and directly led to the an understanding of the glorious secrets of Time.

However the temporal marauder was just the beginning. Other species were taking an interested in time travel. It was during the era that Gallifreyans became involved in a "Time Race" with the people the planet Crial. The Crialans were a race of telepathic bacteria that infect hosts. They were determined to become the masters of space and time. They planed to travel back in time and infect all the species in the Universe. This led to a desperate dash to see which culture would develop unlimited time travel first. Some of the Crialans' time technology was even stolen by the Gallifreyans.

Twenty three years after the Qqaba mission Rassilon returned to the Sector of Forgotten Souls and seized the nucleus of the black hole. He brought it to Gallifrey and installed it beneath the Citadel creating a even more efficient and powerful source of energy [LINK]. Using Temporal

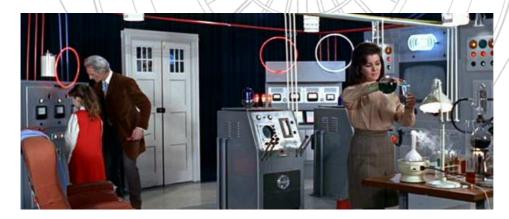
Fission Omega's Black Star became the anchor point for all of History, creating the Space Time Vortex [LINK] in such a way that it had always existed. At the moment the Web was anchored other Lords of Time in the Proto-TT Capsules waited at the extreme boundaries of what would become the Noosphere. The black star was called the Prime Eye of Harmony because it anchoring the Web of Time [LINK], becoming an all seeing eye, that observed and crystallizing history. The limits of the Eye of Harmony set the Space/Time range limit for all Gallifreyan TT Capsules and thus defined the Gallifreyan Noosphere [LINK].

One of the key developments that allowed the Gallifreyans to become the Lords of Time was the Rassilon Imprimatur [LINK]. Early capsules required a link with a pilot who had a Symbiotic Nuclei to function with in the Vortex. While the Symbiotic Nuclei [LINK] has already been created in the Qqaba mission, it took Rassilon some time to reveal that the exposure to the energies of the Eye of Harmony could elevate any lesser species. With their unique power over Weak Nuclear Force the Lords of Time invented Huon Energy for to be used in the Heart's of their TT Capsules [LINK].

A few years after the creation of the Eye of Harmony, a Lord of Time (know today as the Other) used block transfer mathematics to discover trans-dimensional Warp Matrix Engineering [LINK]. This allowed the Gallifreyans to abandon Tachyonics for Warp Matrix Engineering.

By this time the Gallifrey's chronosphere is filled with failed prototype TT Capsules. Some of these abandoned Capsules became sapient, escaped Gallifrey's temporal pull and slingshoted out into the space/time continuum. Despite all these failures future breakthrough would lead the Gallifreyans to victory in the Time Race. With the achievement of the early types of TARDIS, the Gallifreyans erase the Crialans from history so that they never existed. The Gallifreyans become the true Time Lords.

Type 1



The Scientific Elders (including the pioneers Rassilon and the Other) designed and built the Type 1 Time Travel Capsule in a Solar Workshop. Rassilon used Warp Matrix Engineering to design the Protyon Units for what would become the first sentient matrix. Though some of the tools used were simple spanners, the process used to create a TARDIS is one of the greatest secrets of the Time Lords [LINK]. There are rumors that the Matrix retro-actively created the Time Lords just so that all Timeships could have a defined moment of creation. Otherwise every TARDIS would exist without ever having a point origin.

The Other's granddaughter, who was only a child at the time, found the phrase 'TT Capsule' to be too hard to say. So she gave the new timeship the name TARDIS. 'Tardis' was a word that meant 'timeship' in Old High Gallifreyan, but it is also an acronym that stands for Time And Relative Dimension In Space. Her habit of re-naming things would persist, and she would later change her own name from Lady Arkytior Larn to Susan Foreman.

Due to the Time Race and Eternal Wars, the Time Lords of this era were much more paranoid then later generations. All of the early TARDISes had several defense mechanisms. Among them was a temporal stasis field that uses a spare dimensional stasis field to "freeze" any intruder whose bio-rhythms are unauthorized. The field can only be deactivated from the Control Console.

- * First to be called a TARDIS
- * First to be constructed using trans-dimensional Warp Matrix Engineering [LINK]
- * First with Protyon Core [LINK]
- * Has a box shaped exterior
- * Composed of almost pure forced-matter calculations and movement equations [LINK].
- * Dimensionally Immanent (capacity for only 3 or 4 crewmembers)
- * First to rely entirely on power broadcast from the Prime Eye of Harmony [LINK].
- * First to have a Rassilon Imprimiture that allows a symbiotically bonded Time Lord full access to the Power of Creation [LINK].
 - * Huon based Space-Time Element [LINK]
- * By decree of Rassilon this and all future TT Capsules would carry a Psycho-Telmeter to track vampires based only on a blood sample [LINK].
- * Circuits that allowed the Ring of Rassilon to remotely override the commands of the operator are traditionally installed on this and every future TARDIS [LINK].
 - * Equipped with Banshee Circuits [LINK]
 - * First to have Temporal Stasis option and several other unique defenses.

Type 2

- * First with long term Life support [LINK]
- * First with Vortex Force field generator [LINK]

Type 8

- * Designed to hold only two crew members
- * Spherical exo-shell

Type 9

By this point the people of the Gallifrey were using time travel against each other in petty feuds. Seeing the dangers of this, Rassilon created the Laws of Time, based on Mason and Aaron Blinovitch's on temporal science. Shortly after the creation of the Eye of Harmony he decreed

that every TARDIS must have interfaces that prevent them from traveling into Gallifrey's Future. This started with the Type 9. In addition to this, Gallifrey's past is protected by powerful Temporal Baffels, Backtime Field Buffers, and Temporal Locks.

The original Worshipful and Ancient Law of Gallifrey to serve as a "key" to the Time Lord prison asteroid, Shada. When the pages of this book are turned while within a TARDIS the book will use Remote Control to pilot a TARDIS to Shada.

- * First to have Governor Circuits [LINK]
- * First to be able to be controlled by the "Worshipful and ancient Law of Gallifrey"

Type 10

126 years after the Eye of Harmony was created the Time Lords were experimenting with Warp Matrix Engineering. They discovered that block transfer equations [LINK] could be used to shift tracts of space-time into small pocket dimensions. When inside these micro-universe the space-time would fold back on itself in what some have termed the Escher Effect. With the addition of a Dimensional Interphase Point created by a Time Vector Generator [LINK] it became possible to have this pocket universe be both present and not present in normal space. This was the key to trans-dimensional engineering and led to the construction of the Type 10 TARDIS that was dimensionally transcendental.

- * First to have a much more advanced Protyon Core [LINK]
- * First to be dimensionally transcendent [LINK].

Type 12 Super Orbital Time Stations



While the Time Race was over, the Eternal Wars with the Great Vampires (which had started before the fall of the Pythia) continued. The most well known weapon in these wars were the 700 Bowships, crewed by 16,000 Prydonians and Arcalians. To transport Rassilon's Bow Ships, through time a specially designed TARDIS, the Type 12, was constructed.

These massive capsules were known as Super Orbital Time Stations. By time mapping their internal dimensions on to their exterior their massive exo-shells were the size of a comet. Dominating the disc like structure is a colossal communications-tower. Space-docks, and

batteries of space-cannons were also mounted on the exterior. The rust colored panels of the shell are enscribed with rococo scroll describing the achievements of the Time Lords.

A side effect of the time mapping process led to minor instabilities with their real world interfaces. The station's interior were filled with interlocking complexes of corridors, workshops,

laboratories, living quarters, energy generators, storage rooms, and Bow Ship Bays. Much of the ornately decorated interior was made of golden colored machonite.

The Type 12 was the first TARDIS to make extensive use of exitonic circuitry. These artronic circuits were made of a type of metal that has many of the characteristics of plastic. They work by relaying pulses of artron energy through complex circuits. The Artron Mainframe



is connected to the Matrix via the Telepathic Circuits, and if a Time Lord has the Key of Rassilon, he can physically interface their TARDIS into the Matrix's Thought Space using the legendary Seventh Door to the Matrix



Despite sometimes being describe as a War TARDIS the Time Station's themselves have no actual offensive function and serve only to deliver the Bow Ships to the correct time zone. One of the reasons the Time Lords never considered mounting offensive weapons on a Time Station was that they didn't want to give destructive capabilities to the incomprehensible intelligence that is a TARDIS sentience. As the name station implies, under most circumstances the station sits outside of time and deploys the Bow Ships via time corridors. Its Magnatron was even capable of shifting entire constellations over two light years. Despite their size, they contained only six Bow Ship Bays and probably carried no more then 10 Bow Ships. Each bay contained a psionic tractor beam that can collect timeships from the Vortex and force them to materialize inside.

Only 1 out of the 16,000 warriors who fought the Eternal Wars survived and most of the Time Stations were lost as well. One War TARDIS transporting Bow Ships was invaded by a Great Vampire in the Agamemnon System. Its crew was killed and the damaged TARDIS was trapped there. For millions of years it transmitted a tight beam distress signal but because of the damage the signal couldn't be properly targeted at any the Time Lord Base. After accumulating asteroids for 10,000,000 years the massive TARDIS is eventually mistaken for a naturally formed planetoid by Humans and named Cassandra. Its self-destruct was eventually triggered by the Doctor.

The most advanced of these Stations constructed during Rassilon's life was the Class 7 Time Station known named Zenobia. This was Gallifrey's largest off world Time Station. Within this station Rassilon built the Oubliette of Eternity Dispersal Chamber. Using D-Mat technology, those placed in the chamber would have their timeline erased creating a new timeline where they would never have existed. Rassilon decreed that anyone threatening Gallifrey should be placed inside and dispersed.

This station survived the Eternal Wars and was still functional by the time of the Ravalox Stratagem. Over millions of years, the oubliette came to be used on any Gallifreyans who committed high treason. Eventually this practice was recognized as a violation of the Laws of Time and the punishment was forbidden.



Sometime before the Doctor's exile to Sol III the Celestial Intervention Agency (CIA) purchased Zenobia and use it as their secret headquarters. The Time Station is moved to the Storm Belt (a graveyard of abandoned spaceships) orbiting a red giant on the edge of the Constellation of Kasterborus. To further ensure security, during important events the CIA would induce a massive electrical storm in the area. The CIA continued to use the Oubliette of Eternity for dispersal of Gallifreyan troublemakers.

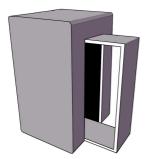
Thousands of people were dispersed by the CIA sometimes as many as 200 in a single year.

During the presidency of Lord Niroc the CIA used Zenobia for their base for the Ravolox Stratagem. The CIA use the station's Magnetron to move Earth and its constellation 2 lightyears and rename it Ravolox. This scorches one side of the planet and devastates the other.

Eventually the CIA would re-build a Time Station into the Class 7c. The Class 7c Super Orbital Time Station followed the basic form of the Class 7 but is equipped with the latest in Mark IX technology. One of the new innovations was the architectural configuration program. Its interior architecture can transcendentally reconfigure itself instantly to meet with the needs of its crew. This allows the travelers to quickly access any room in the TARDIS without extensive use of service tunnels. Another fairly new innovation is an improved ability to partially regenerate damaged systems and seal hull breaches. Perhaps most significantly an Eighth Door to the Matrix was constructed and permanently installed in the Class 7c. This Time Station was forced to self-destruct to protect Gallifrey from the Never-People.

- * The first to have its components constructed with exitonic circuitry.
- * First to have the ability to Time Map the internal dimensions onto the external dimensions. This increased the exo-shell to the size of a small comet [LINK-Chameleon].
 - * Real World Interface tended to be unstable [LINK].
 - * Possesses 6 Bow Ship Bays with a psionic tractor beam
 - * Probably carried less then 10 Bow Ships.
- * These timeships had a fully functional self-destruct mechanism (unlike later types of TARDIS) [LINK].
 - * Equipped with a Magnetron that can shift entire constellations. [LINK]
- * The Class 7 Time Station Zenobia survived the Eternal Wars and became a base for the CIA.
 - * Zenobia was used in the Ravolox Stratagem.

Type 15



* First to have default exterior that is silver-grey metallic cube 3 meters on each side. Before this the exo-shells were quite large.

Type 18

By this point the Eternal Wars were over. Many of the defense mechanisms (such as the temporal stasis field) were no longer install on new TT Capsules. Like every TARDIS built after the end of the Vampire Wars, the Type 18 was equipped with the Record of Rassilon. It says (in part) that the Vampires are "the enemy of our people, and of all living things." It charges all Time Lords with the Directive of Rassilon: the task of destroying any Great Vampire or its decendents even at the cost of his own life.

By the time of the Doctor was born, at least one heavily upgraded Type 18 would still be operational and used for training Junior Time Lords at the Time Academy.

- * Dimensionally Transcendental [LINK]
- * Has a control room.
- * Has a Scanner [LINK]
- * First to contain the Record of Rassilon [LINK].
- * Extra defense mechanisms of previous models withdrawn.
- * Can be upgraded to have a Chameleon Circuit.

Type 20

- * First to have a hexagonal free-standing Master Control Console inside the control room. [LINK]
 - * First with Rassilon Imprimature enhanced with Telepathic Circuits [LINK]
 - * First to have Architectural Configuration Program [LINK]
 - * First to have modern Main Door Locking Mechanism [LINK]
 - * First to have Isomorphic Security System [LINK]
 - * Enhanced Temporal Limiter [LINK]
- * Despite increased security, several Type 20s were captured to the Ooolatrii during the Celestial Wars.

Type 21

* First with a Sick Bay and Advanced Diagnostic Terminal [LINK]

Type 22

- * First with a Cloister Room [LINK]
- * First with a Cloister Bells [LINK]

Type 25

500,000 years after the invention of the Type 1, the Time Lords finally accepted that is safe to use TARDISes for exploration and investigation missions.

The Type 25 TARDIS was created several millennia after the introduction of the Type 1. Despite protests from traditionalists, the Type 25 was the first TARDIS to have an independent Block-Transfer copy of the Eye of Harmony. Not only did it have two hearts (the Main Space-Time Element and the Eye) but the Type 25 was also the first TARDIS to have more then one Control Room.

- * First to have a block transfer copy of the Eye of Harmony [LINK]
- * First to have more then one Control Room [LINK]
- * Designed to serve as mobile research laboratory

Type 26

* The first to have a Passenger Adoption Scanning Terminal (PAST) [LINK]

Type 28

- * The first to have a Zero Room [LINK]
- * First with workshop to make replacement parts [LINK]

Type 30

700,000 years after the invention of the Type 1 the people of Gallifrey agreed that a TARDIS could be used to safely participate in the Web of Time. However violations of the Laws of Time were (and still are) still possible.

Like the Types 15-29 this TARDIS had default exterior that is silver-grey metallic cube 3 meters on each side. But it was the first equipped with a Chameleon Circuit. Development of the Chameleon Circuit began before Omega was lost. Technicians successfully tested the prototype for the circuit shortly after the Eye of Harmony was created. However the circuits were not

installed as a standard part of TARDISes until the Type 30. This was done because lost timeships were creating legends and mythologies of monsters and gods among the lesser species.

Like other pre-60 types of this era, the Type 40 often developed faults with its Fluid Links.

- * First to be considered safe for chronoforming history.
- * First to have a Chameleon Circuit [LINK]
- * Frequent fluid link failures. [LINK]
- * About 200 years after the birth of the Doctor the Mark II and Mark III upgrades of the Type 30 will be very popular.

About one million years after the Eye of Harmony was anchored, Gallifrey begins to enter into a period of stagnation. The Time Lords discovered Quantum Mnemonics. This science is capable of altering the nature of reality and probability, allowing one to reshape an the history of an entire planet. This form or reality manipulation was far superior to the block transfer equations used to create a TARDIS. Despite this, TARDISes continue to be constructed using block transfer computation. The Time Lords turn aside from the barren road of technology and most abandon experimentation of any kind. This cultural stasis will last more then a million years.

Type 32

The Time Lord engineers finally became a more innovative in designing TARDISes, after millions of years of stagnation. As if to make up for lost time, the last few thousand years of Gallifrey's existence would see a much wider variety of TT Capsules being produced. With new model being released approximately every 2 centuries. This acceleration appears to greatly accelerated the rate at which Timeship is scraped and replaced with a newer model, meaning that instead of lasting several millennia of years the effective life-span of each capsule is less then thousand years.

After following up on a suggestion by a Time Lord who might have been the Doctor, the Voice Integrator was invented by a Lord Therde. It can be found as part of the PAST on the Type 32 and all later TT Capsules.

- * First to have a Voice Integrator [LINK]
- * The Type 32 was the first TARDIS to having XX or XY circuits installed to define their gender as male or female.

Type 36

* First to have a Data-Core installed. [LINK]

Type 38

* The first to have a Hostile Action Displacement System (HADS) [LINK]

Type 39



Type 39 was the first model of TARDIS whose Protyon Core manifested semisentience. [LINK] The idea of a TARDIS acting on its own initiative took the Time Lords a while to believe and then even longer to accept. Many Capsules were sent for repairs or even de-energized for their disobedience.

* The Type 39 was the first to have Temporal Grace Circuits [LINK]

* First with a set of Data-Banks (sorted with an Index File) that held information about the cosmos. [LINK]

* Used by the criminal Salyavin.

Type 40



The first Type 40s were built on Date Index 1995733 RE, well over five thousand years before the Last Great Time War. Since the Type 40s were some of the last to be constructed with Mark I technology they were, overall, very similar to the Type 39. But, unlike many early models of TARDIS, the interior of the Type 40 took full use of its dimensionally transcendental nature. The total volume of rooms and corridors of a Type 40

TARDIS has been described as being about the size of a small town and it could take over a year to give a full guided tour. Not everyone saw this large size as a plus and the major complaint made by several Time Lords against the Type 40 was that its kitchen was always located very far from the Control Room.

Despite the large size, the main drive of a Type 40 produced orthogonal readings with a hyper time shift ratio of only ZS+ 101 EQ. These shift ratios were much smaller then the wave loops generated by later Types of TARDIS. A Type 40 had the capability of boosting its reality quotient to the point where everything near it could be time locked at a quotient of up to 3 [LINK]. Using this, a Type 40 could trap another Type 40 or early models TARDIS by keeping it from dematerializing. But a later model TARDIS would be able to escape, sending the Type 40 spinning off into the Vortex in the process.

Type 40s (and later models) were equipped with a Defense Unit that included Banshee Circuits [LINK]. This defensive warning system could pull images from the data banks and put them on the Scanner to warn the crew about dangerous situations outside. Some operators kept it disconnected because the resented how overly sensitive to threat it is. This systems was necessary because (like most capsules before it) the Type 40 was initially released without any Force-Field Generator [LINK]. Many operators corrected this disadvantage by constructing and installing their own generator, and later refits would make the generator standard on all Type 40s.



Despite the advancements made over the last 10 models, the Type 40's Chameleon Circuit [LINK] was still considered to be a primitive, early version by modern standards. To create a new disguise the operator had to use a retractable keypad that extended out of console when a switch under the console was thrown. This keypad allowed new disguises to be created with machine code. Pre-used disguises were automatically accessible. Unlike later capsules, the Type 40 TARDIS made a whooshing noise when their chameleon circuit altered the exo-shell. Like many older models, the Type 40 was particularly prone to system breakdowns of the Chameleon Circuit, which would freeze the exterior appearance. They required regular Chameleon Conversions to combat this tendency. This problem was fixed with the introduction of the Type 65.

But this was not the only fault common in the Type 40. The Type 40 tended to suffer from a fundamental systemic failure which caused numerous little malfunctions. Even with a Force-Field generator installed, the Type 40 were still particularly vulnerable to antimatter implosions. Some Type 40's had intermittent faults in their Attitude Control [LINK] resulting in damage and injury from exterior acceleration/gravity disruption. The operator can compensate for this by frequently re-setting the pitch stabilizer's manual control. Like other pre-60 types of this era, the Type 40 often developed faults with its Fluid Links. And some of them had faulty Protocol circuits with unreliable connections. These connections could fail causing the circuits to disengage and allowing the TARDIS to break some of the Laws of Time.

The first Type 40s were built on Date Index 1995733 RE, and by the end of its production run, 305 Type 40 Time Travel Capsules had been grown and registered at the Black Hole shipyards. However due to the many faults the Type 40 quickly becomes known as a renegade model and a lemon. By Date Index 309456 (when the Doctor was born) the Type 40 was considered to be a museum piece. By 309715 they were classified as Veteran and Vintage Vehicles and training in their operation was only offered as an elective at the Time Academy. Over 400 years later the release of the Type 70 spelled the final end for the older design. 304 of the Type 40s were deregistered and made non-operational.

- * One of the first models equipped with Molecular Stabilizers for self-repair [LINK].
- * Equipped with a sensitive and pro-active Defense Unit [LINK]
- * Could time lock areas with a reality quotient of up to 3. [LINK]
- * First to have a Remote Control option. [LINK].
- * Main drive produced orthogonal readings with a hyper time shift ratio of only ZS+ 101 EQ.
- * Required regular Chameleon Conversions to keep the Camouflage Unit from freezing up [LINK].
 - * Some of the last models to be constructed with Mark I technology

- * Frequent fluid link failures. [LINK]
- * One of the last to require chameleon disguises to be manually created with machine code.
 - * One of the last types not to have a force-field generator [LINK]
 - * One of the last types to carry the Record of Rassilon [LINK]
- * One of the last models to use Old High Gallifreyan as the programming code for its Artron Mainframe. [LINK]
 - * 305 Type 4 TT Capsules were registered during the production run.

The 13 Halflings Project



Back before Rassilon became Lord President of the Time Lords, during the Time of Chaos, Omega, Rassilon, and the Other created the Ultimate Defense for Gallifrey. It was called Validium, a living metal with DNA, that becomes sapient when it achieves critical mass (probably about 300 kg). All of the units of Validium were created within a picosecond of each other. Validium's sole function is to cause destruction, and it was capable of instantly wiping out entire star fleets of warships. Without proper shielding, it

generates an low level aura of chaos that subconsciously induces violence and aggression in anyone within hundreds of thousands of miles of it. Validium can shape itself into whatever form its owner desires, and is even able to turn items into water or other elements. The potential sapience and its trans-mutative abilities made Validium very versatile and powerful.



While it is often suspected that Validium was used to create the Cold, the N-Forms, and even the Casts, very few know that the Matrix also experimented with using Validium to create 13 experimental hybrid Timeships. At this point, Time Lord engineers were a little more innovative in designing TARDISes then in later millennium. In the year 91963 TL of the Gallifreyan dating system the Time Lords (most likely House Oakdown) grew 13 special TARDISes.

The exterior of a normal TARDIS is made up of a Chronoplasmic Shell [LINK] composed of atoms of rare TARDIS metals that includes mercury and inorganic polymers. For this project, the timeships that were spawned by the Caldera womb had Validium grafted into the equations of the 5 dimensional chronoplasm. This created 13 timeships that were half Validium on their Father's side.

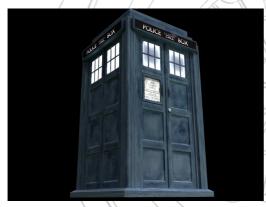
Despite the ridiculousness of mounting weapons on these pre-Time War capsules, the halflings were each equipped with a weapon module. When the module was activated a brass spike would extend and form a set of concentric rings symbolizing a targeting reticule. This lever has only to be pulled down to fire the weapon. Using the weapon module to focus fire, the Validium was

capable of discharging devastating white pulses of energy. With sustained bombardment these pulses could reduce a planetoid to rubble. The system draws a significant amount of energy from the transpower system and should only be used when main power fully available. The operator is also cautioned that the module requires frequent maintenance and tuning or it will be incapable of focusing the fire, resulting in the energy being discharged in all directions.

Several different models of TARDIS were chosen for this experiment, including at least one newly conceived Type 40 and one Type 45. The Matrix [**LINK**] viewed these 13 timeships as being unique, and foresaw that they were destined to acquire names and to evolving into a humanoid form. Being advanced 4 dimensional beings, all of the timeships of this generation knew about the coming Time War between the Time Lords and Daleks.

As of Date Index 309456 (the time of the Doctor's birth) most of the Type 40s were regarded as museum pieces. However, for those who knew the secret, these hybrid Type 40s were considered to be the cutting edge of TARDIS technology at that time. But, even the Time Lords couldn't forsee that two of these TT Capsules would go on to be some of the most famous timeships in Gallifreyan History.

The Doctor's Type 40 Timeship



named Marnal of the House of Oakdown.

The Matrix regarded one of the units of Validium to be psychologically deficient at the time of her birth, and blamed this deficiency on the Eternal Wars with the Great Vampires. Despite this, the unit of Validium was used to create the exochronoplasmic shell of a Type 40 Model B [LINK] TT Capsule that would eventually become the Doctor's TARDIS. Officially this Type 40 was part of the production run of 305 Type 40s. The newly registered Type 40 TARDIS instantly knew that she was superior to the other capsules. The ship became the property of a Time Lord Castellan



Several millennia later, after Marnal had disappeared, the ship was sent to TARDIS Academy to be granted to another Time Lord. On her first day the Type 40 picked student known as Theta Sigma (later known as the Doctor) from the House of Lungbarrow. The other timeships viewed the Doctor as a lunatic and failed to understand what the Type 40 saw in him. The Doctor's TARDIS

quickly developed a reputation among the Time Lords and other Timeships of being a disobedient renegade. After questioning too many instructions the Doctor's Type 40 TARDIS is forbidden to travel until the Time Lord Corps of Engineers could repair it. After a few decades of waiting the

Ship decides to renegade against TARDIS society because of a disagreement she had with the Matrix. Stealing the Doctor and the Hand of Omega, the Type 40 fled Gallifrey. 114 years later, the ship is was captured and exiled to Sol III for 5 years due to its disobedience.

Her freedom was eventually restored and the ship was removed from the official Type 40 register by the Celestial Intervention Agency. As predicted by the Matrix the TARDIS did eventually acquire a name. However she keeps her name – 'Sexy' – a secret from everyone, even other Timeships. The Doctor usually referrers to her as the Ship or the Tardis. The Type 40 also chooses to hide her more extreme and unique abilities despite the Matrix of Time's plan for her. The Doctor and her exploits became legendary. She was responsible for giving birth to the first 102 Form TARDIS. The Type 40 was even responsible for releasing an alternate version of history that destroying a paradox corrupted Gallifrey I at the beginning of the Time War. By the end of the Last Great Time War in Heaven, the Doctor is the sole surviving Time Lord and his TARDIS is the sole surviving Gallifreyan Timeship. Thus far, she has refused to fulfill the Matrix's plan to evolve into a 100 Form Timeship.

The Master's Type 45 Timeship



Another unit of Validium was far more impressive to the Matrix. She managed to determined the true meaning of the Eternal Wars only a few hours after birth. This unit of Validium was installed in a Type 45 Model B TARDIS. On her own initiative, this timeship made sure that the Matrix was the only one who knew that herself and her sister Type 40 weren't like other TARDISes. After TARDIS Academy the Type 45 TARDIS chose Koschei of the House of Oakdown (a Time Lord later known as the Master) to form a symbiotic bond with. Unlike other Timeships, this Type 45 allowed the Master to form a symbiotic link with six other TT Capsules, including a Type 40 Model B, a Type 65, and a Type 70. The Master's TARDIS would later take the name Lolita and become the first

101 Form Timeship. For more on this particular Type 45 see the entry for 101 Form [LINK].

In addition to whatever systems were standard with their model, the 13 Halflings possessed the following traits:

- * Contain Validium from the time of the Eternal Wars in the cronoplasm of their exoshells.
 - * Only Pre-Time War capsules to be equipped with a Validium Weapon Module.
 - * Predicted by the Matrix to evolve in the 100 Forms Timships.
 - * Only 13 constructed, using several different models of TARDIS.
 - * A Type 40 Model B was bonded to Castellan Marnal and later the Doctor.
 - * The Master also stole another Type 40 Model B from Gallifrey.
 - * The Type 45 Model B was bonded to the Master.
- * Three of these state of the art capsules (including the Doctor's ship) participated in Marnal's Crusade of Date Index 309456 / 4756.7 RE / 1213 GRT / 100447 TL.

- * Due to persistant malfuctions, often materialized hovering 30 centimeters above the ground. [LINK]
 - * Developed other system wide faults even more often then the Type 40. [LINK]
 - * Almost immediately withdrawn from use due to faulty systems.
- * Probably the abandoned experimental TARDIS found and used by the Gallifreyan Iris Wildthyme. This TT Capsule newer then the Type 40, was dimensionally immanent and had a jammed chameleon circuit.

Type 42

- * Released shortly after the Type 40.
- * Known for being much more reliable then the Type 40s.
- * First model to carry the paralysis Defensive System, which can discharge a field of electrical energy that will automatically strike anyone within 30 meters of the TARDIS. While ineffective on Gallifreyans the bolts will stun many species including humans.
 - * Popular enough to still be in use 164 years after the Doctor went renegade.
- * A Type 42 TARDIS was stolen by the War Chief Magnus after the CIA had him framed for treason.

Type 44

- * First to have the Automatic Emergency Landing option [LINK].
- * First to have the Emergency Stop option [LINK].
- * First to have the Emergency Displacement System (EDS) [LINK].
- * First to have the Extreme Emergency Lever [LINK].
- * First to have the Emergency Emergency Systems [LINK].
- * All of the above systems were made available with the Mark II refit.

Type 45

- * Probably the first to have a Force Field Generator included as standard.
- * First TARDIS to carry a Recall Circuit [LINK]
- * First with the Portable Scanner included as standard [LINK].
- * First to be equipped with Poly-Directrix Lenses [LINK]
- * First model of TARDIS to have the Remote TARDIS Security System [LINK]
- * One of the TT Capsules used by the Master was a Type 45 Model B TARDIS.

(For more information on this particular TARDIS see the 13 Halflings Project [LINK] above)

- * The Type 46 Model B was the first to have the Navigator installed [LINK]
- * Probably the last Type to use Old High Gallifreyan programming code.
- * Probably the last model to carry the Record of Rassilon.

Type 47

* Many older and obsolete features were withdrawn and not found on this type.

Type 50

* The Type 50 remained in use till shortly after the recovery of the Key to Time by the Doctor and Romana. However the success of the Type 70 led to all the Type 50s and earlier models being de-registered and made non-operational.

Type 51

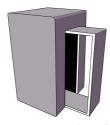


Inspired by the success and limitations of the Navigator program the Type 51 was equipped with a Cybernetic Personality Matrix Interface. The original hope was, with the aid of a Symbiotic Bypass [LINK], to create a TARDIS that could function autonomously without out any crew at all. This would have removed the need for Time Lords to participate in the purely observational journeys that make up the majority of off world travel. While this goal was abandoned in the design phase the programmers still hoped to create a TARDIS that could function as a fully interactive 3 dimensional and 5 dimension life-form. To

this end the matrix was programmed to replicate Gallifreyan mental and emotional responses.

The CPM Interface was able to verbally interact with the operators and acts as a liaison with the Sentient Matrix in the TARDIS's Protyon Core. The CPMI is capable of controlling all the TARDIS's functions (assuming the Automatic Systems Override hasn't been thrown). The interface was not carried over to later models of TARDIS because there was a basic design flaw in the system that caused the CPMI to develop new, disruptive, personalities. This was caused by the engineered brain's inability to understand the subtle block-transfer processes holding the TARDIS together. A visit to a Gallifreyan Repair Center was often necessary to reset the personality. Another minor oddity of the interface is that it can often be heard faintly whispering when the Type 51 is talking to another TARDIS.

- * The Type 51 was the first and last TARDIS to have the Cybernetic Personality Matrix Interface a standard component.
 - * Most of the production run was scrapped.
- * The remainder were removed from the registry and put to use by Interventionists of the CIA.

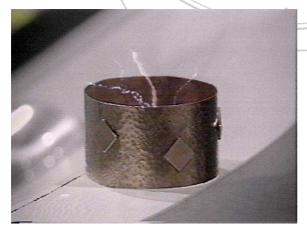


* The Type 52 was the last TARDIS to have the a silver-grey metallic cube 3 meters on each side as its default state.

Type 53

- * Considered to be state of the art at the time of the Doctor stole his Type 40 (Date Index 309792).
- * First to have a default exo-shell that looked like a white cylinder 2 meters tall and 1.2 meters in diameter [LINK]. When in this form the outer surface of the shell will appear, on close examination, to be rippling and changing like something unreal or dreamlike.
- * First to have the locking mechanism take the form of an exterior sensor plate that key just has to touch to unlock [LINK].
- * Revisions to the exo-shell and real world interface resulted in the Main Door being significantly smaller then models released before or after this Type [LINK]

Time Rings



Since a TARDIS isn't even constructed of real matter and is, in fact, a complex space time event rather then an object it was inevitable that the Time Lords would develop a version of a Time Travel Capsule that could be worn by a Time Lord. This was the concept behind the Time Ring.

Functioning much like a Vortex Manipulator (without the unhealthy side-effects to one's reality quotient), the Time Ring uses technology first developed for the Time Scoop in the early days of the Time

Program.

When activated this device will transport anyone who is in contact with it to a preprogrammed Time Zone. Using Transmission of Matter Through Interstitial Time (a purely muon based temporal drive) the Time Scoop creates Interstitial Motive Bridges that transports the user through space and time. A pocket dimension of Vortex Shields which, combined with the Rassilon Imprimatur, protects the traveler. This time bubble would also slow the passage of time for the operator so that travel time seems to be only a few minutes. Like the Time Scoop, the Ring was powered by Taranium. And like the Time Scoop, the Time Ring relied on its operator's own artron energy to guide it through the Vortex.

Time Rings have seal on them that appears to be a spiral galaxy with three arms (the Milky Way has two.) A Time Ring can store the coordinates for two space-time jumps. All the navigation and drive systems are tucked out of sight in their own micro-universe, leaving only the Ring itself for the operator to interact with. The external bracelet existed only as a locator and control device. Due to the limited controls, guidance and operation of the Time Ring accomplished telepathically. A Time Ring is equipped with a PAST and can expand its materialization field to transport more then one person. But every traveler must be in physical contact with the Ring at the moment of dematerialization. This requirement tends to limit capacity to three to four people. The Ring contains a fail-safe based on the Emergency Emergency Systems [LINK] that will engage automatically if travelers become separated.

The first proto-types were produced by the Temporal Development Center less then a century before the Doctor's exile to Sol III. But the Time Lords would spend more then 300 years try to perfecting the technology. Even then they were prone to molecular short circuits that would result in spatial or temporal displacement. If the Time Ring suffers a molecular short circuit while trying to get the user back to his TARDIS the operator will find himself a the right spatial the spatial coordinates will be off by several thousand years. A safety system in the Time Ring will trigger the TARDIS's temporal drift function to bring the TARDIS to operator's time-zone.

A Time Vector Coordinator is responsible for programming Time Rings for the CIA and other Time Lords before every journey. This is done using special Protyon Units attached to the Matrix which are called Block-Transfer Relays. Most time rings store coordinates for two space-time jumps. A Time Ring can be programmed to disintegrate itself, once their program space-time jumps are completed.

Users of Time Rings are cautioned that almost all of their systems are automatic, with no manual override options. Something as simple as a harmless field of strange tachyons and charmed antiquarks will automatically trigger dematerialization and a random space-time jump.

- * Time Rings lack all but the most essential of the systems that are found on a standard TARDIS.
 - * Time Rings possess Emergency Emergency Systems
 - * Most time rings store coordinates for two space-time jumps.
- * Because of rarity of Taranium, most Time Rings are given only enough fuel to complete their planned journey.
- * When the power supply has been expended, an abandoned Time Ring will shimmer and vanish.

- * To reduce the chance of theft the Rings have a powerful self-destruct, capable of shattering Dalek casings.
 - * One of the proto-types was stolen by the Master and cloned several times.
- * Despite not minor flaws, they were in use by members of the High Council 50 years after the first prototypes.
- * They were also used under full field conditions during the Deliavatsud Intervention to prevent the creation of the Daleks. Two of the three rings suffered miss-jumps.

* At the end of Borusa's presidency the current presidential TARDIS was a Type 57.

Type 58

- * Type 58 and later TARDISes can automatically scan the target area right before materialization and the Chameleon Circuit will automatically select a disguise that will hide it [LINK].
 - * Possibly the first TARDIS to have Atrium Circuits [LINK].

Type 60

- * They Type 60 (and all future) designs eliminated the frequent failures of the Fluid Links that all TT Capsules had been suffering. [LINK].
- * At the beginning of the Time War a Type 60 TARDIS was still being used by a Time Lord known as Qixotl (aka Drax).

Type 63

* Eight years after the Doctor stole a TARDIS the Junior Time Lord Drax bought a second-hand Type 63 TARDIS and leaves Gallifrey.

Type 65

Like the Type 53, and 58, the Type 65 TT Capsule major improvements were in the area of defensive mechanisms. The Type 65 was dubbed the Secure Recon TARDIS. It was created in an attempt to fulfill the needs of the Celestial Intervention Agency.



For starters, the reoccurring fault with locked Chameleon Circuits that had been plaguing all Capsules since the Type 30 was finally fixed with this model. No longer would frequent chameleon conversions be required. Other improvements to the Chameleon Circuit allowed the Type 65 TARDIS to take the form of statue like beings that were able to move and walk and the addition of a Limbo Atrophier. Because of all these changes the wave loop patterns of this TARDIS have much larger shift ratios then early models (like the Type 40).

More significantly, the Type 65 had the most elaborate and sophisticated anti-intruder and anti-theft systems yet devised – greatly expanding upon the Remote TARDIS Security System [LINK]. The core of the whole network was the Scanner Identification Computer System (SID). The SID was designed to intelligently screen out unauthorized personnel to prevent theft, hijacking, and stowaways. The SID was independent, but parallel, to the main computer banks, preventing it from being altered by any external hacking attempts against the Artron Mainframe.

For most models of TARDIS, the Passenger Adoption Scanning Terminal [LINK] automatically screens and adopts any sapient life-form which is present at the moment of dematerialization into the Vortex. On several occasions this had allowed stowaways to also share in this Time Lord gift. For this reason Type 65 and more advanced capsules are equipped with a scanning booth which must be used by any newcomer to be added to the Approved Entrance File. Only beings who whose biodata was on file would be fully accepted by the SID.



Using a red Optic Pickups, the SID Computer System detected the biological rhythms (including retinal prints, and artron patterns) of anyone attempting to coming aboard and compared them with the Approved Entrance File. Anyone not found to be on the list would find the main doors closing and the doors being double locked. It target tries to interfere with the locking mechanism the TARDIS can also paralyze anyone who touches the exterior shell. The TARDIS can inflict tuned artron energy on anyone who made eye contact with the external Optical Pickups. These attacks could stun or paralyze.

If the locking mechanism was somehow bypassed and unauthorized entry into the control room was achieved the SID would attempt to remove, or disable the intruder by other means. In addition to controlling the various defense mechanisms of earlier TARDIS models, it had the ability to alter the Architectural Configuration System, allowing it to reconnect dimensional junctures so that every door lead through the real world interface and out of the TARDIS. If these tactics were insufficient the SID would deploy non-lethal stun gas. The internal optical pickup was also capable of artron energy attacks.

The default Standby Setting for the SID was non-lethal, but this would be changed to Active Mode if the system recognized the intruder as being from its list of major temporal marauders (such as the Daleks, Cybermen, or Sontarans). If such an intruder was detected, more violent methods could be available to the SID. In active mode the TARDIS was capable of using its internal or external red optical pickups to not only to stun or paralyze but to also inflict sever pain. These attacks could kill even a Time Lord.



The system could be set up so that an intruder could remain alive as long as they didn't move.

From inside the TARDIS the operator was able to take direct control of the SID computer system. The red Optical Pickups could be modified to relay hypnotic

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and telepathic signals. It could even be used to displace another TARDIS's exo-shell from the current time-cone, making it vanish [LINK].

Unfortunately the Scanner Identification Computer System tended to suffer from very unpredictable faults. It would become over-sensitive and often targeted its own Time Lord or his fellow crew members for no readily apparent reason. While it was rare, it was not unknown, for lethal force to be deployed in such situations. The presences of powerful rho waves (of the sort used in perceptual induction hypnosis) virtually guarantees a malfunction of the SID's control circuitry making it violently paranoid. In the end the SID was considered to be a failure and was not installed on any other model of TARDIS.

- * Known as the Secure Recon TARDIS
- * First model to not require frequent Chameleon Conversions
- * The Type 65 could assume the form of mobile statues [LINK].
- * The Type 65 possessed a Limbo Atrophier [LINK].
- * The Type 65 was the first to be equipped with a scanning booth for its Passenger Adoption Scanning Terminal [LINK].
- * They Type 64 was the first, and last model to carry the Scanner Identification Computer System.
- * All remaining Type 65s required extensive modifications to attempt to compensate for the faults in the SID.
- * The Master stole an modified Type 65 TARDIS but it was destroyed on the planet Traken.

Type 66

- * First to carry a Cell Regeneration Vault in its medical-bay [LINK].
- * PAST Booth equipped as standard on this and later models [LINK].

Type 68

* First model to carry a Jibbert Cathocode Troisieme Timepiece as a standard part of the console. [LINK]

Type 70

Released around the time of the Deliavatsud Intervention to prevent the creation of the Daleks, the Type 70 would become one of the more popular TT Capsules of the pre-Time War era. Indeed it was the release of the Type 70 that resulted in Type 50's and earlier capsules being deregistered and made non-operational. The Type 70 Mark VI (often know as the Type 7-0-6 Capsule) would be considered to be modern and even new for over four centuries. This would cause some problems for older Time Lords who were use to the control console layout of vintage capsules.

In addition to all the new capabilities of the Mark VI refit, the Type 70 had enhanced Telepathic



Circuits. This allowed for a pure telepathic mind-lock to replace the key based locking systems used in earlier models. The circuits also made possible a more reliable version of the Navigator voice control

program [LINK] that could even be used for operating the internal lift and other minor functions throughout the interior.

A military modification of the Type 70 was issued for the Celestial Intervention Agency. This Military TARDIS was equipped with weapons systems that included Time Torpedoes [LINK].

- * Released around the time of the Deliavatsud Intervention.
- * Has enhanced Telepathic Circuits [LINK].
- * First to have an improved Pause Control that that can freeze a TARDIS in midrematerialization for up to 2 microspans [LINK].
 - * Type 70 features a internal voice activated lift made of metal.
 - * The sick bay was located on level Gamma Seven [LINK].
 - * Unlike a Type 40, a Type 70 can penetrate distortion grids.
 - * One of the first to carry a pure telepathic mind-lock for the main doors [LINK].
 - * Improved voice control Navigator system [LINK]
- * A military modification of the Type 70 was issued for the CIA that was equipped with weapon systems. [LINK]
 - * The Master has stolen one Type 70.

Type 71

* This model had a much faster and easier to use Chameleon Circuit [LINK]

Type 73

* The Type 73 was the first to carry the Defense Indefinite Time-loop Option (DITO) option for the HADS [LINK].

Type 76

* This model featured improved TARDIS Relational Information Systems with expanded Data Banks [LINK]

Type 88

* The last TARDIS model to be produced before the idea of studying and using the technology of other temporal powers become fashionable



Type 89

The Type 89 has a long and complex story. One of the fallouts of the Ravolox Incident was as massive contamination of new ideas form other temporal powers throughout the cosmos. This would result a surge in the number of different models of the timeships being designed. The Type 98 would become the most advanced and

complex traditional TARDIS ever created. While prototypes had been being tested for several centuries as part of Project Foresight, the Type 89 didn't go into production until 11 years before the Ravalox Incident.

Using an enhanced Telepathic Link between the Time Lord and Capsule, the Type 89 is capable of boosting a travelers reality quotient, vastly increasing the chance that their version of reality would survive if a major change to history occurs. It also had a superior ability to execute shorthops. These systems were designed by the Arcalian Time Lord Mathematician and Scientist named Lord Verostephocalen. Like the type 97, the Type 89 has its Time Vector Generator installed in the central column instead of a wall alcove or under the console. Because of this the central column looks very different the one found in a Mark I Console.

Lord Verostephocalen developed the theory that the Back Time Field Buffers that protect Gallifrey's Relative Past could be penetrated by using the Star of Rassilon, two Type 89 TARDISes working in tandem, and some very complex forced-matter equations. This possibility was to prove too great of a temptation for some renegades. Under the hypnotic control of the Master, Lord Verostephocalen, stole one of the Type 89 as part of attempt to use Rassilon's Star to breach the back time field buffers and travel into Gallifrey's relative past. While this attempt was thwarted the second Type 89 had to be destroyed to prevent the Master from stealing it.

Originally only two of these experimental Type 89 capsules were produced. However a reorganization of TARDIS classifications would change this. Just as Veros had been inspired by alien ideas of how technology should be used so to were other TARDIS Engineers becoming obsessed with the cross-breeding of ideas. By the time the Doctor has assisted Kopyion Liall a Mahajetsu in repelling a second Yssgaroth invasion the designs of the newer models of timeships were developing in an almost evolutionary fashion. Using Veros' Type 89 as a foundation, new systems were grafted on to capsules creating numerous mutations. Each of these variations was issued its own model number, causing much confusion. Despite the fact that the Navigator program was only marginally superior to that found on the Type 70 the Primary Control Room was no longer designed for manual control. Instead the operator relied entirely on the Navigator voice control circuits. While optional controls were still available for use in an emergency the Master Control Console could only be found in the Secondary Control Room. This level of vocal interaction was such that many Time Lords began to give these timeships names such as Ilsashatii.

Type 90: Put into production before the Committee of Three scandal.

Type 97: first to have a Stattenheim Remote Teleport Control

Type 98: First to have a holographic scanner.

Type 102: Voice print lock, Limbo Atrophier

Type 104

Type 128b

Type 161.55

Type delta-216-delta

Type n+x

Type pi-R-760

Type 1056771z

The designation of the last of the capsules on this list was considered by the High Council to be so absurd that a re-organization was mandated. To prevent confusion, all capsules of this new generation were re-designate as Type 89s. All of the various mutations that we deemed to be

successful were grafted on to all of the timeships of this generation as part of the Mark X refit [**LINK**], and thus standardizing all Type 89s. From this point forward, much stricter limits were enacted on the design of new models. With the shadow of the Time War approaching, no new non-military TARDIS models were issued. Within five decades of the start of the War all non-military research missions had been suspended by the Supreme Council.

- * Created as part of Project Foresight
- * First to have new Telepathic Circuits allowing the Time Lord to have a stable reality quotient when altering history. [LINK]
 - * New systems allow for much easier and more accurate microjumps [LINK].
- * The Type 89 (formerly Type 97) was the first to be equipped with a Stattenheim Remote Teleport Control as a standard feature. [LINK]
- * The Navigator program would become the preferred method of controlling the Type 89 [LINK]
- * Like all Capsules since the Type 58 the Chameleon Circuit works automatically, blending with its environment as it materializes. [LINK]
 - * The Type 89 (formerly Type 98) was the first to have a holographic scanner.
 - * The Type 89 (formerly Type 102) was the first with Voice-Print Locks [LINK]
 - * The Type 89 (formerly Type 102) had a Limbo Atrophier as standard [LINK]
- * When combined with the Star of Rassilon, the fields created by two Type 89 Capsules would allow travel into Gallifrey's past.
- * The first Type 89s were issued to Lord Verostephocalen and Lord Dorvios. The first was captured by the Master, and the second was scrapped.
- * Like the Type 89, the Proto-Type 97 had been in secret use by the Celestial Intervention Agency as far back as the War Lord Malfeasance Tribunal. But after over 500 years of testing it was had finally put into production sometime after the Veros incident.

Type 90 War TARDIS

With several predictions of a coming Time War with an unknown enemy the Lord President set the Solar Workshops to trying to creating the first truly *military* TARDIS. One of the reasons the Time Lords never created a proper War TARDIS before was that they didn't want to give destructive capabilities to the incomprehensible intelligence that is a TARDIS sentience. Though it was technically possible (and occasionally tried) most Time Lords found the idea of mounting weapons on a Pre-War TARDIS laughable. Such timeships were deliberately designed to minimize their impact in any time zone. For these reason it took 2 million years before TARDISes were accepted by the Time Lords as viable weapons in a Time War. With the War looming in the imminent future, the Time Lords realized that many temporal powers, such as the Daleks, viewed their exploratory TARDISes as weapons.

While the Time Lords had already begun work on the Form 100 Project the initial results of the Form 101 were not promising [LINK]. With only 18 years left to till the Time War began, work began to create the first proper War TARDIS, the Type 90. The finest Elite Technician in the Kasterborous Quadrant, Nivet of the House Military was instrumental in force-engineering of these new timeships.

Like earlier Models of TARDIS, a War TARDIS has a minimal awareness of humanoid life and are probably powered by black holes. Unlike previous TARDIS designs, War TARDISes have

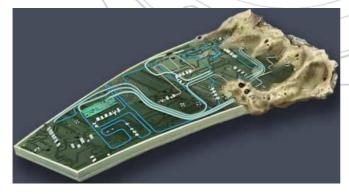
their symbiotically bonded pilot physically installed inside their guidance systems. The pilot would remain neurally linked to the capsules for centuries with each regeneration welding them into the structure. This use of specially breed pilots allowed the TARDIS to carry to large numbers of Regen-Inf troops into battle without having to risk a Lord of Time.

They Type 90 is equipped with the latest in Mark X technology. One of the new innovations was an enhancement of the architectural configuration program. Its interior can transcendentally reconfigure itself instantly to meet with the needs of its crew. This allows the travelers to quickly access any room in the TARDIS without extensive use of service tunnels. Another new innovation is an improved ability to partially regenerate damaged systems and seal hull breaches.

Their default appearance is a massive brass colored sphere. When engadged in military operations on the surface of planets, they often assume the appearance of cathedrals. However, when stealth is required, a War TARDIS is quite effective. The Type 90 can conceal itself by embedding itself into local culture - making it very hard to notice. Using a variation of Voice Integrator technology [LINK] the TARDIS can manipulate the subconscious of the natives of the current time zone so that the Time Lord and his companions will be accepted by everyone they meet as being part of this world. This doesn't prevent the locals from perceiving the crew as a threat or an enemy. But it makes if very unlikely that anyone will believe that the crew is from completely outside their sociological system. This can cause undesired complications if the Time Lord should decide to tell the natives the truth. Should the War TARDIS somehow be breached it can create insubstantial perceptual illusions to defend against internal threats. If a TARDIS is destroyed while in stealth mode then it will release a cultural shock wave that will be felt by everyone on the planet.

These new TARDISes are equipped with Chaotic Limiters, which adjust the crew's affect on History by changing their reality quotient. The Limiter is set for lower settings for scouting missions and higher settings for assaults. Its possible, using the Chaotic Limiter, that a TARDIS could effectively render its crew invisible and possibly even immune to Gravity. It should be noted that the for most of the Time War the Time Lords suspect that the enemy timeships were capable of much higher reality quotient settings then their War TARDISes were. This put the Time Lords at a significant disadvantage during assaults.

The Type 90 is the first TARDIS to have a Tribophysical Waveform Macrokinetic Extrapolator based Force-Field. When connected to the massive dimensional energy of the Heart of the



TARDIS the Extrapolator generates a powerful force-field that can deflect many of the temporal weapons used by the Daleks in the Time War. It can ever be used to prevent the TARDIS from being drawn in by the field created by excessive amounts of huon particles. Not only can it deflect energy it can also enhance the transducer power cells allowing the TARDIS to lock on to a target and drain its energy [LINK]. This

enhancement can also be used to speed up the refueling of TARDIS's Heart when power from the Prime Eye of Harmony is unavailable [**LINK**]. With an Extrapolator based force-field, no known Human (or Post-Human) weapon can destroy a War era TARDIS.

By re-ordering the block-transfer equations that make up their structure the Type 90 is capable of causing severe damage to the continuum. But this model of War TARDIS has no precision weapons of any sort. Instead, the Type 90 is primarily used to blockade the arrival or departure of enemy timeships. Using their mathematical mass, they can prevent all exit or penetration of the Vortex over a large area of space-time. They also possess powerful tractors that can pull a TARDIS out of the Vortex if it tries to dematerialize. They are likely to be equipped with Klypstromic Warheads which, when detonated, irradiate the local area of the Space-Time Vortex - making travel difficult, if not impossible, by blocking any TARDIS's entry into the Vortex for a span of 5 million years.

The War Timeships were organized into Fleets of at least 1,000 ships. Each fleet is subdivided into Centuries of 100 War TARDISes. With less the two decades to design and test a proto-type the century of Type 90s weren't deployed until days before the Time War began. These ships were positioned in time zones near the world of Drornid and participated in the first battle of the Time War.

- * First true War TARDIS
- * Designed by Elite Military Technician Nivet
- * The symbiotically bonded pilot is physically installed inside the guidance systems
- * Automatic Architectural Configuration Program [LINK]
- * Enhanced self-repair mode [LINK]
- * Default appearance is a massive brass colored sphere
- * Can conceal itself by embedding itself into local culture
- * Equipped with a Chaotic Limiter
- * First to have Tribophysical Waveform Macrokinetic Extrapolator based Force-Field.
- * Primarily used to blockade the arrival or departure of enemy timeships.
- * Likely to be equipped with Klypstromic Warheads
- * Organized into Fleets of at least 1,000 ships and subdivided into Centuries of 100.

Type 91 Ship of War



Unlike the Type 90, the Type 91 was equipped with precision temporal weaponry that had been developed and collected by the Slaughter House in the decades leading up to the Time War.

The Type 91 shared most of the systems and technology of the Type 90 [LINK], including a black hole based transpower system, Chaotic Limiters, and the ability to blockade of large areas of space-time. Unlike the Type 90, each Type 91 is owned and operated by a bipedal Time Lord or Time Warrior who is not welded into the artron mainframe. Their Artron Mainframe has also been enhanced with minimum intensity biodata to allow the timeship a basic awareness of three-dimensional lifeforms. The ship is constantly evolving its event boundaries to increase efficiency. Most operators configure the desktop theme [LINK] to reflect the operator Time Lords biorhythms or cellular structure.

All the exo-shells of the Type 91s are deliberately large and eye-catching. Their default shape takes the form of a massive spire of gold, covered in spikes. At the summit is a corkscrew shape that models the Time Lord owener's triple helix DNA. While in orbit over a world this gives them the appearance of golden spaceships, but when materialized on the surface of a

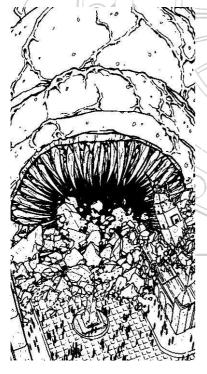
planet the look like towering cathedrals anchored into the ground. When the chameleon circuit in engaged the timeship will inevitably chose some sort of monstrously intimidating bio-mechanical form. War TARDISes can even extend tentacles and attack nearby enemies with a great deal of efficiency and destructive power.

War TARDISes carry a Tuckson-Jacker Energy Weapon that is based on the technology used in certain weather control systems. When set to broad spectrum, the Tuckson-Jacker Energy can tractor a TARDIS out of the Vortex and into real space. When set to pulse-mode, the Tuckson-Jacker Energy bursts are capable of penetrating even a TARDIS's Force Field. A successful hit renders both the TARDIS and the Time Lord operator incapacitated. Any Lesser humanoid species that was aboard would be killed.

An Artron Cannon is also standard on a War TARDIS. At short ranged, the cannon is capable of killing an Eternal. A more general configuration of this weapon includes the ability to release an omni-directional psychic blast of Artron Energy by opening a direct wormhole to the Prime Eye of Harmony on Gallifrey. The resulting burst of Artron Energy will kill any Timeships that are within the blast radius. The blast will also destroy any Chronovores in the area.

A powerful Vortex Lance rounds out the offenses of a Type 91 War TARDIS.

They are equipped with a variety of temporal warheads which are kept in chronic stasis to prevent them from accidently detonating. Once removed from stasis they can be launched from Time Warp Silos. The time warps created by the silos allow the warheads to be delivered to almost anywhere in space in time. The available warheads include the following:



- Earthshock Bombs: Each bomb consist of fissionfusion devices that create a tiny hole in the Space-Time Continuum. This creates massive amounts of radiation and intertemporal shock waves. These weapons were occasionally mounted on Type 40 TARDISes around the time of the Doctor's birth and were capable of reducing large asteroids to rubble.
- Time Torpedoes: They take a little over 30 seconds for them to reach their target. When they detonate, their target is frozen in a microsecond of space-time for several centuries. These weapons are capable of breaching even a TARDIS's defenses.
- Klypstromic Warheads: When detonated, the warhead irradiates the local area of the Space-Time Vortex blocking any TARDIS's entry into the Vortex for a span of 5 million years. This maks space-time travel difficult, if not impossible.
- Doomsday Probes: Releases a 5 second Entropy wave that will destroy all life in an entire sector of space.

The Proto-Type 91 was created about the same time the 101 Form was born, less then two decades before the Time War. Unlike the Type 90, the Type 91 War TARDIS was considered to be a success, and five decades after the start of the War it is now only the only pre-100 TARDIS

still in production. Indeed it was virtually the only Type of TARDIS not to have been recalled and scrapped. For most of the Time War, the Eye of Harmony's Womb (sometimes referred to as a Hyper Loom [LINK]) is the most well defended location in the Universe.

- * Designed by Elite Military Technician Nivet
- * Default appearance is a massive golden spire with spikes
- * Automatic Architectural Configuration Program [LINK]
- * Enhanced self-repair mode [LINK]
- * Equipped with a Chaotic Limiter
- * Equipped with Tribophysical Waveform Macrokinetic Extrapolator based Force-Fields.
- * Equipped with a Tuckson-Jacker Energy Weapon
- * Equipped with a Artron Cannon
- * Equipped with a Vortex Lance
- * Time Warp Silos can launch Earthshock Bombs, Time Torpedoes, Klypstromic

Warheads and Doomsday Probes.

- * Organized into Fleets of at least 1,000 ships and subdivided into Centuries of 100.
- * Only pre-100 Timeship to still be in production after the first 50 years of the Time War.

Type 94 War TARDIS

Deep in the chaos of the Time War the House Military began deploying Type 94 War TARDISes. These ships appear to be a more advanced version of the Type 91 with most of the same weapons and defenses.

- * Automatic Architectural Configuration Program [LINK]
- * Enhanced self-repair mode [LINK]
- * Can conceal itself by embedding itself into local culture. [LINK]
- * Equipped with a Chaotic Limiter [LINK]
- * Equipped with Tribophysical Waveform Macrokinetic Extrapolator based Force-Fields.

[LINK]

- * Equipped with a Tuckson-Jacker Energy Weapon [LINK]
- * Equipped with a Artron Cannon[LINK]
- * Equipped with a Vortex Lance[LINK]
- * Time Warp Silos can launch Earthshock Bombs, Time Torpedoes, Klypstromic

Warheads and Doomsday Probes. [LINK]

* Organized into Fleets of at least 1,000 ships and subdivided into Centuries of 100.

101 Form TARDIS: aka Lolita



Around the time the law prohibiting interbreeding between Gallifreyans and Lesser Species is revoked, the idea of cross breeding of TARDISes became accepted as long as its supported preparations for the coming Time War. There were many reasons for this change in point of view, but most significantly, the Time Lords had come to realize that their TT Capsules were not as invulnerable as they had once thought. Advanced seismic detectors could easily locate a TARDIS, even one that was buried deep underground. The Daleks and other temporal powers had

developed Space/Time Scopes that allow them to pinpoint the space-time location of a known TARDIS and track their disturbance in the Space-Time Continuum or the Vortex. Osirians, such as Sutekh had enough power to singlehandedly hold of entire time-fleet of War TARDISes. It was also known that it took only 3 Daleks to create a chronon loop that would disable a TARDIS's transpower system, effectively trapping it in a temporal prison. Without power the exo-shell's defenses would fail and would be no stronger then the object it was disguised as. The Daleks had also armed their DARDIS TT Capsules with Temporal Disruptors that could severely damage a TARDIS from a distance. Their Time Destructors were capable of rupturing the exoshell of TARDIS. To combat this, a new breed of timeship was commissioned by the more progressive elements of the Time Lords. The Lord President named it the 101-Project.

While the Type 51's Cybernetic Personality Matrix Interface represented an attempt to create a TARDIS that could communicate with its Time Lord as a fully interactive being, its marginal success was achieved only by creating a third mediator entity. The 101-Project had the goal of augmenting the sentient matrix of a TARDIS's Protyon Core to be able to comprehend both the three dimensional and five dimensional worlds. Research began 137 years before the beginning of the Time War. A TARDIS that is fully sentient in humanoid terms would not only be able to be trusted with advanced offensive systems, it would be able to use its 5 dimensional predictive abilities to directly aid the Time Lord within the material universe – a true omni-species.

Deciding to build on the interactive intelligence possessed by Validium, the first attempt to create a 101 Form capsule was the upgrading of one of the 13 hybrid TARDIS created by the Halfling Project [LINK]. The Type 45 Model B TARDIS that belonged to the Master was chosen for this experimental refit. The Master made numerous changes to the Heart of the timeship, and her Protyon Core was programmed with heavy-duty biodata waldoes. The Type 45 saw these modifications as a fulfillment of her destiny as predicted by her mother, the Matrix. She was the

first (and to date only) one of the 13 Halflings to

achieve this destiny.



The 101 project took much longer then expected, which resulted in the commissioning of the Type 90 and Type 91 models. After 118 years the 101 Form was re-born. She survived her birth but the screaming terrified timeship that resulted was completely beyond the Time Lords' control. She attacked them with strands of biodata and tore at space-time in a desperate attempt to free herself from her Cradle. The 101-Form would later be regarded as the first renegade TARDIS.

Officially the 101 Form was, with great effort, destroyed, but in actuality the ship escaped and assumed the form of a female Gallifreyan. She took on the identity of a Time Lady known as Lolita (possibly a play on "101ita"). She formed an alliance with House Tracolix and, about five decades after the start of the Time War, she became the founding Grandmother of

House Lolita. After founding the house Lolita began breeding with lesser speices. She gave birth to at least one baby TARDIS. And shortly after that she was impregnated with another. Lolita would be key agent in working to fulfill the Matrix's plans for the Timeships and the Time Lords. She single handedly destroyed the Eleven Day Empire of Faction Paradox. Lolita planned to

reveal her full capabilities to the Time Lords when the circumstances were such that they would be unable to stop her. At that point she would take control of the Great Houses of the Time Lords and fulfill the Matrix's plans. Fortunately, she was destroyed a little over 50 years after the start of the Time War, in an altercation between the Time Lords, Faction Paradox, and the Osirians.

- * Contains Validium from the time of the Eternal Wars in the cronoplasm of their exoshells. [LINK]
- * One of 13 pre-Time War capsules to be equipped with a Validium Weapon Module. [LINK]
 - * Originally a Type 45 Model B [LINK]
 - * Predicted by the Matrix to evolve in the 100 Form Timeships.
 - * Sister to the Doctor's Type 40 Model B. [LINK]
- \ast Participated in Marnal's Crusade on Date Index 309456 / 4756.7 RE / 1213 GRT / 100447 TL.
 - * Was bonded to the Master the Academy [LINK]
 - * The 101-Project was authorized by the Lord President.
 - * The first and only 101 Form ever grown.
- * After the 101-Project she was capable of thinking like a living growing biological creature.
- * Can have objects keyed into her Dematerialization Matrix, allowing her to dematerialize and rematerialize them at will regardless of the distance between herself and the object. [LINK]
 - * Regarded as the first renegade TARDIS.
 - * Presumed destroyed but actually pretends to be Time Lady Lolita
 - * Destroyed the Eleven Day Empire

102 Form Timeship: aka Type 102, Compassion V, Laura Tobin V



Laura Tobin V was a human companion of created on Anathema in the 20th century. She later became a traveling companion of the Time Lord known as the Doctor. She had a Faction Paradox designed receiver that was neurologically hardwired into any signal she would receive. It was capable of picking up very obscure deep-level frequencies. The Doctor hooked the receiver into his Type 40 TARDIS so that the timeship would screen and filter all the signals she received. Unknown to the TARDIS's crew the

timeship had decided to become the mother of the first 102-Form. The Ship began narrowcasting its programming to Laura in order to rebuild her biodata. At a moment of crisis Laura Tobin's human form was re-sculpted into the first and only 102-Form TARDIS. She was the first fully successful human / timeship hybrid [LINK]. From this point forward she referred to herself only as Compassion.

Like the other 100-Forms she is capable of communicating directly with 3-dimensional beings (such as Gallifreyans or Humans) as well as 5-dimensional beings (such as other models of TARDIS). Her Central Cortex Element is made up of huge canyons of information storage systems filled with memory acid. This memory acid is semi-aware

and self-repairing. Part of her mind is organic and functions as a 4 dimensional anchor into Normal-Space. She has subsystems devoted to interpersonal dynamics. With these she can predict every thought in a lesser species mind with an accuracy of 1.3 millifreuds.

The 102-Form has most, if not all, of the capabilities of a Type 40 TT Capsule. This includes the special enhancements give to the 13 Halfling Project, as well as many of the custom modifications the Doctor had made to her mother (the Doctor's Type 40). Most notably, Compassion not dependent on the presences of an operator with Symbiotic Nuclei in order to enter the Vortex. Many of her capabilities are far superior to not only Type 40s, but even the later War Timeships. She can cross the Universe in a day and cover over 300 billion years in an attosecond. One of the few deficiencies was found in her Environmental Systems. Her interior is

only big enough to carry several thousand people. However she is capable of exerting total physical control over her passengers.



While Compassion usually assumed an external appearance that resembled her original humanoid form she was capable of blending into a time zone by reshaping her exo-shell to match the local inhabitants. In her default appearance she is a human female who is 1.64 meters tall. She has dark red hair and facial freckles.

Like her mother timeship, Compassion is equipped with a Validium weapon module. When the module is activated a brass spike extends from the console and form a set of concentric rings symbolizing a targeting reticule. This lever has only to be pulled down to fire the weapon. Using the weapon module to focus fire, the Validium was capable of discharging devastating red pulses

of energy. The pulses could destroy even a War TARDIS if the target's defenses had been weakened. With sustained bombardment these pulses could reduce a planetoid to rubble. The system draws energy from the transpower system and the enhanced power of Compassion's 102 Form Heart allowed it to trigger nova's in stars.

Indeed the power of her Heart was independent of the Prime Eye of Harmony on Gallifrey and she accumulated most of her energy by swallowing nova and draining their energy, leaving only a neutronium snowballs. It is rumored that she is equipped with several other precision-capable ranged weapons and many of her abilities surpassed that of the future 103-Form timeships. Unlike later forms of TARDIS, Compassion had the power to simultaneously deactivate all the TT Capsules on Gallifrey.

After her re-birth as a Timeship Compassion realized that the Time Lords would want her multidimensional mass for breeding stock, With the aid of the Doctor and a Randomizer [LINK] he installed, she fled the Great Houses of Gallifrey. An attempt to capture her inadvertently led to the Battle of Mutter's Cluster and the destruction of the first Gallifrey of the Time War. She aided the Doctor in rescuing a copy of the Matrix files and the Time Lord Technician Nivet who had designed the Type 90 and 91 War TARDISes.

Almost immediately afterwards the War King of another Gallifrey rescued her from a null-probability field and she agreed to assist in the 103-Form breeding program [LINK]. A decade into the Time War she again worked with the War King to open up a "second front" in the Time

War. Beleiving that the Daleks were a mere distraction Compassion arranges for the eventual destruction of Lolita [LINK].

Compassion's good relations with the Time Lords did not to last. Five decades into the War the House Military had orders to sterilize any world she was found on. Compassion's numerous exploits become legendary among the factions involved in the Time War and many time aware species classified her as a Subversive Influence.

After at least 10 million (and possibly several billion) years of traveling the cosmos Compassion made contact with the Universal Machine. This machine was created by the last of Post-Humanity out of skeins of light, thought, and aether. It was designed to record all of the machines humanity had ever created. After several decades of discussion Compassion and the Universal Machine merge to created the City of the Saved: a compendium of all humankind that will continue to exist after the destruction of the Universe. The City is a micro-universe within which all the humans (including post and pre humans) that have ever existed in any version of history have been recreated as Homo Imago using a combination of Biodata and Warp Matrix Engineering. The Homo Imago are biomemetic structures comprised of the original human DNA, psychological makeup, physical traumas, and awareness of somatic processes. The City's 10 to the 38 power inhabitants live galaxy sized (10¹⁸ kilometers in diameter) city within a state-of-grace where death, wounds, and pain is impossible.

- * Created out of a hybrid of the bio-formed human Laura Tobin V and the narrowcast signals of a Type 40 timeship [LINK].
- * Almost certainly uses Old High Gallifreyan as the programming code for its Artron Mainframe. [LINK]
 - * Probably has a copy of the Record of Rassilon [LINK]
 - * Contains Validium in the cronoplasm of her exo-shell.
 - * Equipped with a Validium Weapon Module.
 - * Was capable of thinking and communicating like a living growing biological creature.
 - * Can predict every thought in a lesser species mind with an accuracy of 1.3 millifreuds.
 - * Can drain novas for energy.
 - * Has complete physical control over any lesser species who enters her.
 - * Pedestrian Infrastructure can only transport several thousand humanoids. [LINK]
 - * Can assume the appearance of the local inhabitants of a time zone in order to blend in.
- * Probably required regular Chameleon Conversions to keep the Camouflage Unit from freezing up [LINK].
 - * Possesses a Symbiotic Bypass [LINK]
 - * Can cross the Universe in a day and cover over 300 billion years in an attosecond.
- * Can have objects keyed into her Dematerialization Matrix, allowing her to dematerialize and rematerialize them at will regardless of the distance between herself and the object. [LINK]
 - * Can deactivate any pre-100 model TARDIS within several thousand miles.
 - * Involved in the first battles of the Time War, both at Dronid and Mutter's Cluster.
 - * Mother of the first generation of 103-Form Timeships [LINK]
 - * Opened a second front in the Time War against the renegade timeship Lolita [LINK].
 - * Considered by many factions of the Time War to be a terrorist and a renegade.
- * Merged with Post-Humanity's Universal Machine to save a copy of every sapient being with any human ancestry.

Familiars

Patrexians on Gallifrey managed to predict the creation of the 102-Form over a year before the Time War began. They had also predicted that she would be the mother of the 103-Forms that would be Gallifrey's most valuable and effective weapon in the War. But Compassion had used a Randomizer to flee, showing no interest in assisting the Time Lords. Attempts to create another 102-Form using other humanoids by the same method resulted only in subjects with simple facial and spinal mutations. It was concluded that the unique nature and experience of the Doctor's Type 40 was a key part of the process.

Given their failure with the 101-Form [LINK] Time Lord technologists reasoned that it would be wise to start with a simpler biological matrix that was merely sentient rather then truly sapient. With the approval of the House of Dvora they began their work in an experimental facility located on an minor abandoned planet in the Rassilon Era.

With in a year the technicians had created 10 Familiars. These complex space-time events were successfully able to interact with three dimensional organic life-forms but only on the level of higher, non-sentient, animals. These experimental subjects were never intended to field tested. The were to provide a cautious stepping stone towards the predicted 103-Form.

Unlike the 101-Form, the experiment was considered to be a complete success. The priming protocols developed in raising the Familiars would be essential for conditioning the 103-Form Timeships.

Unfortunately, before the vivisections could begin, these sub-sapient timeships breached their cradles. Like all Time Travel Capsules created by the Time Lords, the Familiars required a symbiotically bonded operator to enter the Vortex. With this instinct in mind, the ten Familiars each swallowed a technician before vanishing into the continual strata of the Vortex. Official records theorize that the Familiars turned on each other leaving none alive but rumors persist of their continued existence.

- * Authorized by House Dvora
- * Only 10 were grown.
- * Engineered to be only sub-sentient.
- * Required a pilot with a symbiotic nuclei to enter the Vortex
- * All 10 kidnapped Time Lord technicians and escaped.

103 Form Model A Timeship: aka Antipathy

After being rescued from a null-probability field by the War King of Gallifrey, Compassion agreed to assist in the 103-Form breeding program. These new 103-Forms would be produced through an "organic" mating process instead of being grown in Solar Workshops. The male part of project were provided in the form of specially constructed bull-TARDIS Engines that were equipped with XY circuits. Remembering the creation of the 101-Form, the first 103-form was marked for death even before birth. Within one year of mating, Compassion had produced her first son, a 103 Form Model A named Antipathy. The infant was removed from Compassion's womb and placed in a Dimensionally Transcendental Cradle. The capsule was experimental, incomplete and

unformed. While Compassion would eventually learn to love all of her subsequent decendents, Antipathy was always viewed as an object to be pitied.

While the 103-Form would have most the abilities and features of Compassion some of his capabilities were deliberately capped, making him less powerful then his 102-Form mother. Most notably, Antipathy required a symbiotic nuclei to traverse the Vortex. Antipathy had been horrified to be born and horrified to altered by the dwarf-star-alloy tools that blunted and capped his instincts and abilities. Much was learned through the application of these priming protocols to a fully sapient TT Capsule, but the trial and error experimentation turned the already unstable timeship into a creature of monstrous intent. The Time Lords held him imprisoned until after Compassion had completed her part of the 103 Program and left Gallifrey. At that point Antipathy was sent him on a "test mission" that was, in fact, a suicide mission. Unfortunately, as had become the pattern with the timeships of the early War era, he consumed his operators and escaped his supposedly inevitable death.

Antipathy blamed Compassion for abandoning him to the Time Lords and set out to ruin her. Learning that she would become the City of the Saved he allied himself with both Faction Paradox and even the Daleks in an attempt to destroy her. Eventual he travels beyond the end of the Universe and arranges to penetrate the City of the Saved from the future rather then the past. This attack is successful but Antipathy is destroyed by an Annihilation Bomb triggered by Faction Pardox.

- * Born from a union of a bull-TARDIS Engines and the only 102-Form [LINK].
- * Sapient Matrix is dangerously unstable from birth [LINK].
- * Almost certainly uses Old High Gallifreyan as the programming code for its Artron Mainframe. [LINK]
 - * Was capable of thinking and communicating like a living growing biological creature.
 - * Can predict every thought in a lesser species mind with an accuracy of 1.3 millifreuds.
 - * Has complete physical control over any lesser species who enters him.
 - * Pedestrian Infrastructure can only transport several thousand humanoids. [LINK]
 - * Can assume the appearance of the local inhabitants of a time zone in order to blend in.
- * Probably required regular Chameleon Conversions to keep the Camouflage Unit from freezing up [LINK].
 - * Can drain novas for energy.
 - * Can cross the Universe in a day and cover over 300 billion years in an attosecond.
- * Can have objects keyed into her Dematerialization Matrix, allowing her to dematerialize and rematerialize them at will regardless of the distance between herself and the object. [LINK]
 - * Sent on a suicide mission but escaped
 - * Eventually killed by Faction Paradox after the end of the Universe.

103 Form Model B Hominid-Sentient Timeship: aka Type 103

With the completion of the experimental Model A 103-Form [LINK] the Time Lords began breeding a Model B War TARDIS that would used to fight in the Time War. Like Antipathy, these TARDISes were produced through "organic" mating of the 102-Form and specially constructed bull-TARDIS Engines. While the mating process usually took place inside the time spiral of the space-time vortex the near-infinite micro-universes were quickly removed from their mother's planet sized womb. The infants were suspended in pan-dimensional boxes and allowed to grow their first power cells. After providing the Time Lords with sufficient breeding stock, Compassion left Gallifrey to continue her travels. Like most mother Timeships, she never saw her children again. Her affection for these offspring was, however, undisputed.

For the first decade of these timeships' lives even the most basic forms of movement were prevented. Through a viewport the technicians observed them until the timeships learned to communicate. At this point they 103-forms were informed that they could not be released until they had learned self-control. Like Antipathy, many of these children rebelled at this, sometimes for years at a time. But in the end, under the supervision of the Time Lords, priming protocols, developed while studying the Familiars, produced an obedient time travel capsule.

While Antipathy was male all Model B 103-Forms had XX circuits installed in their corridors (and almost all of their bonded Time Lords are male). After this several other pieces of excitonic circuitry was installed, including a Chameleon Circuit. Like Compassion, each 103-Form has a name, such as Marie or Percival. These names were chosen by the newly released capsules at a formal Naming Ceremony. It is at that ceremony that they are finally allowed to take on a Gallifreyan appearance – though it often took the timeships several weeks to perfect the details. v

War-TARDISes have all the interpretive, adaptive and responsive intelligence of normal TARDISes, but with enhanced aggression. They had most of the features of the 102-Form, but some of their capabilities were deliberately altered and blunted with the dwarf-star-alloy tools, to make them less powerful then Compassion.

Like their mother, they are capable of communicating directly with 3-dimensional beings (such as Gallifreyans or Humans) as well as 5-dimensional beings (such as other models of TARDIS). Part of their minds are organic and function as a 4 dimensional anchor into Normal-Space. The Central Cortex Element were made up of huge canyons of information storage systems filled with memory acid. This memory acid is semi-aware and self-repairing. The 103's subsystems devoted to interpersonal dynamics. With these she can predict every thought in a lesser species mind with an accuracy of 1.3 millifreuds.

The 103's could accumulate energy by triggering novas in stars, swallowing them, and draining their energy, leaving only a neutronium snowballs. Like their mother, they can cross the Universe in a day and cover over 300 billion years in an attosecond.

The 103-Form units traditionally blend into a time zone by reshaping her exo-shell to match the appearance of the local inhabitants. Their exo-shells are limited to roughly humanoid sized forms. Due to having a grandmother that was a Type 40 the Chameleon Circuits of the 103's would often jam in a particular shape and require frequent chameleon conversions to repair.

They are all equipped with traditional precision-capable ranged weapons, including the ability to cause local stars to go nova. They were also outfitted with many of the temporal weapons and defenses found on Type 90 and Type 91 War TARDISes. They can tractor a more primitive TARDIS out of the Vortex, forcing it back into Normal Space.

The male/female breeding system ensures that each 103-Form has a mutagenic factor to make them less vulnerable to manipulation at the hands of the Time Lord's enemies. This has the effect of introducing "genetic" quirks into the breed, such that no two timeships were ever completely identical. Some Time Lords found the idea of TARDIS evolution to be disturbing but these 103-Form TARDISes quickly proved themselves to be the most essential and useful weapon the Time Lords had in the War. The House Military was anxious to grow as many as possible. Breeding facilities were set up in many locations including the Fortress world of Many of Simia KK98 and within a few decades became the most common TARDIS.

Each 103-Form required neural-linking with a Time Lord pilot in order to enter the Vortex. While some saw the roles of these "organic drones" as little more then maintenance, in truth the Time Lord and Timeship existed in a true symbiotic relationship – each one was the companion of the other. The 103-Form provides its Time Lord with protection and a physical home, and an operator provides a 103-Form with a social/political foundation and frame work as well as access to all of space and time. The neural-linkage actual grounds and anchors the timeship's personality. A whole new culture and vocabulary was created to deal with Time Lord/TARDIS interaction. For example a 103's choice of name was often considered to be a good or bad omen. The fully sentient and interactive TARDISes created during the Time War are some times called Type 100s (Type 101, 105, etc...) but are more properly referred to a Form 101 or Form 103 etc...

Like other War Timeships, the 103-Forms were organized into Fleets of at least 1,000 ships. Each fleet is subdivided into Centuries of 100 War TARDISes. There are at least 59 time-fleets, all numbered. A Time Fleet can extinguish even a well protected star. Despite (perhapse because of) these accommodations, many 103-Forms would become renegades during the Time War.

- * Conceived within the space-time vortex and raised on bases and colony worlds of the Time Lords.
 - * Born from a union of a bull-TARDIS Engines and other 100-Form timeships [LINK].
- * Choose their own names after more then a decade gestating in a pan-dimensional box. [LINK]
- * Almost certainly uses Old High Gallifreyan as the programming code for its Artron Mainframe. [LINK]
- * Possess all the interpretive, adaptive and responsive intelligence of normal TARDIS, but with enhanced aggression.
 - * Are capable of thinking and communicating like a living growing biological creature.
 - * Can predict every thought in a lesser species mind with an accuracy of 1.3 millifreuds.
 - * Can drain novas for energy.
 - * Has complete physical control over any lesser species who enters them.
 - * Pedestrian Infrastructure can only transport several thousand humanoids. [LINK]

- * Designed to assume the appearance of the local inhabitants of a time zone in order to blend in.
 - * Exo-shells limited to roughly humanoid sized forms.
- * Required regular Chameleon Conversions to keep the Camouflage Unit from freezing up [LINK].
 - * Can cross the Universe in a day and cover over 300 billion years in an attosecond.
 - * Equipped with a Chaotic Limiter [LINK]
- * Can have objects keyed into their Dematerialization Matrix, allowing them to dematerialize and rematerialize them at will regardless of the distance between the ship and the object. [LINK]
 - * Has Tribophysical Waveform Macrokinetic Extrapolator based Force-Field. [LINK]
 - * Equipped with a Tuckson-Jacker Energy Weapon [LINK]
 - * Equipped with a Artron Cannon [LINK]
 - * Equipped with a Vortex Lance
- * Time Warp Silos can launch Earthshock Bombs, Time Torpedoes, Klypstromic Warheads and Doomsday Probes. [LINK]
 - * Organized into Fleets of at least 1,000 ships and subdivided into Centuries of 100.
- * They are the most essential weapon and prolific timeship the Time Lords had in the first century of the Time War.

104 Form TARDIS: aka Type 104

With the numerous mutations caused by the 103-Forms "biological" method of reproduction it was inevitable that a new TARDIS would evolve. The first of this new breed was the 104-Form TARDIS appeared a little over 5 decades into the Time War. The 104-Form was rumored to possess recidivist genes from the original 102-Form that had been re-activated to make the breed more powerful.

- * Introduced after the first 5 decades of the Time War.
- * Conceived within the space-time vortex and raised on bases and colony worlds of the Time Lords.
 - * Included both male and female models.
 - * Rumored to possess powerful recidivist genes from the original 102-Form
 - * Choose their own names after more then a decade gestating in a pan-dimensional box.

[LINK]

- * Possess all the interpretive, adaptive and responsive intelligence of normal TARDIS, but with enhanced aggression.
 - * Are capable of thinking and communicating like a living growing biological creature.
 - * Can predict every thought in a lesser species mind with an accuracy of 1.3 millifreuds.
 - * Can drain novas for energy.
 - * Has complete physical control over any lesser species who enters them.
- * Designed to assume the appearance of the local inhabitants of a time zone in order to blend in.
 - * Can cross the Universe in a day and cover over 300 billion years in an attosecond.
 - * Equipped with a Chaotic Limiter [LINK]
- * Can have objects keyed into their Dematerialization Matrix, allowing them to dematerialize and rematerialize them at will regardless of the distance between the ship and the object. [LINK]
 - * Has Tribophysical Waveform Macrokinetic Extrapolator based Force-Field. [LINK]

- * Equipped with a Tuckson-Jacker Energy Weapon [LINK]
- * Equipped with a Artron Cannon [LINK]
- * Equipped with a Vortex Lance
- * Time Warp Silos can launch Earthshock Bombs, Time Torpedoes, Klypstromic Warheads and Doomsday Probes. [LINK]
 - * Organized into Fleets of at least 1,000 ships and subdivided into Centuries of 100.

105 Time Dreadnought: aka Type 105

Five centuries years after the beginning of hostilities, the Time Lords were starting to lose the Time War. By this point the enemy could detect any grouping of 12 or more timeships and was capable of mounting an attack on that time zone. While the 103 and 104 Forms coutinued to be produced it the House Military took its mandate to a new level with the 105-Form Time Dreadnought. Like the 104-Form, the Type 105 was rumored to possess recidivist genes from the original 102-Form that had been re-activated to make the breed more powerful. Also, like the 104, the 105s were designed to be both male and female. Certainly they were significantly more advanced then the 103. Time Dreadnoughts were designed to aggressively fight the Daleks. Each Time Dreadnought was equipped with hundreds of copies of Gallifrey's Prime Eye of Harmony, allowing them to carry and discharge hundreds of times as much power.

In order to combat the enemy's ability to detect multiple materializations, the 105 was capable of extending itself simultaneously through every point in the space and time noosphere of the Time Lords. This allowed one single capsule to deliver the offensive power to hundreds TARDISes to any point at the spiral politic. The downside of this taetic is that the Dreadnought could be attacked by any temporal weapon located anywhere in space and time. This drawback lead to tactics of overwhelming violence to ensure that no counter strike was possible. To this end the Time Dreadnought was equipped with a massive Time Destructor. Powered by the mineral Taranium and the hundreds of Eyes and these Eyes, this weapon could erase an entire star system from history and easily rupture the exo-shell of a TARDIS.

- * The first Time Dreadnought
- * Designed to directly combat the Daleks Time Saucers and DARDIS capsules.
- * Conceived within the space-time vortex and raised on bases and colony worlds of the Time Lords.
 - * Included both male and female models
 - * Rumored to possess powerful recidivist genes from the original 102-Form
- * Possess all the interpretive, adaptive and responsive intelligence of normal TARDIS, but with enhanced aggression
 - * Are capable of thinking and communicating like a living growing biological creature
 - * Powered by hundreds of block-transfer copies of the Eye of Harmony.
 - * Has complete physical control over any lesser species who enters them.
- * Capable of accessing all space-time points within the Time Lords' Noosphere of understanding [LINK]
 - * Equipped with a Chaotic Limiter [LINK]
- * Can have objects keyed into their Dematerialization Matrix, allowing them to dematerialize and rematerialize them at will regardless of the distance between the ship and the object. [LINK]
 - * Has Tribophysical Waveform Macrokinetic Extrapolator based Force-Field. [LINK]

- * Primary weapons consisted of a massive Time Destructor.
- * Equipped with a Tuckson-Jacker Energy Weapon [LINK]
- * Equipped with a Artron Cannon [LINK]
- * Equipped with a Vortex Lance
- * Time Warp Silos can launch Earthshock Bombs, Time Torpedoes, Klypstromic Warheads and Doomsday Probes. [LINK]
 - * Involved in several crossbreeding experiments with earlier models of TARDIS.

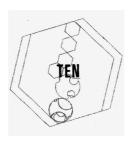
End of the Line



Over the centuries of the Time War the High Council of the Time Lords authorized several cross-breeding experiments between 103 and 105 timeships in the hope of discovering new, favorable, mutations. Despite this research, the Form 105 is the most advanced TARDIS known to exist before the Final Battle. The fall of the last Gallifrey signaled the end of the Time Lords and their research into TARDIS design. Many of the Laws of Time were suspended and the walls of reality closed. It becomes virtually

impossible for any timeship to visit alternate realities, even if the proper phase-shift was known. The Doctor's Type 40 Model B (sometimes known as Sexy) was the only TARDIS known to escape destruction. With no Prime Eye of Harmony to replenish its Heart, that timeship, was required to scavenge energy from space-time rifts and other temporal phenomenon.

It is known that the former Time Agent, Jack Harkness has a small amount of TARDIS coral and he has been using it to slowly grow his own TARDIS. The Doctor also left another sample of his TARDIS coral in an alternate universe with a half-human version of himself. It remains to be seen whether either of these will be able to grow into a fully functional Time And Relative Dimension in Space.



Chapter 10: TARDIS Refits, and Upgrades



"I can see you've been doing the TARDIS up a bit. I don't like it."
-The Doctor

TARDISes are hugely adaptable things. This section details a number of the refits and extra devices that are available for a TARDIS.

Color Key

The following color code is used:

- Black: For information from the TV Series, including Dimensions in Time, and 1996 TV Movie
- Blue: For information from the Novels and Audios including Target, Virgin, BCC, and Big Finish.
- Green: For information from 'licensed' reference sources such as the Technical Manual, *Doctor Who Magazine*, and the Role Playing Games.
- Red: For information from unofficial sources -The Faction Paradox series, behind the scenes interviews, author's speculation, and popular fan belief.

Refitting a TARDIS



Originally there was no easy method of upgrading a TARDIS. Indeed the Type 30 design remained unchanged for millions of years. However in the most recent Gallifreyan generation, Time Lord engineers finally became a more innovative in TARDIS design. TARDISes. A much wider variety of were designed, with new model being released approximately every 2 centuries. Because each model of TARDIS would become obsolete in a less then a millennium, a method was developed to refit existing capsules, making it possible to upgrade the master control console and associated systems to match newer designs. For example the Type 40 TARDIS was originally equipped with a Mark I console. But, once the refit to Mark III specifications is complete it is possible to install Mark III hardware in a Type 40.

The Time Lords had developed their refit protocol to a considerable level. Indeed rather purchase newer models of TARDIS many Time Lords preferred older, more experienced, models that had a recent refit. By the time the Doctor was about 200 the Type 45 had been put into production, but the refitted Type 35s received much greater respect from the traditionalists. They refit process even worked on TARDIS models created before the current renaissance of timeship engineering, and Mark II and III refits were being tried out on Type 30s. At least one Type 18 had be successfully refitted to have Mark I capabilities.

However the Refits didn't upgrade all systems, for example, many of the updated capsules still had Chameleon Circuits that were more limited then those found on a Type 40. Things finally came to a head sometime before the assassination of Lord President Eldhind's assassination, when all Type 40 and earlier TT Capsules were de-registered and made non-operational.

While the availability of upgrades has varied over the last millennium its recommended that, at minimum, a TARDIS receive a bicentennial refit. Refit instructions are sent to capsules in the field using a signal from Gallifrey. Update packages would usually carry the instructions "Install Immediately."

Once the proper information signal has been received by the TARDIS the operator only needs to activate the upgrade. In most cases the refit can be accomplished automatically by the TARDIS. During this time the TARDIS will place a sign on the door to secondary control room that says "Closed for refurbishment." Once the setting is changed it appears to take several months for the TARDIS to upgrade a control room. During this time the Primary Control Room can still be used. As one might expect, such refits usually involve significant changes to the Master Control Console. A side effect of this system is that, given time, a TARDIS can rebuild/grow new control rooms to replace one that has been destroyed.

Sometimes various components for a refit, such as the Mark III Emergency Transceiver, will arrive separately and need to be manually installed into the reconfigured console. In most cases the technology is backward compatible so that technology from earlier Marks

can be used on consoles running later Marks. They are not, however, forward compatible. Attempts to use hardware from later Marks on earlier model of console will often fail to work at all. At best the component will burn out after only a few uses. This is because the increased power demands of the more advanced circuitry. Depending on the component in question a sudden burn out could even destroy the more primitive TARDIS.

It should also be noted that an older TARDIS can only be upgraded so far before implementing such modifications becomes dangerous to the TARDIS and sometimes even the operator himself. Indeed some operators using modern refits have chosen to restore a Mark III configuration.

NOTE: The layout of controls on each of the six panels can be assumed to follow the default layout listed in Control Rooms [LINK] except where noted below. For information and pictures of the various Desktop Themes available for use in the Primary Control Room see Desktop Themes [LINK].

Mark Numbers

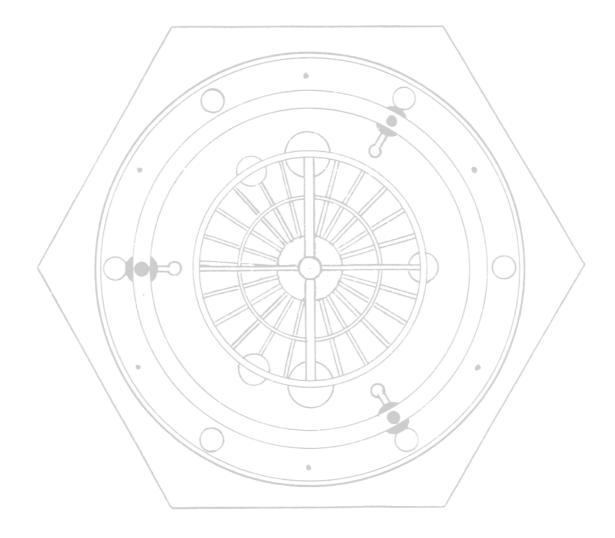


To keep track of these refits the Mark system was created. While the Type of a TARDIS is always fixed, the Mark number is much more variable. It denotes the current sophistication of the Master Control Console (and, by extension, many of the other peripheral systems). Thus a TARDIS could be a Type 35 Mark I or a Type 35 Mark III. Both capsules were originally Type 35s but a majority of their control console's systems have been upgraded. A

Time Lord would find that all Mark III TARDISes (regardless of their Type) have many of the same systems and extras.

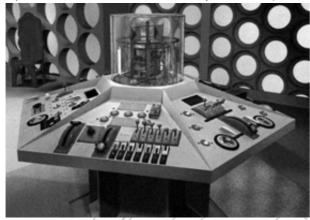
So, the Type designates the specific model of TARDIS that was produced by the Neural Construction Docks. The Mark Number designates the current capabilities and level of sophistication of the TARDIS's guidance systems. Time Travel Capsules are sometimes described using a three number expression. For example a Type 7-0-6 refers to a Type 70 TT Capsule with a Mark VI capabilities.

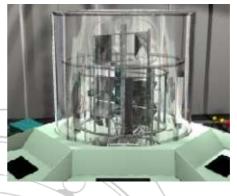
TYPE	MARK	DOCTOR AGE	GAP BETWEEN RELEASE
Type 31-41	Mk I	~-8982	N/A
Type 42-47	Mk II	~-8485	497
Type 48-53	Mk III	~200	8685
Type 54-59	Mk IV	380	180
Type 60-65	Mk V	~560?	180
Type 66-71	Mk VI	~756	180
Type 72-77	Mk VII	~787	31
Type 78-83	Mk VIII	~818?	31
Type 84-88	Mk IX	~840	31



Mark I Console Refit

(Doctor's TARDIS: Seasons 1-7, Season 14)





The Mark I refit was the first template that could be easily installed on older models of

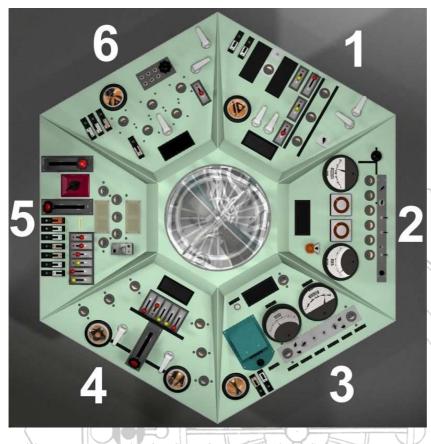
TARDIS. The Type 31 was the first TARDIS to carry the Mark I refit, but it was retro-actively implemented on several older types of TARDIS. The Mark I refit effectively upgraded older capsules to the point where they had the capabilities and features of a stock Type 40.



The Mark I did contain on feature unique to this refit. The Automatic Defense Network. This is an optional extra built into Mark I TARDISes. When active it connects the Banshee Circuits to the Time Scanner and attempts to predicted when the situation outside a TARDIS is dangerous. When such an environment is detected the Network will use the various TARDIS systems, (often the scanner) to alert the

crew and persuade them to go elsewhere. Like all later refits it has a Primary Control Room with a Desk Top Theme that could be changed.

By current standards, the Mark I console has several deficiencies and limitations. The has Stabilizers are exceedingly primitive. Force Barriers are not standard equipment for Mark I TT Capsules. Similarly, the Time Path Detector is not available in Mark I refits. Many operators constructed and install their own force field generators and Time Path Indicators.



Panel 1: Communications & Exterior Monitor

Panel 2: Mechanical & Master Control

Panel 3: Fabrication & Information Systems

Panel 4: Diagnostic & Internal Ship Systems

Panel 5: Navigation

Panel 6: Helm & Dematerialization Systems

* Required a Rassilon Imprimature [LINK]

* Equipped

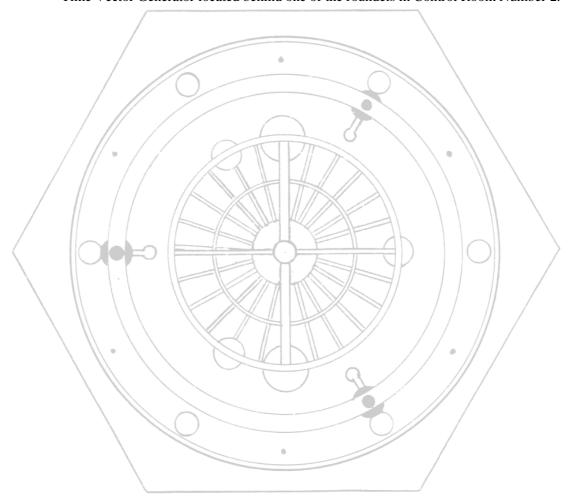
with a Passenger Adoption Scanning Terminal (PAST) [LINK]

- * Used Old High Gallifreyan for their programming code.
- * Components constructed with exitonic circuitry.
- * Equipped with Telepathic Circuits [LINK]
- * Equipped with an Architectural Configuration Program [LINK]
- * Equipped with long term Life support [LINK]
- * Equipped with Governor Circuits [LINK]
- * One of the first models equipped with Molecular Stabilizers for self-repair [LINK].
- * Capable of being controlled by the "Worshipful and ancient Law of Gallifrey"
- * Equipped with a Data-Core and Data-Banks. [LINK]
- * Equipped with a Voice Integrator [LINK]
- * First to have a Remote Control option. [LINK].
- * Optional Automatic Defense Network
- * Equipped with a Hostile Action Displacement System (HADS) [LINK]
- * Equipped with Isomorphic Security System [LINK]
- * Equipped with Temporal Grace Circuits [LINK]
- * Equipped with a Chameleon Circuit [LINK]
- * Required chameleon disguises to be manually created with machine code.
- \ast Required regular Chameleon Conversions to keep the Camouflage Unit from freezing [LINK].
 - * Could time lock areas with a reality quotient of up to 3. [LINK]
 - * Very primitive Stabilizers [LINK]
 - * No Force Barrier [LINK]
 - * No Time Path Indicators [LINK]

- * No Extreme Emergency Lever [LINK]
- * No Fabrication Dispenser [LINK]
- * No computer readout screen to display data. [LINK]

Console Layout Notes

- * Equipped with more then one Control Room [LINK]
- * Equipped with a hexagonal free-standing Master Control Console. [LINK]
- * Panels now numbered counter clockwise.
- * Dematerialization Switch found on Diagnostic panel
- * Scanner Switch found on Helm Panel.
- * Time Vector Generator located behind one of the roundels in Control Room Number 2.



Mark II Console Refit

(The Master's TARDIS: Terror of the Autons - The Sea Devils) (The Doctor's TARDIS: Seasons 8-11)

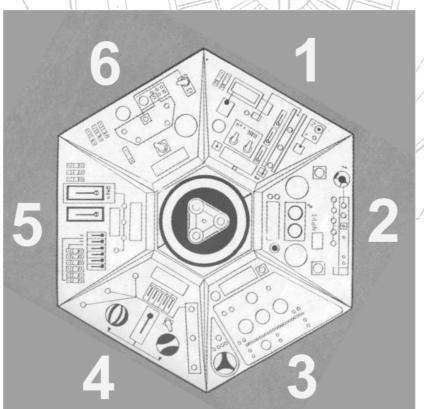


The Mark II refit could first be found on Capsules in the mid to upper forties, such as the Type 45. This refit added a number of emergency systems. This was the first console



refit to make extensive use of old fashion graphic labels for the controls. There were

also lines printed on the panels that showed how various systems interfaced. The Mark I refit contained several upgrades, including a Mark II Dematerialization Circuit, which could not be used on console that were still using the Mark I configuration. Mark II TARDIS also includes an Internal Monitor. This device detects the crystallization created by sapient biodata and thus allows someone in a control room to determine the number of sapient life forms inside a TARDIS. The exo-shell's Materialization Beacon could be set illuminate when there is one or more sapient being inside. Capsules with the Mark II refit were significantly more energy efficient then the Mark I.



Panel 1:

Communications & Exterior Monitor

Panel 2: Mechanical & Master Control

Panel 3: Fabrication & Information Systems

Panel 4: Diagnostic & Internal Ship Systems

Panel 5: Navigation

Panel 6: Helm & Dematerialization Systems

- * Used a Mark II Dematerialization Circuit. [LINK]
- * Equipped with a manual Chameleon Circuit (if one was not already installed) [LINK]
- * First with a Force Field Generator [LINK]
- * First TARDIS to carry a Recall Circuit [LINK]
- * First to have the Automatic Emergency Landing option [LINK].
- * First to have the Emergency Stop option [LINK].
- * First to have the Emergency Displacement System (EDS) [LINK].
- * First to have the Extreme Emergency Lever [LINK].
- * First to have the Emergency Emergency Systems [LINK].
- * First to have an Internal Monitor [LINK]
- * No Fabrication Dispenser [LINK]
- * No computer readout screen to display data. [LINK]

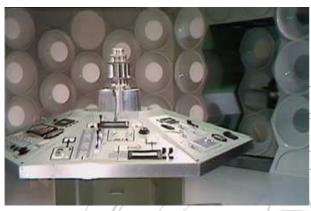
- * Panels now numbered counter clockwise.
- * Extensive used of colored graphics and labels on controls.
- * Scanner Switch found on Helm Panel.
- * Master Dematerialization Switches now located on Communications Panel.



Mark III Console Refit

(The Master's TARDIS: The Time Monster)

(The Doctor's TARDIS: The Series 1-6)



The Mark III refit was considered to be state of the art when the Doctor was around 200 years old.



A new

experimental Time Column was installed which had a significantly different design from previous or later designs. Like the

Mark II the console was extensively labeled. An example of feature unique to this refit is that some emergency situations will trigger the dropping of life-support masks in the control room for each crew member.



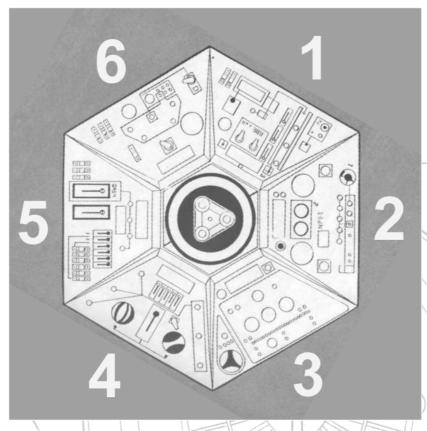
The Mark III Transceiver was a component of this upgrade. It plugs into the control console, and when switched on, immediately transports a TARDIS to the location of the spatially nearest distress signal. It can also transmit distress calls by a variety of means. With a simple modification this device allows a TARDIS to travel to the source of any other type of transmission signal that the

Transceiver has locked on to.



Many older and obsolete features were withdrawn from this refit, causing some Time Lords to complain that the earlier models were more fully equipped. Like all later refits it has a Primary Control Room with a Desk Top Theme that could be changed. However the Mark III was the last refit where the Primary Control Room possessed all the capabilities of the Secondary Control Room. For Mark IV and later TARDIS refits the simplified controls of the Primary Control Room

limited access and control to several secondary systems. For these reasons the Mark III remained popular, and even during and after the Time War some operators could be found using a Mark III configuration.



Panel 1:

Communications & Exterior Monitor

Panel 2: Mechanical & Master Control

Panel 3: Fabrication & Information Systems

Panel 4: Diagnostic & Internal Ship Systems

Panel 5: Navigation

Panel 6: Helm & Dematerialization Systems

* Extensive used of color coded graphics and labels on controls.

- * Equipped with a Force Field Generator [LINK]
- * First to be equipped with a Fabrication Dispenser with a Sump Flush (Link to Fabrication Dispenser)

- * Master Dematerialization Switches now located on Communications Panel.
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Communications Panel has an Analogue Crosstime Telephone (Link to Super phone)
- * Door Control now found on Mechanical Panel (Link to Real World Interface)
- * Dimension Scale Control and Dimension Scale Stabilizer are now found on Diagnostic Panel.
- * Time Vector Generator located behind one of the roundels in Control Room Number 2.

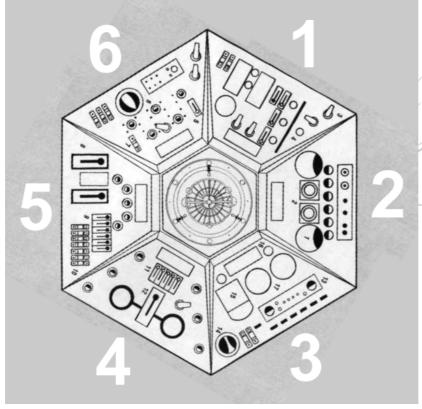
Mark IV Console Refit

(The Monk's TARDIS)



The Mark IV Refit was released in the five decades after the Doctor left Gallifrey. One of the big breakthroughs of the Mark IV was the installation of the Automatic Drift Control. It allows a TARDIS to automatically stabilize its position in Hover Mode, and thus reduce its chance of crashing. The Chameleon circuit of a Mark IV can be set to automatically blend into its surroundings. This new disguise will be implemented before materialization. It was also the first time the Safety Precaution Switch was included. For Mark IV and later

TARDIS refits the simplified controls of the Primary Control Room limited access and control options to several secondary systems. This loss in extra functionality resulted in many experienced operators preferring Control Room Number 2 to the Primary one and even viewing the Primary Control as being secondary or auxiliary option.



Panel 1: Communications & Exterior Monitor

Panel 2: Mechanical & Master Control

Panel 3: Fabrication & Information Systems

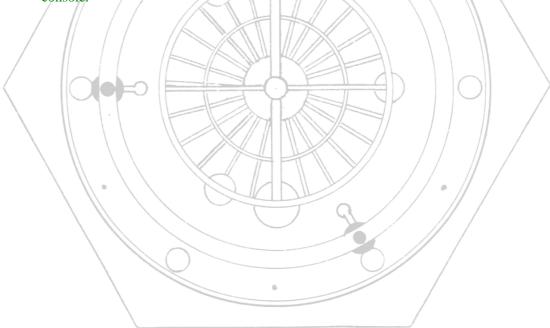
Panel 4: Diagnostic & Internal Ship Systems

Panel 5: Navigation

Panel 6: Helm & Dematerialization Systems

- * First to be equipped with a Fabrication Dispenser [LINK]
- * First with Safety Precaution Switch [LINK]
- * First to be equipped with Automatic Drift Control [LINK]
- * First to have a automatic Chameleon Circuit [LINK]
- * First TARDIS to have Atrium Circuits [LINK]

- * First in a series of refits which provided more limited options for the Primary Control Room, in comparison to Console Room Number 2.
- * Panels numbered clockwise.
- * Fabrication Panel equipped with a Fabrication Dispenser with a Sump Flush
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Communications Panel has an Analogue Crosstime Telephone
- * Door Control now found on Mechanical Panel
- * In Mark IV console the Time Vector Generator can be found on the underside of the console.

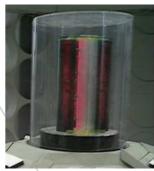


Mark V Console Refit

(The Doctor's TARDIS: Seasons 12-13)

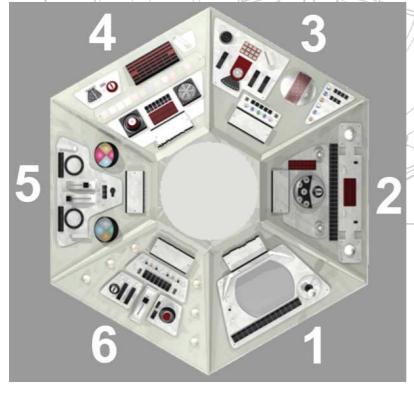


The Mark V
Refit was
significant in
that was the
first time the
layout of the
individual
controls was
significantly
changed. The



panels still broke down into the usual 6 stations but only the internal ship systems panel retained its basic configuration. For the first time, no matter which desk top theme was used,

the Information Systems Panel had a computer readout screen to display data without resorting to the scanner screen. In addition to a change in layout the panels were now numbered counterclockwise. Like the Mark I console, this new layout of each of the 6 stations would remain approximately the same for the next several refits. This new layout caused some confusion with operators who had been trained on veteran and vintage vehicles.



Panel 1: Fabrication & Information Systems

Panel 2: Navigation

Panel 3: Mechanical & Master Control

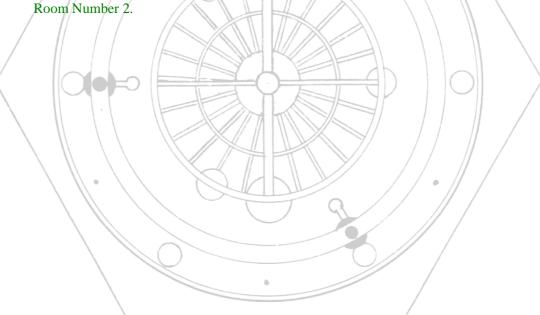
Panel 4: Communications & Exterior Monitor

Panel 5: Helm & Dematerialization Systems

Panel 6: Diagnostic & Internal Ship Systems

(Pictures from www.themindrobber.co.uk)

- * Completely new configuration for each panel when compared to earlier versions.
- * Panels now numbered counter clockwise.
- * Fabrication Panel equipped with a Fabrication Dispenser with a Sump Flush (Link to Fabrication Dispenser)
- * Fabrication Panel now equipped with a computer readout screen. [LINK]
- * Auxiliary readouts for communications, sensors, and repair diagnostics now found on Fabrication Panel.
- * Read-Out Displays for Stabilizing Planes moved to Navigation Panel. [LINK]
- * Telepathic Circuits moved to Helm Panel. [LINK]
- * Auxiliary Power Control moved to Helm Panel. [LINK]
- * Main Power Bus Levers moved to Helm Panel. [LINK]
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Door Switch moved to Diagnostic Panel (Link to Real World Interface).
- * Scanner Control moved to Diagnostic Panel. [LINK]
- * Chameleon Circuit Controls moved to Diagnostic Panel [LINK]
- * Scanner Switch moved to Mechanical Panel [LINK]
 * Read-Out Displays for Radiation moved to Communications Panel. [LINK]
- * Communications Panel has an Analogue Crosstime Telephone (Link to Super phone)
- * The Time Vector Generator can be found on the underside of the console. [LINK]
- * Had more limited options for the Primary Control Room, in comparison to Console



Mark VI Console Refit

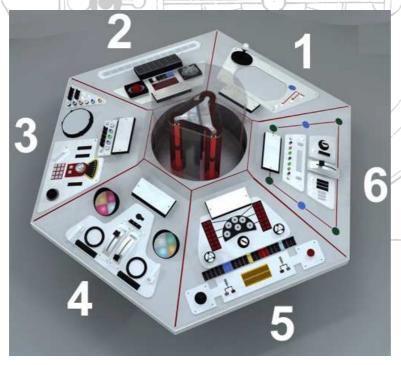
(The Doctor's TARDIS: Seasons 15-18)





The Mark VI TARDIS Refit (first found on the Type 70) was considered to be perfectly modern at the time of the Sontaran's invasion of Gallifrey. Its control layout followed the Mark V very closely. A Jibbert Cathocode Troisieme Timepiece

was added to the console, and the Telepathic Circuits were enhanced. This allowed internal voice activated lifts and doors. The Mark VI had a Chameleon Circuit that was much faster and easier to use.



www.themindrobber.co.uk)

Panel 1: Fabrication & Information Systems

Panel 2: Communications & Exterior Monitor

Panel 3: Mechanical & Master Control

Panel 4: Helm & Dematerialization Systems

Panel 5: Navigation

Panel 6: Diagnostic & Internal Ship Systems

(Pictures from

- * Has enhanced Telepathic Circuits [LINK]
- * First to have voice activated lifts and doors.
- * First to be equipped with a Jibbert Cathocode Troisieme Timepiece [LINK]

- * Panels numbered counter clockwise.
- * Fabrication Panel equipped with a Fabrication Dispenser with a Sump Flush (Link to Fabrication Dispenser)
- * Fabrication Panel equipped with a computer readout screen. [LINK]
- * Auxiliary readouts for communications, sensors, and repair diagnostics now found on Fabrication Panel.
- * Read-Out Displays for Stabilizing Planes moved to Navigation Panel. [LINK]
- * Telepathic Circuits moved to Helm Panel. [LINK]
- * Auxiliary Power Control moved to Helm Panel. [LINK]
- * Main Power Bus Levers moved to Helm Panel. [LINK]
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Door Switch moved to Diagnostic Panel (Link to Real World Interface).
- * Scanner Control moved to Diagnostic Panel. [LINK]
- * Chameleon Circuit Controls moved to Diagnostic Panel [LINK]
- * Scanner Switch moved to Mechanical Panel [LINK]
- * Read-Out Displays for Radiation moved to Communications Panel. [LINK]
- * Communications Panel has an Analogue Crosstime Telephone (Link to Super phone)
- * The Time Vector Generator can be found on the underside of the console. [LINK]
- * Had more limited options for the Primary Control Room, in comparison to Console Room Number 2.

Mark VII Console Refit

(The Doctor's TARDIS: Seasons 18-19)





The Mark VII TARDIS Refit featured only the most cosmetic of changes to the controls at each station. This refit featured improved TARDIS Relational Information Systems with significantly expanded

Data Banks. It also equipped the Capsule with the Defense Indefinite Timeloop Option (DITO). This refit had a more advanced Pause Control that allowed the Emergency Dematerialization Switch to input an alternate destination after starting on a pre-programmed journey.



* First with DITO option. [LINK].

Panel 1: Fabrication & Information Systems

Panel 2: Helm & Dematerialization Systems

Panel 3: Mechanical & Master Control

Panel 4: Navigation

Panel 5: Diagnostic & Internal Ship Systems

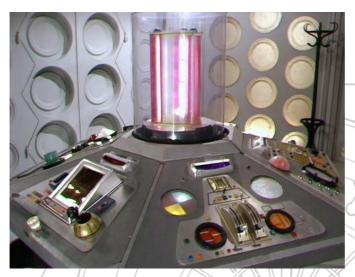
Panel 6: Communications & Exterior Monitor

- * First with an enhanced Emergency Dematerialization Switch that allows course changes while in the Vortex.
 - * Significantly expanded Databanks

- * Panels numbered counter clockwise.
- * Fabrication Panel equipped with a Fabrication Dispenser with a Sump Flush (Link to Fabrication Dispenser)
- * Fabrication Panel equipped with a computer readout screen. [LINK]
- * Auxiliary readouts for communications, sensors, and repair diagnostics now found on Fabrication Panel.
- * Read-Out Displays for Stabilizing Planes moved to Navigation Panel. [LINK]
- * Telepathic Circuits moved to Helm Panel. [LINK]
- * Auxiliary Power Control moved to Helm Panel. [LINK]
- * Main Power Bus Levers moved to Helm Panel. [LINK]
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Door Switch moved to Diagnostic Panel (Link to Real World Interface).
- * Scanner Control moved to Diagnostic Panel. [LINK]
- * Emergency Dematerialization Switch moved to Diagnostic Panel. [LINK]
- * Chameleon Circuit Controls moved to Diagnostic Panel [LINK]
- * Scanner Switch moved to Mechanical Panel [LINK]
- * Read-Out Displays for Radiation moved to Communications Panel. [LINK]
- * Communications Panel has an Analogue Crosstime Telephone (Link to Super phone)
- * The Time Vector Generator can be found on the underside of the console. [LINK]
- * Had more limited options for the Primary Control Room, in comparison to Console Room Number 2.

Mark VIII Console Refit

(The Doctor's TARDIS: Season 20)





Like the Mark VII, the Mark VIII TARDIS Refit featured only cosmetic changes to the controls at each station. The only significant edition was the pentagonal Recall Indicator on the Exterior Monitor Panel, which would illuminate when the TARDIS was under remote control.



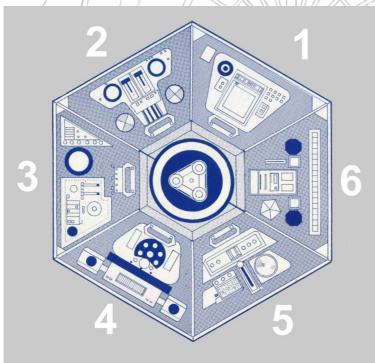
Panel 2: Helm & Dematerialization Systems

Panel 3: Mechanical & Master Control

Panel 4: Navigation

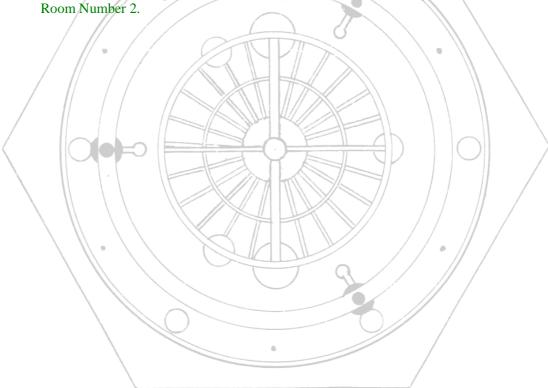
Panel 5: Diagnostic & Internal Ship Systems

Panel 6: Communications & Exterior Monitor



- * Panels numbered counter clockwise.
- * Fabrication Panel equipped with a Fabrication Dispenser with a Sump Flush (Link to Fabrication Dispenser)
- * Fabrication Panel equipped with a computer readout screen. [LINK]

- * Auxiliary readouts for communications, sensors, and repair diagnostics now found on Fabrication Panel.
- * Read-Out Displays for Stabilizing Planes moved to Navigation Panel. [LINK]
- * Telepathic Circuits moved to Helm Panel. [LINK]
- * Auxiliary Power Control moved to Helm Panel. [LINK]
- * Main Power Bus Levers moved to Helm Panel. [LINK]
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Door Switch moved to Diagnostic Panel (Link to Real World Interface).
- * Scanner Control moved to Diagnostic Panel. [LINK]
- * Chameleon Circuit Controls moved to Diagnostic Panel [LINK]
- * Scanner Switch moved to Mechanical Panel [LINK]
- * Gallifrey Recall Indicator light on Communications Panel [LINK]
- * Read-Out Displays for Radiation moved to Communications Panel. [LINK]
- * Communications Panel has an Analogue Crosstime Telephone (Link to Super phone)
- * The Time Vector Generator can be found on the underside of the console. [LINK]
- * Had more limited options for the Primary Control Room, in comparison to Console



Mark IX Console Refit

(The Doctor's TARDIS: Season 21-26)

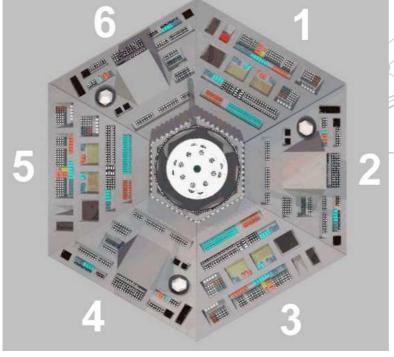
(The Master's TARDIS Season "Planet of Fire" – "Trial of a Time Lord")





The Mark IX Refit was considered to be state of the art around the time that future Lady President Romanadvoratrelundar was ordered back to Gallifrey. In these newer refits (such as the Type 97) the Time Vector

Generator installed in the central Time Column, giving it a very different appearance from the column found on a Type 40. This refit marked a radical departure from all previous control consoles, relying almost exclusively on various keyboards. Again, a major change in panel configuration was accompanied by a reversal of the number direction; this time they were counted in a clockwise direction. This was the last TARDIS refit to be produced before the idea of integrating the technology of other temporal powers become fashionable. No further refits for pre-Time War TT Capsules were issued.



Panel 1: Navigation

Panel 2: Helm & Dematerialization Systems

Panel 3: Diagnostic & Internal Ship Systems

Panel 4: Fabrication & Information Systems

Panel 5: Communications & Exterior Monitor

Panel 6: Mechanical & Master Control

- * Panels now numbered clockwise.
- * Helm, Fabrication, and Mechanical Panels equipped with computer readout screens.
- * Fabrication Panel equipped with a Fabrication Dispenser with a Sump Flush (Link to Fabrication Dispenser)
- * Dematerialization Switch now found on Navigation Panel
- * Door Switch now found on Navigation Panel
- * External Interface Port found on Navigational Panel.
- * Scanner Controls now found on Helm Panel
- * Main Door Controls now found on Helm Panel
- * Advanced Navigational Controls (such as EDS buttons, Tracking Monitor Control Board, Psycho-Telmeter, Emergency Stop, Autonomous Control, etc...) are now all located on the Helm Panel.
- * Defensive Controls (such as the Camouflage Unit, Defense Force Fields, HADS, DITO, etc...) are moved to the Helm Panel.
- * Internal Communications is now found on the Diagnostic Panel.
- * Room controls such as (Internal Lighting Control, Desktop Theme, Attitude Control, Early Warning System, etc...) are now found on the Diagnostic Panel.
- * Scanner Switch moved to Diagnostic Panel,
- * Fast Return Switch moved to Diagnostic Panel.
- * Diagnostic Panel contains and Organic Diagnostic, Bunsen Burner, Microphone, and Water Dispenser.
- * Telepathic Circuits moved to Fabrication Panel. [LINK]
- * Radiation Detector now on Communications Panel.
- * Read-Out Displays for internal, Radiation, Auto-Systems, Atmosphere Monitoring Subsystem, Auto-Gravity System are now on Communications Panel.
- * Communications Panel has an Analogue Crosstime Telephone (Link to Super phone)
- * Power Response Dials on Mechanical Panel.
- * Auxiliary Power Control now on Mechanical Panel [LINK]
- * Gallifrey Recall Indicator light on Mechanical Panel [LINK]
- * Power Outlet Socket now on Mechanical Panel.
- * The Time Vector Generator can be found on the underside of the console. [LINK]
- * This Refit has more limited options for the Primary Control Room, in comparison to Console Room Number 2.

TARDIS Special Extras



The TT Capsules of the Time Lords can be substantially modified or reconfigured by individual operators. They can be made to interface with a huge variety of other devices. Customization can range from selection of a favorite Desktop Theme for the Primary Control Room to installation of alien technology such as ketchup and mustard dispensers. Some of these customizations can even lead to a change in the timeship's designation. When a TARDIS acquires extra internal dimensions its acronym changes. The word 'dimension' is pluralized, making it a Time and Relative Dimensions in Space.

Popular modifications include construction and addition of components not available for the current refit. Many owners of Mark I capsules built their own Force Barrier Generators or Safety

Precaution Selector. Others had built their own Cybernetic Personality Matrix Interface like that found on a Type 51A TARDIS [LINK].

It should be noted that an older TARDIS can only be upgraded so far before implementing such modifications becomes dangerous to the TARDIS and sometimes even the operator himself. Operators are also warned that some TARDISes gets quite upset when their parts are removed and used in other devices. They tend to hold a grudge about this and operate unpredictably for quite some time after being used as a technology donor.

Star of Rassilon

One of the earliest customizations of a TARDIS was done by Rassilon himself. The Star of Rassilon was an exceptionally large green crystal that was installed on Rassilons Proto-Type 0 Model B TT Capsule. It served as the focus for the dynomorphic projector, vastly boosting the reality quotient stabilizing abilities of the TARDIS. It was this, combined with the Sash of Rassilon, that allowed the Doctor to One of Rassilon's relatives was using the TARDIS when it materialized inside solid rock on the planet Radirr. The TARDIS was destroyed and the Star of Rassilon was presumed destroyed as well.

Millions of years later, Lord Verostephocalen developed the theory that the Back Time Field Buffers that protect Gallifrey's Relative Past could be penetrated by using the Star of Rassilon, two Type 89 TARDISes working in tandem, and some very complex forced-matter equations. This possibility was to prove too great of a temptation for some renegades. The Star was later recovered for a short time by the Master who planned to used it to safely violate the Laws of Time. Fortunately the Master's plan to steal the two Type 89 Capsules was thwarted by the CIA, but the Star remained in Master's possession.

Dematerialization Cut-Out

A Dematerialization Cut-Out is a inhibitor installed on the laser trigger of a Dematerialization Circuit which immobilizes the TARDIS by preventing it from entering the Vortex. Such inhibitors are often implanted on the capsules of exiled Time Lords to prevent them from leaving their incarcerating time zone.

An inhibitor fairly easy to disable if the operator has full access to Time Lord training. It can by bypassed using the triggering mechanism from a particle accelerator. Alternatively it might be possible to override this circuit with a massive power surge. For example, dematerializing in the middle of a nuclear blast can be enough of a "kick" to disable an inhibitor. Care should be taken, for if supplied with about seven megavolts and around 500 Watts of external power the TARDIS could end up slipping into a parallel universe.

Return Circuit

A Return Circuit can be programmed into a TARDIS's Dematerialization Circuit. It acts as a primary override to prevent a TARDIS from permanently leaving a particular planet and/or time. If the operator was to make a successful space-time jump, the would invariably find that their next journey would return them right back to pre-programmed time zone. The Return Circuit doesn't interfere with the override commands of a Remote Operations Module.

Remote Operation Module

A Remote Operations Module, is and enhanced Recall Circuit that gives the Celestial Intervention Agency (or the High Council if they have access to the right codes) homing control over a TARDIS. This override allows them to override the operator's programmed course and steer the TARDIS. They can force it to materialize in any Time Zone and prevent dematerialization.

As with most forms of remote TARDIS navigation, use of the Remote Control drastically reduces the life span of a TARDIS's <u>Zyton-7</u>. This is why most Time Lords become infuriated when homing control is enacted on their ship. Should an operator find a way to override Remote Control, the CIA can use Collection Beams on any dematerialized TARDIS whose location in the Vortex is known.

Remote Self-Destruct

While all TARDISes can be set so that it will appear to be counting down to self-destruct. The TARDISes used by the CIA's Field Agents have remote self-destruct systems with a 20-second timer.

Surveillance System

A Surveillance System was developed after the Mark IX TARDIS. This system allows a TARDIS to continually collect and store all data observed by its sensors. This data was then uploaded to

the Matrix. Using the Matrix's processing abilities this data could be used to render visual and audio images for events occurring anywhere within its collection field (at least several miles) even if the event in question was deep underground. Despite not becoming available till after the Mark IX Refit, this function was retroactively installed in all capsules running earlier refits by Gallifreyan technicians at the first available opportunity.

Emergency Compulsion Facility

The Emergency Compulsion Facility found only on the timeships of High Council of Gallifrey. When activated it uses a distress attraction signal to pull the 'nearest' TARDIS through space and time to the time zone that the Councilor's TARDIS is located in.

Quantum Foam Manipulators



Every time a TARDIS materializes microscopic elements (such as bacteria) from each destination will become embedded in its exo-shell. While the External Decontamination Function (EDF) can be used to sterilize the exterior of the shell leaving it appearing pristine and clean it doesn't affect those molecular or atomic spatial elements that have become embedded inside the shell. While this contamination does not weaken the Shell, it does create a time thickening effect on the underlying cosmological quantum foam-structures of space. In most cases the effect of this thickening on a time zone is minimal – usually resulting in nothing more then a slight change the fashions by the natives. However, the slight gravitational change can be measured and used to detect the materialization coordinates of a TARDIS. During the Time War both the Time Lords and their enemies used this to detect the appearance of each other's timeships.

While the Daleks were manipulated into developing Zero Time to cleanse each DARDIS before materialization the Time Lords

installed Quantum Foam Manipulators on their TARDISes. Six of these were installed in a TARDIS Console at the joins between each panel. They could manipulate the cosmological foam to cancel out the time thickening, allowing the times ship to arrive undetected.

Locatormutor Tracer Core Interface: aka Tracer



This interface takes the form of a socket installed in the navigational circuits. When a Locatormutor Core (sometimes known as a Tracer Core) is inserted into the socket, the navigational circuits are capable of reading out the coordinates of each of the six segments to the Key to Time. These coordinates can then be fed into the Directional Unit for a space-time jump.

Manual Symbiotic Bypass Controls

Every time a TARDIS dematerializes it leaves behind a telepathic "thumb print" of the operator's Symbiotic Nuclei. These "thumb prints" make it very easy for the High Council of Gallifrey to track a TARDIS through Time and Space. Through extensive modifications it is possible to bypass the symbiotic relationship and distort the telepathic "thumb print," thus preventing a TARDIS from being tracked.

To do so, a TARDIS's structure must be changed by installing controls and systems made of real matter and by drastically altering the operating system. The only way to achieve this is to remove several pats of the ship that are created out of block transfers and replace them with a combination of semi-organic, fiber-optic, metallic, and acoustic circuitry from the real Universe. This bypasses the Briode-Nebuliser, keeping it from automatically absorbing the Molecular/Dematerialization Codes from the operator's Symbiotic Nuclei.

Unfortunately, these codes are essential for dematerialization and safe vortex travel. Thus to ensure an accurate trip the operator needs to input the codes manually. Usually the inputting of the dematerialization codes is done telepathically before dematerialization, but they can be permanently programmed into the console as well. Without this telepathic "coaxing" some TARDISes with a Symbiotic Bypass won't even dematerialize.

This manual inputting bypasses the symbiotic circuits' normal access to the Rassilon Imprimatur. However, while all Time Lords carry the molecular dematerialization codes in their symbiotic nuclei the codes are not widely known to most Time Lords. The complex codes are quite difficult to compute and memorize, and even minor errors will result in malfunctions in the Directional Unit. These malfunctions often lead to a missjump, causing the TARDIS to materialize at the wrong point in space and time. If even parts of the code is still a secret, it can take more than a dozen attempts to successfully navigate the TARDIS to a desired location.

Another side effect is that a symbiotically bypassed TARDIS doesn't require the presence of a Time Lord to initiate a space-time jump. The Symbiotic Bypass also allows a TARDIS a large amount of free will. It is not unknown for such a TARDIS to allow any sapient being that it "likes" to have access to its Heart and other systems. In some cases lesser species, who inputted the proper Coordinates, have even been able to initiate a space-time jump.

Paradox Machine



The renegade House known as Faction Paradox determined how to cannibalized a Gallifreyan time ship into a Paradox Machine. This was done by making numerous modifications to the Hear (aka the Main Space Time Element) and the console that contains it. A large conduit was connect to the heart and ran to the Interstitial Antenna which emitted the artron energy necessary to hyper crystallize that timeline. A metal cage would be constructed around the console to contain the massive energies being manipulated. It is recommend that steam based

cooling systems be used. The interior of the control room will be lit with a red glow for the residual energy leaking from the Heart.

When history is changed, or otherwise corrupted, it takes 20 minutes of Relative Time for the consciousness' active biodata to fully crystallize events. After that the events of Alternative Time will be embedded into History with a massive amount of temporal inertia. If properly programmed and activated during this crucial 20 minutes a Paradox Machine has an excellent chance of diverting history to the new course and reconciling the paradox so that the temporal marauder won't have to worry about Reapers, or Chronovores.

Once activated the TARDIS energy drain from the Heart will convince the TARDIS that it is dying. The Cloister Bell will sound continuously as long as the original timeline is being suspended. The machine's continued functionality is essential to holding the new time line in place. The destruction (or even disabling) of the machine will reverse time to the point that history was first changed. Everything within about ½ mile of the machine will be unchanged by the machine's destruction. But outside that radius everything that had happened since the machine was activated will be undone. For the rest of the universe the alternate timeline never happened.

Using a similar method, it is possible that a TARDIS could be used to sustain a paradox of two different temporal versions of the same person simultaneously aboard the TARDIS at once. The Time Lord would have to disable some of the TARDIS' peripheral functions and jettison at least one storage room to gain the needed energy boost.

Hard-Wired Coordinates

Space-Time Coordinates can be wired directly into the Coordinate Programmer. If this is successfully completed, then the operator can be guaranteed of landing on the correct planet, however the specific location and arrival time still needs to be inputted. It takes a lot of skill to wire a set of coordinates into the programmer. Once done the TARDIS will automatically fly to

those coordinates whenever the TARDIS dematerializes without first entering destination coordinates (such as when the emergency dematerialization switch is used or when the operator files a forward reference).

Though the coordinate override can be used to halt the TARDIS's journey for an indefinite period there is absolutely no way to alter wired-in coordinates once the journey has begun. The operator must finish traveling to the locked-in coordinates before attempting to remove or bypass the wired in coordinates. The only know alternative requires the use of the Emergency Unit to shift the TARDIS our normal space and time and into the Land of Fiction.

Randomizer



This glass cased device is fitted to the Guidance System and Directional Unit. When installed it uses a random field frame to ensure that the destination coordinates are random. It also keeps a TARDIS from getting a lock on galactic zero center. Every time it is activated the operator must input a random seed setting. This seed number is the basis of the improbability algorithms.

The Randomizer can be overridden if the operator wishes to travel to a specific time zone. This is done by deactivating all of a TARDIS' travel circuits and manually the inputting space-

time coordinates. By disabling only some of the travel circuits it is possible to partially engage the Randomizer. This allows the operate to set broad guidelines as to the approximate geographical area and temporal arrival point, but to leave the exact date and location up to the Randomizer.

Randomizers are often used by renegade time travelers who are being actively pursued by one of the temporal powers. For this reason it is illegal for a Time Lord to own or construct one of these devices. Randomizers can also be cannibalized to form a random field frame for a Tachyon Generator.

Bounce-Back Circuit

A Bounce-Back Circuit allows a TARDIS to make a jump to default coordinates if a TARDIS dematerializes without a destination being inputted. It can be used with difficulty to avoid a Time Ram.

Stand-by Mass Converter

This emergency system has an automatic trigger that activates when the TARDIS has insufficient power. When this occurs it immediately starts converting unused storage rooms into extra energy.

Enhanced Transducer Cells

These are a refinement of the Transducer Cells found aboard stock TARDISes. Not only can they absorb and use almost any energy that travels at light speed, they can even drain entire continental power grids without a physical connection. These Cells can absorb at least several thousand megawatts.

Locate the Doctor

One renegade Time Lord set up his Scanner so that it would use his Rassilon Imprimatur to locate and identify the coordinates of his time trace relative to the location of the TARDIS. The function was activated by pressing a button on the console labeled LTD (Locate The Doctor). When this was done the relative position of this time trace would be identified on a map presented on the console's visual display unit.

Reality Inhibitor

A Reality Inhibitor is a purple dodecahedron with ruby vertices. When attached to a TARDIS it will boost its Reality Quotient from one to ten. This will prevent it from entering the Space-Time Vortex. It will also make a TARDIS and the crew inside immune to any change in history.

Farquazi Force Field

This enhanced shield systems was first developed by the Farquazi in the 300th Segment of Time. While Extrapolator based force fields of this type became standard issue on the Type 90 War TARDIS some operators of older timeships improvised their own using a Tribophysical Waveform Macro-Kinetic Extrapolator.

A Tribophysical Waveform Macro-Kinetic Extrapolator is designed to function as a pandimensional surfboard that is powered by an external dimensional explosion. In certain time zones these devices can be cheaply purchased at airlock sales.

The Extrapolator can however be linked to the massive dimensional energy of the Heart of the TARDIS. When this is done, the Extrapolator generates a powerful force-field that can deflect many of the temporal weapons used by the Daleks in the Time War. It can ever be used to prevent the TARDIS from being drawn in by the field created by excessive amounts of huon particles.

Not only can it deflect energy it can also enhance the transducer power cells allowing the TARDIS to lock on to a target and drain its energy [LINK]. This enhancement can also be used to speed up the refueling of TARDIS's Heart when power from the Prime Eye of Harmony is unavailable.

Conclusion



"VWORP! VWORP!"
-The TARDIS

Two unexpected observations came to light in the compilation of this Technical Index. First of all, the information revealed about the TARDIS over the decades is amazingly consistent. So much so that, despite my better judgment, I found it hard to accept that various writers hadn't been interested in continuity.

The second is that the TARDIS and its inner workings are truly unique in a way that most other iconic vessels aren't. From its biological conception, to its unmappable interior, to its infinitely alterable shape, the TARDIS is like no other vessel in Science Fiction. Even the most advanced starship looks humdrum and unimaginative next to this magical blue box. Trying to imagine all of this crammed into one battered police box leads one quickly to the realization that her dimensionally transcendental nature extends beyond the "fourth wall." The ideas and concepts are truly bigger on the inside; larger than a simple time machine could possibly contain.

Whatever her exterior appearance, the TARDIS will always remain a pivotal point upon which the Doctor's adventures hinge. A motivator and a facilitator, she serves as the Doctor's only permanent companion and friend.