Lazarus Type 1 Construct Chassis

The Lazarus Type 1 Construct Chassis system serves as a physical body for ROM constructs.

About

The chassis uses a modified ARIA chassis that is usually weaker than most cyborgs in terms of physical strength but with a far greater mechanical endurance: Unable to punch or run with super-human ability (though superh-human stamina). The only exception to this rule is slow crushing actions with hands or slowly lifting objects or locking joints, which usually causes severe trauma to organic systems (eg: skeleton slicing through the fingertips).

In simple terms, the construct is a bare minimumly functional skeleton with sensors and joints able to drive its own movement, with a genetic flash-clone of a person's organs, heart, lungs, hair, skin and nerves interfacing with the artificial nerves of the skeleton. Systems are also included to manually restart the heart, as well as an artificial backup system.

An inert oxygen gel is also stored inside the ribs which can keep organics oxygenated even in conditions without air for around half an hour, which then on contact with atmosphere can then be replenished.

This is all commanded by a small maesus microprocessor about the size of and resembling a common marble, known as a 'cookie'.

Importantly, ROM constructs are designed to have volatile memories: that if their power fails, they lose what may be months or even years of life changing experience and return to their factory state meaning potentially a ROM construct can "die": They can also elect to self-destruct, eitheir scrubbing their software and wiping themselves or sometimes self detonate.

Often, constructs are carried unimprinted as skeletons and are "configured" on sight: their skeletons adjusted to the correct size, shape and proportions needed and then the software and biological changes needed added.

To this end, a construct can also be repurposed to drive another cookie.

Should the organic part of a construct die, it can be repressed and re-issued but regardless, the construct continues to function.

Version 1.1 update

In anticipation of the upcoming Type 2, the 1.1 model did away with the nearly legendary maesus in exchange for a re-issued Electroptic/Quasitransistor femtoprocessor (EQFM) microcomputer. These changes were mandatory to all constructs in the field regardless of their character development or usage - for the purpose of doing away with what in programming was called 'original thought' - that many constructs became self-aware of their nature. Included in 1.1 were a wide assortment of programming

changes, locking down exploits demonstrated and exposed by Freespacers - making the platform formerly secure to through obscurity now realistically secure.

In doing so, constructs were now better replicas of their original being and better tools in the field, even if they lost a quality indescribable to most.

The change was met with widespread arguments throughout the Consortium, particularly among its more sentimental members.

Now, only a handful of the original 1.0 models remain in the field, those thought to be destroyed or lost.

Construction

The chassis itself is relatively simple. It begins with a specially engineered MODUS endoskeleton treated with layer of duranium, fitted with a QNC powerplant. The MODUS is able to move with total independence of the musculature system of the grown flesh covering, meaning even if the exterior flesh musculature dies, the construct can continue normal operation or potentially be re-surfaced with new flesh. The skeleton also includes ports to link additional equipment.

The flesh specifically is aged and weathered specifically on the cellular level to match the person in question. While the used model of MODUS is adjustable in height, bodily proportion or facial features, the flesh may require resurfacing. Often, users may choose to avoid weathering and age their bodies selectively or alter individual biological properties – a common change being a bigger bust, larger penis or thicker hair – almost all purely for vanity.

Within the skull of the construct is a maesus driven computer: potentially either one large or a smaller version known sometimes as a "cookie" which relies on quantum communications for excess processing power beyond the amount needed to run the construct itself. Under normal scans, a construct just looks like a conventional ARIA.

Damage

Importantly, a construct can function after and suffer punishment a human cannot: electrocution, acid-damage, flame, plasma, severe barometric changes (such as explosion), severe compression (crushing forces), severe atmospheric changes and even EMP.

Decomposition

Enduring severe trauma, the biological coating of a construct (which includes organs, muscles and blood) the organic components can fail and no longer be recoverable.

Rather than let these elements decompose, it is preferable to cut or peel them.

Coverings

Packed into a small fist sized capsule, (like Yamataian gachapon capsules) are synthetic altex covers, which must be soaked in water before they assume their full form, as well as a spare pair of eyes and a false mouth interior, with other bodily part interiors being optionally added.

These coverings include an expressive face-mask plate for the face (able to assume a wide variety of personlike expressions very convincingly) and a swimsuit like cover for the torso, covering the hips, very beginnings of thighs and the neck: acting as a synthetic skin, airbrushed with fairly realistic textures. Importantly, if altex is ripped or torn, it can be stitched up, then submerged in water rich with nitrogen (fertilizer), and it will usually heal quite quickly.

Also included in a second ball is usually replica hair, which is a hybrid of ribbon style lengths with false hair like volume and hard plates made to deliver the impression and volume of hair.

Located around the skeleton are also compacted folding metal coverings, designed to fit over the biceps and fore-arms as well as the legs, giving the appearance of a droid or low cost droid with the gradient of artificial sensing altex skin and metal coverings resembling arm length gloves and stockings.

A helmet like covering can also usuall be constructed from armored panels around the torso over the ribcage, again to resemble volumous hair but composed of sliced plates: One or several forming the overall impression of groups of strands: Fringe, sides, back, etc.

'Cookie' Microprocessor

Featured in conventional constructs, a cookie is a small marble sized maesus computer, driving the construct. The cookie has a 1 hour backup capacitor before it goes into low power sleep mode (which can last around a year) and can be plugged into lots of other platforms, allowing a construct to assimilate and exploit other such as power-armor, droids, cybernetic bodies or act as a co-pilot.

Wireless Interface

A major feature of the construct is the ability to interface wirelessly using the same skills as an experienced intermediate hacker/cracker out of the box regardless of the capabilities of the person the construct was based on.

In this way, any construct can break into poorly protected devices such as datapads, cars or public utility control systems, etc.

This is done leveraging the tools and skills of the consortium's most experienced hackers, packed into a sort of "greatest hits", meaning civilian grade technology is almost always an open book to them.

Volatile Memory

All construct memory is volatile meaning if power fails, the construct "dies", being reset to a factory state with only a bullet-point of its accomplishments akin to a diary. In practice, if a construct is rebooted it can remember its memories but only in the sense of a person reading a book, losing the "quality" and "impression" of those memories and the personality and character changes they caused.

Such a state can only be achieved if main power for the construct fails as well as its backup capacitors. When power is running low, a stopwatch style countdown will appear in a nearby 'reference device' (a linked piece of equipment like a phone or computer), indicating 'time to total memory failure'.

This volatile function of memory serves well for deniability, allowing at any point for a construct to remove their intellectual potential for abuse, removing the effectiveness of interrogation, coersion, hacking and dismantlement, while also ensuring its software cannot be reverse-engineered via conventional techniques since a construct's actual "source code" is not stored onboard but issued during boot if a quantum modem is available and if authorisation is available. If the construct recognises it has been captured, the unit is typically bricked and self destructed.

Self-Destruct

An exploitation of the QNC allows the construct's power core to act as a "nuclear hand-grenade", destroying it beyond recognition. While the yield is very low, to minimalise collatoral damage, a construct can be dialled up significantly to a nuclear yield of fourty tons: Enough to vaporise a small house and flatten four four city blocks if stood in a middle road.