

ATOMIK CYBERTEK



Written By:
Mark Chase (mchase@cdc.net)

Edited By:
Randell Wolff (randell.wolff@murraystate.edu)

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Home Base
Meta-Earth
<http://www.meta-earth.com>

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What is Fuzion?

Fuzion is a unified set of role-playing rules combining the best of the **Hero System™** (*Champions*) and **Interlock™** (*Cyberpunk®*, *Mekton Z™*). Not only can Fuzion be adapted to cover nearly every time, place, or setting, but it also has the ability to utilize existing **Hero™** and **Interlock™** rules and materials; if it is marketed as **Fuzion Capable**, it can be used as part of the Fuzion system.

Hero Games and R.Talsorian Games, Inc., jointly developed Fuzion. Many existing games systems use Fuzion, including **Champions: The New Millennium**, **Usagi Yojimbo**, **Bubblegum Crisis the RPG**, **VOTOMS**, **Mekton**, and many more. Fuzion uses a unique Plug-In system that allows for easy addition and removal of rules. For instance, to add Martial Arts to your campaign, you need only turn to a Martial Arts plug-in. To add Magic, Psionics, or Superpowers, these too may be easily plugged-in to the core rules (Total Fuzion).

Where Can I Get Fuzion?

The basic Fuzion rules (for character generation, combat, game mechanics, and basic plug-ins) can be found in any Fuzion product produced by R.Talsorian Games, Hero Games, or Gold Rush Games. However, as it is, these companies were kind enough to provide an on-line version of their core rules system. To obtain this file, please visit the following URL on the Internet (provided the site does not move, of course):

<http://www.sabram.com/rtalsoriangames/site/fuzion>

What is Atomik Fuzion?

Atomik Fuzion is collection of Fuzionable materials developed by Mark Chase, primarily plug-ins for Mekton and other Fuzion RPG gameworlds. These plug-ins include the mecha gameworld of **Metal Storm: 2380**, as well as generic plug-ins for psionics, magic, sci-fi, and alien characters.

Playing Fuzion

You have this Atomik Fuzion plug-in game, so how do you play Fuzion? First, you must get a set of Total Fuzion rules. As mentioned, the rules to create characters and play the game can be found in any Fuzion Capable RPG book or at the web site listed earlier. If you are having trouble finding a Fuzion game book, visit your local gaming store and ask about the R.Talsorian Games or Heroes Games product line. I recommend **Champions: The New Millennium** or **Bubblegum Crisis** for a good source.

In late 1998 or 1999, R.Talsorian will be coming out with a Fuzion version of **Cyberpunk** and **Mekton**, which I would highly recommend.

Creating a Fuzion Character

To create a character for any Fuzion game, you must have a Fuzion rulebook (see above). Most any Fuzion rulebook should do.

The first step is to develop your character's lifepath (see step one Fuzion character creation rules). I would recommend the lifepath chart show in **Bubblegum Crisis** (or **Cyberpunk** or **Mekton**, when they come out), or the on-line rules which you can download off the web. There are other lifepath systems, some made by fans, and these are acceptable at the GM's discretion.

The Origins Path for **Champions** is relevant only for superhero characters. If you are playing a superhero, Origins is a good way to flesh out his or her past. If not, you may ignore Origins all together.

Primary Characteristics as listed in Atomik Fuzion Plug-Ins are INT, WILL, PRE, TECH, REF, DEX, CON, STR, BOD, and MOVE. This is the same as it is for **Bubblegum Crisis** and **Champions**. PSI and MAGE may be added for Psionic or Magic plug-ins. Derived characteristics are calculated as normal.

Atomik CyberTek

This is a plug-in for Fuzion that details advanced cybernetics and biotechnology. It is unknown at the time of this writing how **Cyberpunk 2030** will handle cybernetics, so it is advisable to only use Cyberpunk cyber-stuff with **Cyberpunk 2030** and not try to mix and match.



However, it is my hope that Atomic CyberTek can be used in any high-tech, futuristic campaign setting, or to create Super cyborgs for such games as **Champions: The New Millennium**.

Cybernetics is the integration of man and machine; that is, welding meat to steel and nerves to silicon. Biotechnology is the engineering of enhanced biological organs, genetics, and cloning. Both biotech and cybernetics can be primitive or advanced. In the late 20th century, early development in both fields began. Which way we will go in the 21st century depends as much on our social values, political and economic pressure as it does on technical feasibility. All of these factors should be considered before a GM brings a certain piece of cybertech or biotech into a campaign. It may well be that cybertech is far behind and biotech is the wave of the future. Or, in a darker, more cyberpunk setting, perhaps the chrome is all-powerful and biotech is slowly, but steadily, emerging.

Cyborgs, Genies, and Characters

Think Metal...

Think computers, think steel, think silicon... Think of the circuits, the gears, the armor, the actuators and hydraulic pumps. If hard steel is your thing, metal-tech is the way to go! Subtle's for lamers, bigger is better, and your nobody 'less you can bench-press a main battle tank.

Think 'borg, think grinding metal, whirling motors, and steaming hydraulic rams. Flesh is weak, vulnerable, and squishy like a sponge. Bones can break, organs can burst, and cells die by the truckload. Why settle for flesh when steel is so much better?

In a Think Metal world cybernetics are prominent, even common, and biotechnology is lagging behind. In Think Metal campaigns, cybertech should be at least TL 6 or 7, and biotech always one less (TL 5 or 6). Biotech may even be unavailable.

There are certain Think Metal setting which would have a lower TL (TL 3 or 4), where biotech does not exist at all. The movie *City of Lost Children* is an excellent example of a steampunk world at TL 4 where cybernetics is prominent, and biotech is just emerging (cloning, brain-storage, etc.). The William Gibson/Bruce Sterling book, *The Difference Engine*, should be required reading for anyone wanting to run a steampunk game.

Think Flesh...

Think biology, genetics, nanotechnology... Think small, cellular, subtle, perfect, and sublime. We are machines -- machines of enzymes, chromosomes, hormones, and nucleotides. Why replace nature when you can improve it? There is no need to mar oneself by bolting metal and wires into your body. The body is fragile and imperfect, yes, for evolution is a process of simple trial and error. We were born from errors and mistakes, but those mistakes can be easily corrected.

And yes, even improved upon.

The cloning of our bodies, the manipulation of our genes, and the integration of new symbiotic organs has opened a staggering new realm of possibilities. No longer do we define ourselves by how we look today or tomorrow, but by our thoughts and dreams. The body is disposable, perhaps nothing more than a vessel which we change with the changing fads and marketing ploys of the biotech megacorporations. With gene altering retroviruses and augmented clones, we can change ourselves as easily as buying a new car. Change ourselves to suit our jobs, our roles, and our dreams. We can have

bodies optimized for sports, designed to survive in space, or swim with the fish in the sea. There are no limits. We can be anything we want to be...

In a Think Flesh world biotechnology will be far ahead of the 'harder' cybertech. In a world such as this, biotech should be TL 6 or 7, probably even 8. Cybertech will be far behind, TL 6 most likely. Few worlds will be strictly biotech, as cybertech tends to develop earlier, but there is no reason why once biotech gets big cybertech will simply fall out of style. So...

Think Style...

Think hip, hot, glitter and gleam. Think sparkling chrome, shimmering tattoos, and dancing hair of fiber optic light. Your body is canvas to sculpt and mold to your desire. Tell the world who you are or look like the hottest superstar! Technology is poetry in motion and you are its greatest symphony.

No one here flaunts studded metal dermoarmor or camera lens cybereyes, not unless they're one of the dregs. Gold circuit-pattern irises are in style today; yesterday it was rainbow phasing. Nanites can weave video-polymers just under your skin, think of the possibilities there! Saw a girl yesterday with green skin and blue hair, her eyes were simmering like fire... And that wasn't all!

A Think Style campaign is concerned more with looks and appearance than actually functionality. After all, appearance *is* only skin deep, and style is everything. Think Style can blend nicely with Think Flesh, and to some extent with Think Metal. Not everyone in the world is concerned with their appearance, but there are always those who are.

Typically, a Think Style world will have biotech of at least TL 7, and cybertech at 6 or 7. At biotech TL 8 some really cool and stylish things can be done to your body... Just buy a whole new body, the latest from *Marani Couture Bioniche!*

Think Tech...

See pulsing patterns of electrons, taste glittering sweet streams of light, and hear the thundering sonnet of data rushing through those invisible realms of binary logic and neural networks.

In the ages to come we will see miracles no one has dreamed possible and those dreams of today will fade away to fanciful fairy-tales. The future is never what we expect, and far from it. Technology progressed in leaps and bounds. Those great discoveries yet to come, those discoveries which will change the way we view the universe will open forth

such staggering new realms of possibility we will wonder at our own petty ignorance, asking ourselves how we could have been so blind?

How could a mathematician of the 1920s ever envisioned that we would one day have machines to process more computations in one second than he could perform in a lifetime? And how can we today be so naive to think our computers will have any semblance to those vast, unimaginable works of synthetic intellect of the 2050s? How can we begin to ponder the wonders of tomorrow's technology?

Just remember, technology is never static, never constant, and never fades away. It grows, voraciously, every changing and always adapting, exploring new frontiers of human endeavor. Keep sharp and ride the cutting edge. Just don't get cut...

Tech Levels

Tech Level (or TL) is a measure of the development of a society. The range varies from game system to game system, but in Fuzion the range is 0 to 10.

| TL | Description |
|----|--|
| 0 | No technology, Stone Age |
| 1 | Primitive. Early Greece, Egyptian |
| 2 | Roman. developed architecture |
| 3 | Middle Ages/Renaissance. Gun powder, ocean navigation, astronomy. |
| 4 | Industrial Revolution. Later, motorized vehicles and radios. |
| 5 | Late 20th Century. Nuclear technology, early space travel, digital computers. |
| 6 | Mid-21st Century. Orbital colonization, fusion power, cybernetics, developing biotech. |
| 7 | Solar Colonization. Outer planets colonized, fast STL travel, energy weapons developed, lots of biotech. FTL travel might be cutting edge. |
| 8 | Interstellar. FTL travel discovered. Extra-solar colonization begins. Utilization of antimatter for power. |
| 9 | Control of Forces (gravity, nuclear, etc.). Supermassive engineering (Dyson spheres, Ringworlds, etc.). Usage of black holes for generating power. |
| 10 | Superscience. Total Conversion Reactors, control of space-time, possible ascension of humanity to god-hood. |

We are at TL 5. Everything after TL 5 is pure speculation. The exact timetables for TLs beyond TL 5 is up to the GM, as suited for his or her gameworld. It is quite possible that by 2100 we'll be at TL 8, but that is unlikely. It is also possible that we won't even reach TL 7 until 2300.

More probable, however, is that different technologies will reach different stages of development for any given time. There are eight primary tech bases (detailed in **Atomik SuperTek**):

Science, Energy, Electronics, Medical, Weapons, Cybertech, Biotech, and Space Travel. The only two which concern us in **Atomik CyberTek** are, of course, Cybertech and Biotech.

For any given era, the GM may set cybertech and biotech to be +/- 1 TL (or even 2, but this could unbalance things). For instance, in a TL 6 world, cybertech could be TL 6 and biotech TL 7. Conversely, cybertech could be TL 7 and biotech TL 5 (undeveloped).

Option Points and Money

There is a big problem with OP and money in Fuzion. In Total Fuzion, 1 OP = 100 monetary units. Clearly then, either cybertech is dirt cheap or cost a lot of OP. In **Bubblegum Crisis**, 1 OP = 20,000 yen, and in **Cyberpunk** 1 OP should equal 200 Eurodollars.

It is therefore my opinion that no monetary cost should be associated with items in **Atomik CyberTek**. Cost is simply listed as OP. In a certain game setting if 1 OP = 200 monetary units, everything remains equal. For example, a 4 OP cybernetic mod might cost 800eb in **Cyberpunk**, but 400,000 Yen in **Bubblegum Crisis** (remember, 100 Yen is about \$0.75).

The GM may choose to require players to spend both OP and money to purchase new enhancements during the course of the game.

Humanity Cost

Cyberpunk introduced the concept of Humanity Cost (HUM equals WILL x 10). The idea was that by integrating oneself with cybernetics and artificial prosthetics, one becomes less human. Debatable as this is, it may still be a legitimate factor in some game worlds. In **Cyberpunk**, for instance, humanity loss is a mental disorder - the addition of cybernetic parts causes some people to become *detached* from humanity and lose touch with reality (basically becoming sociopathic). In other game systems, such as FASA's **Shadowrun**, characters begin to lose parts of their soul as cybernetic parts replace their natural body.

However, if one tends to believe that a person is the sum of his memories, experience, and mental conditioning, the idea of humanity loss is absurd, and so should be discarded. And what about a sci-fi campaign where aliens exist? They certainly would not have 'humanity' as it were, but rather conditioned personality traits equitable only to other members of their species. A comparison of humanity between a cyborg human and a cyborg Kzinti then become a moot point and impossible to correlate into



game terms. That is, unless for some bizarre reason all intelligent beings have the same exact psychology and mental development (as is the case with *Star Trek*).

Therefore, Humanity Cost is strictly optional. On the other hand, humanity Cost could be interchangeable with an alternative cost...

By default, Humanity Cost is turned On, and a character who gets cybertech must subtract the HC from his Humanity. For every 10 HUM lost, he gains a -1 penalty to all task rolls dealing with human interaction (this is the same as it is for **Cyberpunk 2030**).

However, if the GM wishes, he may dissolve Humanity and replace it with something else. For instance, he could have Soul Points (SOUL) or Essence (ESS) which is equal to 10xPRE or 10xPSI or 10xMAGE, or whatever he or she believes is appropriate.

It is also possible to allocate two (or more) attributes to the derived 'humanity' characteristic. For instance, in a world where magic is prominent and characters have a special MAGE characteristic, PRE and MAGE could together formulate the SOUL derived characteristic ($(PRE + MAGE / 2) \times 10 = SOUL$). The lose of such Soul or Essence might also effect those characteristics or the ability to use magical or psionic powers, but how this works in the gameworld is entirely up to the GM.

You can buy extra Humanity, as with any Derived characteristic. One OP buys you 2 HUM.

Cleaner Cybernetics

It is also possible to get better, more advanced cybernetics which do not generate as much humanity loss. By increasing the cost of a component by +1 OP, Humanity Cost is 2 less. This can never drop below zero.

Getting CyberTech

There are several ways to give a character cybernetics and biotech (assuming the technology is available). The first is to add it to a character during character creation. This is the only way to get some biotech (such as genetically engineered abilities, and so forth), but other items, such as cybereyes and biomods, can be purchased at any time during a character's life. Therefore, cybertech may be bought with money during the course of a game.

Sometimes it is discouraging to discover that you don't have enough OP to buy your cybertech and still have some left over for skills, talents, and perks. There are several ways to resolve this, as outlined below.

More Option Points

The easiest way to let players use more Option Points is to give them more Option Points. A GM could give each character 10-20 extra OP for use with cybertech and biotech only. In a campaign where there is a lot of cybertech, these extra OP could be as high as 30.

CP to OP

Normally, Characteristic Points cannot be exchanged for more Option Points, but a GM can allow the transfer. As you know, 5 OP can be used to buy 1 CP, therefore, with this option, 1 CP can give a character 5 extra OP.

Cybertech Points

Abbreviated XP (to differentiate from CP), Cybertech Points are allocated in much the same way as Power Points. That is, for heavy-hitting cyberpunk adventures, characters have a pool of XP completely independent from their OP and PP. OP can still be transferred into the XP pool at a 1 to 1 basis, but XP cannot be used for OP. One XP is basically equal to 1 OP, and so 5 XP equal 1 PP. Many campaigns also have Equipment Points (EP), so XP and EP can be incorporated into the same pool, if desired.

| Level of Cyber Development | XP |
|--|-------|
| Cybertechnology is unheard of | 5-10 |
| Cybertech and biotech is only talked about | 10-20 |
| Cyber/Biotech is rare and cutting edge | 20-30 |
| Cyber/Biotech is common | 30-40 |
| Cyber/Biotech is everyday | 40-50 |
| Everyone is a cyborg! | 50+ |

Just Money

Alternatively, cybertech and biotech may only cost money, and there is no OP cost at all. If this is the case, then simply translate the OP to whatever monetary value it has in that world and go from there.

Surgery

Cybertech must be implanted surgically, and so each type has a Surgery Code. This represents the minimum level of medical care required to install the component, the time and difficulty value of the surgery, and the damage taken by the cyborged character.

Negligible (N): Any mall clinic or back alley shot. Takes 1 hour, does 1 killing damage. Target: 10.

Minor (M): Medical center. Takes 2 hours, does 1D6 killing damage. Target Number: 15.

Major (MA): Full hospital. Takes 4 hours, does 2D6 killing damage. Target Number: 20.

Critical (CR): Full hospital. Takes 6 hours, does 3D6 killing damage. Target Number: 25.

CyberTechnology

Cosmetic Mods

Cosmetic modifications are not really 'cyber'. There is no linking of man and machine. Rather, cosmetic modifications use synthetic prosthetics to enhance appearance.

Artificial Hair

TL: 6

Surgery: N

Cost: 0.5

Humanity: 0

Hair can be implanted into the skin and may come in any one of 2.5 million colors. At TL 7 ChamoHair (compatible with ChamoSkin) is available for 2 OP. Also at TL 7, LightHair is available, which can shift colors and glow.

Body Sculpting

TL: 5

Surgery: N

Cost: 1 OP, or 3 OP per level

Humanity: 1 per level

With newly advancing technologies in the field of surgery, full facial and body changes are available. To simply change the way you look cost 1 CP. However, to make yourself beautiful (or handsome) costs 3 OP for every +1 to your *Persuasion*, *Performance*, and *Wardrobe/Style* skills. It costs 6 OP to look like someone else, but this is illegal.

Glo-toos (Light Tattoo)

TL: 6

Surgery: N

Cost: 0.5 OP

Humanity: 0

Glo-toos can be drawn into skin by injecting photoluminescent ink of any (or multiple) colors. This photo-ink absorbs light and emits other shades and hues, making the tattoos glow. This is especially attractive at night or in the dark. Any part of the body can have such tattoos, though some areas are more popular to 'glo-too' than others. Common glo-toos are circuit patterns, dragons, chaos patterns, or mystical symbols (for all you neo-pagans and cyber-goths).

Sex Change

TL: 5-6

Surgery: MA

Cost: 1 OP for cosmetic, 4 for functional

Humanity: 0 for cosmetic, 2 for functional

Two types of sex change are available. At TL 5 sex change operations are possible but are only cosmetic in nature; the sex organs have little or no real functionality. At TL 6, however, complete sex changes are possible due to perfected neuro-surgery and organ-cloning technology. Simple cosmetic sex changes are still popular at TL 6.

Subdermal Watch

TL: 6

Surgery: N

Cost: 0.5 OP

Humanity: 0

A subdermal watch consists of an implanted microscopic clock chip and a photo-polymer display situated just under the first few layers of skin (usually just behind the wrist of the left arm). A subdermal watch can be set and programmed using a small pressure sensor imbedded on the display. It is powered by body heat.

NeoSkins

Modifying your skin is one thing. Replacing it is quite another. At TL 7 it becomes possible for a person's skin to be medically removed and replaced with artificial skin through the wonders of nanotechnology. You can have only one type of NeoSkin, but you can have it specially colored (save for Chamo and ColorSkin, which make their own color). NeoSkin does not come with body hair, but artificial hair may be implanted. Below are all available skins.

ChamoSkin

TL: 7

Surgery: MA

Cost: 3 OP per level

Humanity: 2 per level

In a situation where you don't want to be seen, you can try to blend into your surroundings on a successful WILL + Concentration vs. 20 task resolution. Each level makes you harder to spot, giving a +1 to your Stealth. Everyone must make a Perception check at -1 per level to spot you (if they are using normal vision) vs. a DV of your Stealth Roll at +1 per level (this is a double effect). You may have up to Level 5. This camouflage does not work in the dark or against people using a form of vision other than optical. You must also be naked, as clothes will clearly remain visible. ChamoSkin may also function as ColorSkin. Use invisibility rules for combat.

ColorSkin

TL: 7

Surgery: MA

Cost: 3 OP

Humanity: 2

A favorite skin for people who want to stay fashionable. With this modification, you are able to change the color of your skin at will, having 2.5 million colors to choose from. This change, however, cannot act as ChamoSkin, and it serves no real purpose other than to look neat. You can even have it set to cycle through various colors in a specific

pattern. In a society where this modification might be fashionable, it gives a +3 to *Wardrobe/Style* skill.

DuraSkin

TL: 7

Surgery: MA

Cost: 15 OP

Humanity: 6 (or 1D6+2)

This skin, which looks perfectly normal despite its modification, consists of an integrated monoweave mesh. The skin is completely regrown to be exactly the same as normal skin, with one important change; it includes a millimeter thick layer of monoweave armor. This new layer provides 10 KD, but you will always take at least one point of damage because your skin will be injured by the attack.

SensaSkin

TL: 7

Surgery: MA

Cost: 2 OP

Humanity: 4 (or 1D6)

With SensaSkin you are extremely sensitive in touch (pain reception is not altered). You can notice small changes in heat, vibrations, difference in two similar textures, etc. This grants a +3 to your Perception check when performing such tasks.

SlipSkin

TL: 7

Surgery: MA

Cost: 4 OP

Humanity: 4 (or 1D6)

You can make your skin nearly frictionless. Your clothes will fall off unless they are strapped around you with belts or suspenders. You can easily slid off things, and movement through water is greatly increased. Unfortunately, you cannot feel texture when 'slip-mod' is on. This gives you a +5 to escape from bindings or grapples or to slither through tight places, and doubles your swimming speed.

Cyberlimbs

When most people think of cyborgs, they imagine a walking Frankensteinian nightmare with wires and metal blended with flesh, a twisted monster of steel and grinding gears. Well, you can make yourself look that that if you want to be a real badass, but real cyberlimbs are designed to be as non-intrusive as possible.

In the 20th century, when the first prosthetic limbs were introduced, they had limited functionality (no neural connections), but were at least made to look as natural as possible, colored with normal flesh tones, plastic skin, and even fake fingernails. By the turn of the millennium, some could even feel pressure, heat, and cold, and artificial legs could run a marathon.

True cyberlimbs did not come around until the 21st century (TL 6). Early on they might still be considered medical replacement parts for lost limbs. Some special operatives might be given a cyberarm

with a concealed weapon, and full cyber-soldiers might not be far behind. Black clinics could perform illegal surgery on musclemen who wanted arms with inhuman strength, but few middle-class 'normal' people would desire to have cybernetic replacement limbs. Street-tek could be the only way to get a cyberlimb, unless you chop off your own arm and make it look like an accident. On the other hand, elective surgery might become a routine procedure in private hospitals. Expensive, but at least common.

Please note that these Cyberlimbs cost and work quite differently from the cyberlimbs in *Cyberpunk 2030* and *Bubblegum Crisis*.

CyberHand

TL: 6

Surgery: MA

Cost: 2 OP

Humanity: 4 (or 1D6)

Lose a hand or just want a new one? Get a cyberhand! Looks and feels just like the old, but better. The base price of a cyberhand is 2 OP. It has space for up to four hand options, and each finger can have a special finger function as well.

A cyberhand is normally matched to the owner's current STR and DEX. STR may be increased to boost crushing damage and gripping abilities, and DEX for delicate precision. It costs 1 OP per point of increase in STR or DEX for cyberhands, up to a max of +3 at TL 6 or +5 at TL 7. STR and DEX could be lower for cheaper hands, at -1 OP for a lose of -1 in STR or DEX; the final cost of the hand can never be less than 1 OP. Because the bones are metal, a cyberhand does +2 additional STUN damage.

Cyberhands have 10 SDP, unless modified, and are destroyed at -5 SDP.

CyberArm

TL: 6

Surgery: CR

Cost: 6 OP

Humanity: 8 (or 2D6+1)

A cyberarm is a complete arm replacement, including shoulder attachment, elbow, twisting forearm, wrist, and a cyberhand (as above). The base price of a cyberarm is 6 OP, which includes the base cyberhand. It has space for up to four arm options. The cyberhand must be enhanced separately for DEX increases.

A cyberarm is normally matched to the owner's current STR (DEX must be increased in the hand). It costs +2 OP per increase in STR for cyberarms, up to a max of +5 at TL 6 or +10 at TL 7. STR could be lowered for a cheaper arm, at -1 OP for a lose of -1 in STR; the final cost of the hand can never be less than 3 OP. Cyberarms are also quite deadly in combat. The do killing damage instead of stunning damage.

Cyberarms have 25 SDP, unless modified, and are destroyed at -10 SDP.

CyberLegs

TL: 6

Surgery: CR

Cost: 6 OP (15 OP for two, see below)

Humanity: 8 (or 2D6) or 20 for two (or 5D6+2)

A cyberleg is a cybernetic replacement of the leg from the hip to the foot. If two legs are purchased, the pelvic bones are replaced as well, adding larger drive-train motor to power the legs at super-human speed, which is why it costs more. Cyberlegs can only give enhanced speed if the full leg-motor conversion is done (for 15 OP and 20 Humanity). It is possible to have two legs without the enhanced move; this modification just costs 12 OP and 16 Humanity (or 4D6+2).

A cyberleg has space for four leg options and includes a foot, though special feet can be taken as an option. By default, a cyberleg is designed to match the user's own STR and MOVE. STR can be increased for a single leg, at +2 OP per +1 STR (or -1 OP per -1 STR) up to a max of +5 at TL 6 or +10 at TL 7. This will increase kicking damage (Kicking damage = STR + 1). Cyberlegs do killing damage instead of stunning damage.

MOVE should not be increased without two legs in place. With two legs connected to a 'cyber-pelvis,' MOVE may be enhanced as well. For a total of +4 OP, the character receives a +1 MOVE.

Cyberlegs have 25 SDP, unless modified, and are destroyed at -10 SDP.

Cyberlimb Options

Below is a list that describes general options available to hands, arms, and legs. If you get an option in a cyberarm, you must also get it for the hand as well, unless you want the hand to lack that option. Keep track of arm and hand options separately.

Coverings

TL: 6

Surgery: N

Cost: varies

Humanity: 0

Option Spaces: 1/2

By default, all cyberlimbs come without covers: raw metal, bolts, and screws are all visible. Often, however, the limb is covered by a sheath to protect it from the environment and unwanted attention.

Plastic skin is the oldest and most common cover (at TL 5 and 6). It suffices, but everyone can tell the limb is artificial. This option costs 1 OP.

SynthaSkin, which makes the limb look real, is popular at TL 6+. With synthaskin, the user has full tactile senses and can even sense pain, if he or she wants. It takes a Competent Perception roll (DV 18) to tell the limb is artificial. SynthaSkin costs 2 OP.

Finally, a cyberlimb can be chromed out to for that cyber-flash look of glittering steel and sensual

metal. Anyone can tell the limb is artificial, but it sure looks cool. Chrome costs 1 OP.

CyberArmor

TL: 6

Surgery: N

Cost: 5 OP

Humanity: 2

Option Spaces: 1

CyberArmor is a protective armored alloy that covers a cyberlimb. Coverings may be placed over it, but the covering will be destroyed when the limb takes damage, even if the damage fails to penetrate the cyberarm. Cyberarmor gives 20 KD to the limb.

Double-Jointed

TL: 6

Surgery: N

Cost: 4 OP

Humanity: 1

Option Spaces: 1

A cyberlimb's joints can be made bi-directional; that is, able to bend both ways and pivot with an inhuman range of motions. It takes some getting used to (for both the user and his or her companions!), but this modification gives a +1 DEX for hands and arms (+2 DEX if both the hand and arm are double-jointed) and +2 MOVE if both cyberlegs are double jointed.

EMP Shielding

TL: 6

Surgery: N

Cost: 4 OP

Humanity: 1

Option Spaces: 1

Electronic components are hardened and shielded from harmful electromagnetic radiation. The limb is immune to electrical surges, EMP, and radiation.

Hot Shoting

TL: 6

Surgery: N

Cost: 6 OP

Humanity: 2

Option Spaces: 1/2

Any cyberlimb can be "hot shot" to give an extra +3 STR. However, the limb has a 10% chance of breaking when these extra points are used -- roll 1D10 (or 3D6); if the result is a 1 (or 3 or 4 for 3D6), then the motors are destroyed.

Optical Wiring

TL: 6

Surgery: N

Cost: +1/2 OP cost of limb

Humanity: 0

Option Spaces: 1/2

All electrical wiring is replaced with optical circuits and fiber optic wiring, plus optical power adapters. The limb is immune to electrical surges, EMP, short circuiting, radiation, and water.

Plastisizing TL: 6
Surgery: N
Cost: 1 OP
Humanity: 1
Option Spaces: 1/2
All metal is replaced with hardened plastic and ceramic. This makes the limb undetectable by metal detectors and also ensures it will never rust.

Removable Socket TL: 6
Surgery: N
Cost: 1 OP
Humanity: 2
Option Spaces: 1
The base joint socket for the cyberlimb is easily detachable so that the limb may be removed and attached with a simple click-in, click-out lock. It takes one Phase to remove or insert the limb. You can buy this modification for cyberhands, cyberarms, and cyberlegs. A cyberarm could have both the hand and the arm itself removable if, of course, you buy removable sockets for each.

CyberHand Options
Cyberhand options are special options available for cyberhands. All cyberhands have four option spaces for hand options. In addition, there are several 'finger options' available. You may purchase one finger option per finger, but the thumb is generally not large enough to contain options.

Full Rotation TL: 6
Surgery: N
Cost: 1 OP
Humanity: 2
Option Spaces: 1
The hand can rotate 360 degrees with no difficulty. If the limb is otherwise covered with plastic or synthaskin, there will be an apparent joint ring around the wrist, making it obvious the limb is cybernetic.

Modular Hand TL: 6
Surgery: N
Cost: 3 OP
Humanity: 1
Option Spaces: 3
This handy and popular item contains a hypo-spray injector, a garrote wire, a monoedged razor blade, a lockpick set, and a 4cm x 4cm storage compartment.

Tool Set TL: 6
Surgery: N
Cost: 2 OP
Humanity: 1
Option Spaces: 2 (and all finger options)
All fingers are used to contain tools. Tools include a

power screwdriver (with six heads), socket wrench, soldering iron, a microflashlight, and one other tool prudent to your gameworld (a sonic screwdriver, for instance). The hand can be used as a hammer.

Grappling Hand TL: 6
Surgery: N
Cost: 3 OP
Humanity: 2
Option Spaces: 2
Part of the hand maybe detached and used as a grappling hook. A spool of wire gives it a 50m length, and it can support up to 300 kilograms.

CyberMounted Weapon TL: 6
Surgery: N
Cost: 4 OP (+ cost of weapon)
Humanity: 5 (or 1D6+1)
Option Spaces: 4
This allows a soldier to have a small pop-up weapon installed in his cyberhand. The weapon must be less than half a kilogram (0.5kgs) because there is little room available in a cyberhand. It is fired by a simple neural command. May have smart-link built-in.

Implanted Device TL: 6
Surgery: N
Cost: 1 OP (+ cost of device)
Humanity: 1
Option Spaces: 1-4
With this modification any reasonably device may be installed in the hand, such as a scanner, radio, display screen, computer, etc. Size limit is 0.2 kgs per Option Space used. You may also use this option to implant a simple storage area.

Ripper Blades TL: 6
Surgery: N
Cost: 3 OP
Humanity: 4 (or 1D6)
Option Spaces: 1
A set of 4 inch hand blades are mounted on the hand, extendable when the fist is squeezed. Does 2 DC STR-powered killing damage. May have any blade options (see Ripper weapons).

Hand Spike TL: 6
Surgery: N
Cost: 2 OP
Humanity: 4 (or 1D6)
Option Spaces: 2
A deadly spike is built-in to the hand, which can be extended to make attacks. Does 2 DC STR-powered killing damage.

Cyberfinger Implants TL: 6

Surgery: N

Cost: varies

Humanity: varies

Option Spaces: 1 finger

Each finger can have one finger option. Most are self-explanatory, so only the cost and HC are listed.

Micro-flashlight TL: 6

Cost: 0.5

Humanity: 0

Micro-cam (2 min. storage) TL: 6

Cost: 1

Humanity: 0

Lighter TL: 6

Cost: 0.1

Humanity: 0

Rocket-finger (5 DC) TL: 6

Cost: 2

Humanity: 2

Finger Gun (1 shot, 3 DC) TL: 6

Cost: 1

Humanity: 1

Laser Pointer TL: 6

Cost: 0.3

Humanity: 0

Finger Laser (5 shots, 3 DC) TL: 7

Cost: 6

Humanity: 3

Monowhip Finger (1 DC, AP) TL: 6

Cost: 3

Humanity: 2

Myo-whip Finger (1 DC, AP) TL: 7

Cost: 3

Humanity: 2

CyberArm Options

CyberArm options are special options available only to cyberarms.

Arm Blades TL: 6

Surgery: N

Cost: 3 OP

Humanity: 5 (or 1D6+1)

Option Spaces: 1

Three long (8 inch) blades are implanted in the cyberarm and shoot out over the hand when sent a simple neural command. Does 3 DC STR-powered killing damage.

Auto-Holster TL: 6

Surgery: N

Cost: 2 OP

Humanity: 1

Option Spaces: 1-4

Basically, this is a compartment for storing a sidearm or other quickly accessible equipment. With a simple neural command, the compartment pops open and extends the contents automatically. It can store 0.8 kgs per Option Space used (some space is taken up by the equipment inside).

CyberMounted Weapon TL: 6

Surgery: N

Cost: 4 OP (+ cost of weapon)

Humanity: 5 (or 1D6+1)

Option Spaces: 1-4

This allows a soldier to have a pop-up weapon installed in his cyberarm. The weapon must be less than 4 kilograms. It takes up 1 Option Space per kilogram. The weapon is fired by a simple neural command. May have smart-targeting link built-in.

Implanted Device TL: 6

Surgery: N

Cost: 1 OP (+ cost of device)

Humanity: 1

Option Spaces: 1-4

With this modification any reasonably device may be installed in the arm, such as a scanner, radio, display screen, computer, etc. Size limit is 4 kgs. It takes up 1 Option Space per kilogram. You may also use this to implant a simple storage area, or a power cell or ammo for a weapon.

CyberLeg Options

CyberLeg options are special options available only to cyberlegs.

Auto-Holster TL: 6

Surgery: N

Cost: 2 OP

Humanity: 1

Option Spaces: 1-4

Basically, this is a compartment for storing a sidearm, or other quickly accessible equipment. With a simple neural command, the compartment pops open and extends the contents automatically. It can store 1.2 kgs per Option Space used (some space is taken up by the equipment inside).

CyberMounted Weapon TL: 6

Surgery: N

Cost: 4 OP (+ cost of weapon)

Humanity: 5 (or 1D6+1)

Option Spaces: 1-4

This allows a soldier to have a pop-out weapon installed in his cyberleg. The weapon must be less

than 6 kilograms. It takes up 1 Option Space per 1.5 kilograms. The weapon is fired by a simple neural command. May have smart-targeting link built-in.

Implanted Device TL: 6

Surgery: N

Cost: 1 OP (+ cost of device)

Humanity: 1

Option Spaces: 1-4

With this modification any reasonably device may be installed in the leg, such as a scanner, radio, display screen, computer, etc. Size limit is 6 kgs. It takes up 1 Option Space per 1.5 kilogram. You may also use this to implant a simple storage area, or a power cell or ammo for a weapon.

Hydraulic Jump Legs TL: 6

Surgery: N

Cost: 3 OP

Humanity: 1

Option Spaces: 2

Both cyberlegs must have this modification. With hydraulic jump legs, you can jump up to twice your normal height.

Magnetic Feet TL: 6

Surgery: N

Cost: 2 OP

Humanity: 1

Option Spaces: 1

Feet are electro-magnetic (may be turned on an off). Excellent for use in zero-G.

Skate Feet TL: 6

Surgery: N

Cost: 2 OP

Humanity: 1

Option Spaces: 1

Both cyberlegs must have this modification. With skate feet, a set of in-line skates can be extended from a hidden compartment in the feet, allowing you to skate at 2x MOVE. Skating skill is a must.

Body Ware

The term "body ware" refers to cybernetics that modify the way the body functions. Many of these systems replace existing organs with bionic ones, improve the way the body works, or introduce entirely new features.

Grafted Muscles TL: 6

Surgery: CR

Cost: 3 OP

Humanity: 8 (or 2D6+1)

Cloned (or 'donated') muscles are grafted onto your limbs. These muscles are either cloned from your cells or taken from a muscle donor (which may or may not be legal). Once the muscles are grafted (and you have had time to recover), your STR will be at +1 for everything except lifting and carrying. You will need to recalculate all derived characteristics which use STR.

Bio-Muscula Augmentation TL: 7

Surgery: CR

Cost: 6 OP per level

Humanity: 10 (or 3D6) per level

Bio-muscula is a strong artificial muscle with a high strength-to-weight ratio. All the muscles in your body are replaced with bio-muscula, giving you a +1 STR, +5 Hits, and +5 Stun, for 6 OP. The second level is stronger, giving a +2 STR, +10 Hits, and +10 Stun, for 12 OP. You will need to recalculate all derived characteristics which use STR. Both options include back muscles so lifting capacity will also increase.

Drug Sacs TL: 6

Surgery: M

Cost: 1 OP per 10 doses + cost of drug

Humanity: 1

A small sac that contains multiple doses of any one drug. This can be medical drugs, poison sacs (neurotoxins, cardiotoxins, poisons, etc.), combat drugs, or any other kind of chemical substance, even acids. The drug can be released when the user needs or desires it, or it can be released after a certain, pre-programmed time.

Metabolic Control System TL: 7

Surgery: M

Cost: 3 OP

Humanity: 3

You are able to control the involuntary functions of your body, such as pulse, blood flow, respiration, digestion, endocrine, and adrenaline. Metabolic control gives you the talent Simulate Death and also reduces by 30% the amount of food, water, and oxygen you need to stay alive.

Rippers TL: 6**Recovery:** varies**Cost:** varies**Humanity:** varies

Rippers are nails or blades implanted in the fingernails, hands, or arms. Small muscles or actuators control the extraction and retraction of the rippers. Prices are listed for one hand; if you want both hands to be equipped, you must buy for both.

Finger Claws TL: 6**Surgery:** N**Cost:** 1 OP**Humanity:** 3

Small razor blade in fingernails (razor nails). Popular with female bodyguards and 'razorgirls'. Does 1 DC STR-powered killing damage.

Hand Blades TL: 6**Surgery:** M**Cost:** 3 OP**Humanity:** 5 (or 1D6+1)

Three blades are implanted in the hand, shooting out from between the fingers when the fist is closed and clenched with a simple neural command. Does 2 DC STR-powered killing damage.

Arm Blades TL: 6**Surgery:** MA**Cost:** 5 OP**Humanity:** 10 (or 3D6)

Three long (8 inch) blades are implanted in the arm, shooting out over the hand when sent a simple neural command. Does 3 DC STR-powered killing damage.

Monoedge Option TL: 6

Any blade can be given a monatomic edge. This doubles the OP cost and makes it armor piercing (AP).

Vibroblade Option TL: 7

At TL 7 the blades can be made to vibrate a hypersonic resonance. This makes the blades armor piercing (AP) and adds +1 DC of damage. OP cost is doubled.

Energy Blade Option TL: 8

At TL 8 the blades can be energy blades. These can last for 10 Phases of use, and double the list damage (above). They also double the OP cost.

Finger Mono-Whips TL: 6**Surgery:** M**Cost:** 3 OP (per)**Humanity:** 3 (per)

Finger mono-whips are monatomic filaments that can be shot out or retracted by mechanisms in the fingertip. The nearly invisible whip can extend to

three meters. All five fingers on each hand can be equipped with mono-whips making a total of ten whips. Each hand counts as a separate attack. Five whips would do five hits on the same target; damage is rolled separately for each whip, and the number of hits is resolved as per autofire rules. Each whip does 1 DC STR-powered killing damage.

Finger Myo-wire Whips TL: 7**Surgery:** M**Cost:** 6 OP (per)**Humanity:** 8 (or 2D6+1) per

This is similar to a mono-whip, but the myo-wire can also be strengthened with an electrical impulse to act as a long mono-blade. The whip can reach 3 meters, and the wire blade can be up to 30 cms. All five fingers on each hand can be equipped with myo-wire making a total of ten wires. Each hand counts as a separate attack. Five wires would be like five hits on the same target; damage is roll separately of each wire, and the number of hits are resolved as per autofire rules. Each whip does 2 DC STR-powered killing damage and is armor piercing (AP).

Biomonitor TL: 6**Surgery:** M**Cost:** 2 OP**Humanity:** 2

Monitors all body functions, such as EKG, EEG, blood pressure, respiration, body temperature, blood alcohol content, endocrine and adrenaline levels, injuries, and cybersystems. This monitoring gives a +2 to any medical diagnostic rolls. With a cybereye and an optical readout, you can call up a small display window which will show a diagram of your body listing vital states and any injuries.

Skeletal Strengthening TL: 6**Surgery:** CR**Cost:** 15 OP**Humanity:** 15 (or 4D6+1)

This process involves the strengthening of all major bones using a calcium/carbon laminate with titanium braces. This process requires extensive medical operations and about one month recovery time. Your weight also increases by 5 kgs. +2 to STR, +1 BOD, +1 CON.

Nanotech Skeletal Strengthening TL: 7**Surgery:** MA**Cost:** 16 OP**Humanity:** 8 (or 2D6+1)

Same as above, but nanites are used to construct the bone laminates, making the process much less traumatic, but a bit more expensive. It is also available only at TL 7 or higher.

EndoSkeletal Replacement TL: 7**Surgery: CR****Cost: 25 OP****Humanity: 25 (or 7D6-1)**

This process involves the replacement of all bones with metal (or ceramotanium, xenorilium, or whatever). This requires a major operation, even with nanotechnology, and a two month recovery time. Adds 10 kgs to your weight. +2 to STR, +3 BOD, +2 CON.

Bio-Enhanced MediBody TL: 6**Surgery: M****Cost: 2 OP per level****Humanity: 2 per level**

This modification is a built-in repair system. It includes EKG and EEG stabilizers, artificial coagulants, pain blockers, and other drugs. Each level gives +2 Hit point and +1 SD, up to 5 levels.

Nanite Repair System TL: 7**Surgery: M****Cost: 6 OP per level****Humanity: 3 per level**

Bio-repair nanites are introduced to your body. These nanites are able to repair damaged tissue quickly. They float in the blood stream and will accumulate like platelets on a wound. Once on a wound they will begin to mend the flesh back together using nutrients and proteins in the blood. They require that you consume more food than normal, and you may run a slight fever as they work. Each level gives a +2 to REC, but only for healing physical injuries (not STUN or END) and requiring 20% additional food intake while working to heal these injuries. Up to 3 levels at TL 7, and 5 levels at TL 8.

Subdermal Armor TL: 6**Surgery: CR****Cost: 10 OP****Humanity: 10 (or 3D6)**

Subdermal Armor is a type of body plating that is placed under the skin in vital areas. Vital areas are covered with plasteel plates, while joints and flexing areas are covered with a monoweave mesh. This gives 20 KD armor protection, but you lose -1 DEX due to the added bulk and inflexibility. The armor is under your skin, and requires a Competent Perception roll (DV 18) to notice it. At TL 7 there is no penalty to DEX. At TL 8 it takes a Heroic Perception roll (DV 22) to notice the armor because it is constructed of fleximorph metal, hardly half a centimeter thick.

Internal Oxygenation System TL: 6**Surgery: M****Cost: 1 OP per hour****Humanity: 3**

This modification gives you an internal oxygen supply which can supply your body for a give amount of time. The tanks recharge as you breathe normally. It takes two hours to recharge a one hour supply. It costs 1 OP per hour of oxygen available.

Bionic Organ Replacements TL: 6**Surgery: CR****Cost: 20 OP****Humanity: 18 (or 5D6)**

Most of your internal organs are replaced with bionic ones, including your heart, lung, liver, kidneys, spleen, and stomach. These cyborgans retain their full functionality; some are even better and stronger than the originals. You receive a +2 CON (increasing REC and END) and gain +10 Hits and +10 STUN.

HoloProjector TL: 7**Surgery: MA****Cost: 10 OP****Humanity: 8 (or 2D6+1)**

Ever see someone cast fireballs which do no damage, generate sparking fireworks or dancing balls of light? He was probably a techno-illusionist. Holusionists, technomages, they all go by different names, but the key to their power is holography - the art of creating hallucinations. A holoprojector is a laser-optical device implanted within a person's body. Small fiber-optic wires lead to the ends of his fingertips (usually), and from there can project their beams of interlacing light. They holograms are flawlessly realistic, but they are not real, only light. Consequently, they radiate light and 'glow in the dark,' a reason way light effects are the primary use of holoprojectors.

Most holoprojectors come with one hundred preset holograms (such as fires, light spheres, little faeries, etc.), which can be 'cast' at any time. It requires a Competent Perception roll (DV 18) to tell that the illusion is just a hologram, unless it is obviously fake. The holographer may program new images using the new skill Holography (which is TECH based).

On the practical side, a holoprojector can light dark areas. Enter a cave at night? Just cast a light sphere to follow you around, or keep a holographic fire burning in your hand. Better yet, just make yourself glow. Offensively, the holographer can fire a laser beam into someone's eyes, blinding them. The skilled used must be Holography (using REF as a base) and with a -6 modifier for shooting at the eyes.

A holoprojector uses a lot of power. It has a two hour power supply, which must be recharged for an hour.

HoloGrid

TL: 8

Surgery: CR

Cost: 15 OP

Humanity: 20 (or 5D6+2)

Similar to a holoprojector, a hologrid is a network of fiber-optic bundles with microscopic ends dotted across the body like pores. When activated, the hologrid can make holographically him take on another appearance.

This is more advanced than a simple holoprojector. A hologrid is able to compensate for ambient light and shadowing by lowering the intensity of the laser beams. In a very dark place, the hologrid is practically turned off, but this matters little because the person cannot be seen anyway.

Hologrids are generally considered illegal, as they can be used to masquerade as someone else. However, one-mode recreational versions are available at half price which make the person appear like some fictional character or cartoon. Black-market hologrids come with a memory core and digital holocorder. This enables a hologrid user to holographically copy a subject in seconds and load up his image patterns to the hologrid, thus taking on his or her appearance

A hologrid uses a lot of power. It has a one hour power supply, which must be recharged for half an hour.

HoloCloak

TL: 8

Surgery: CR

Cost: 25 OP

Humanity: 20 (or 5D6+2)

The ultimate in active cloaking, a holocloak is able to envelope its user in a holographic bubble which counter-projects the light around him. This works much the same way as a hologrid but has an active holocorder array, usually built in around the subjects neck or head, which records all light around him and downloads it to the projection buffer. A three-dimensional hologram is then generated to make the user seem invisible.

This effective invisibility also grants a +5 to Stealth, and everyone must make a Perception check against the user's Stealth (DEX+Stealth+5) to even spot him. A hologrid uses a lot of power. It has a one hour power supply, which must be recharged for half an hour. Use invisibility rules for combat.

Implanted Deflector Shield

TL: 7

Surgery: CR

Cost: 20 OP

Humanity: 20 (or 5D6+2)

Does it hurt to get hit by a 40mw plasma rifle? Sure it does. But we have the answer! Install an implanted deflector shield and kiss those energy beams goodbye. At TL 7 Implanted Deflector Shield provides 20 EKD (energy killing defense) against all energy based attacks. It uses a strong electromagnetic field

that can actually bend away lasers and charged particle beams! At TL 8, this is replaced by the more powerful Force Shield (below).

Deflectors use a lot of power. Because of this, a wise user will only activate them when necessary. It is neurally controlled, and takes no action to activate, but it must be declared during one of the player's turns (he cannot declare it when it is not his turn to act). It will remain active until he declares it is off or until it runs out of power. You cannot arbitrarily turn it on as a defensive act (out of turn), so be sure it is on before you go into a firefight. An implanted deflector shield has enough power to last 20 Phases (1 full minute), so be thrifty.

Implanted Force Shield

TL: 8

Surgery: CR

Cost: 30 OP

Humanity: 22 (or 6D6)

Does it hurt to get hit? Well stop it. The ultimate in discrete, personal protection is the cyber-implanted force shield system. At TL 8 an implanted force shield provides 20 KD against any attack (energy, projectile, or energy melee) but not physical melee attacks. A melee attack can still push through (fist, swords, knives, etc). At TL 9 it provides 30 KD against all attacks, and 20 KD against physical melee attacks. At TL 10 it provides 50 KD (1 Kill) total protection.

Shields use a lot of power. Because of this, a wise user will only activate them when necessary. Activation is neurally controlled and takes no action to activate, but it must be declared during one of the player's turns (i.e., he cannot declare it when it is not his turn to act). It will remain active until he declares it is off or until it runs out of power. You cannot arbitrarily turn it on as a defensive act (out of turn), so be sure it is on before you go into a firefight. An implanted force shield has enough power to last 20 phases (1 full minute), so be thrifty.

Anti-Gravity Implant

TL: 9

Surgery: CR

Cost: 40 OP (or more!)

Humanity: 20 (or 5D6+2)

An anti-gravity generator will surround the wearer in a field of gravity nullifying energy (electro-gravitic field, anti-gravitons, Podkletnov particles, whatever). This does *not* make you fly; rather, you become effectively weightless. You can push off the ground and float all the way up to space, if you are not careful. Fortunately, the field can be adjusted from "off" to "full" and all ranges in between. For instance, you could negate 1/6 of your weight and jump 6x as far, and bob around in 1/6th gravity (Lunar gravity). Or, you could go to full power and laugh madly in Newton's face.

This anti-gravity implant gobbles up power. Fortunately, at TL 9, it comes with Hawking

Singularity, so it provides its own power. Just don't open it up... If the GM rules this not to be so (or if it comes out a few TLs too early), assume it has a 10 minute power supply.

Implanted Teleporter

TL: 10

Surgery: CR

Cost: Up to GM

Humanity: Up to GM

When you absolutely, positively have to be there this instant. At TL 10 teleportation is everyday. It may be matter-transmissions (i.e., Star Trek), spatial distortion (i.e., warp walking), or by quantum teleportation (i.e., real science). Whatever the case, the effects are the same. You have a cybernetic implant which can jump you to a new place in an instant of time, though it may still be limited to light-speed. Matter transmission is light-speed, warp and quantum teleportation are more than likely extremely FTL.

To teleport, you must know where you are going. This could be to a specified receiving point (TeleStation 4058); that is, an address preset into the teleport. There could be millions of such address on a world, and in order for the teleporter to get there, he or she just plugs in the numbers. Alternatively, you can teleport to a geolocation by specifying the exact planetary (or galactic) coordinates. This is much harder, and requires Competent skill roll (DV 18) in Navigation or Astrogation. Failure means you are in big trouble. Teleporting into a rock is just no fun.

Implanted Stasis Generator

TL: 10

Surgery: CR

Cost: Up to GM

Humanity: Up to GM

Antimatter pod about to blow? Lord Kzaka's super-dimensional anti-everything cannon aiming down your bow? Just turn on your built-in stasis generator and freeze space-time around you! Instantly, an impenetrable totally-reflective bubble (a perfect sphere) will encompass you.

Of course, no stasis field is absolutely frozen in time; to do so would require an infinite discharge of energy, and, even if it were possible, you would then vanish from the universe. Instead, time passes at a 1 to 3600 ratio; that is, for every hour of real-time which passes, one second passes inside. A total conversion generator supplies the unimaginable energy required, but even this will only last for a day of internal time (a year of real-time). The system has a picosecond atomic clock built in, which can shut off the field after a preset time (or it will shut off in a year when the power runs out), this should be programmed by the user before he activates the field. Time will pass for him (at a 1 to 3600 ratio), and if he did not set the clock, he can turn it off or set it at any time (this takes 3 seconds, merely 3 hours of real-

time).

A stasis field is completely impenetrable by conventional TL 10 weapons. Advanced TL 10 weapons of unimaginable power might be able to do so, since anything which can destroy space-time could disrupt a stasis bubble.

A stasis field can only be used once; it must have its core dynostat matrix replaced after each use.

Implanted Temporal Device

TL: 10

Surgery: CR

Cost: Up to GM

Humanity: Up to GM

When you absolutely, positively have to be there yesterday (or tomorrow...). A temporal relocater device is a teleporter for time. It does not move you in space (unless you also have a teleporter), only up or down in time. Assume that you remain exactly where you are (the planet's gravity-well keeps you there, compensating for space-time expansion and planetary orbit), but you can transport yourself forward or backward in time from that physical point.

The nature of time travel is totally up to the GM. If he does not want time travelers, this implant should be disallowed.

Cybernetic Body

TL: 6

Surgery: CR

Cost: 50 OP

Humanity: 30 (or 8D6)

Your human brain is installed in a total cybernetic body. You are as close to being an android as possible. All your limbs and sensory organs must be cybernetic. You are a total cyborg, without the need to eat, drink, excrete, or breathe. You can not heal without repair, but have full immunity to all diseases and poisons, except for things that might effect the brain. The easiest way to build a cyborg body is to construct at 1/10 scale droid (or any scale, if you want) and implant a brain, using the Mekton rules. Or you can use the rules below.

Basic body has 6 STR, 6 BOD, 6 MOVE and 30 SDP and 5 KD of armor. This costs 50 OP and 30 Humanity cost. You may increase each characteristic (STR, BOD, or MOVE) by +1 for 4 OP and 2 Humanity, up to a max of 12. SDP can be increased at 1 per 1 OP and 1 Humanity, and armor at 1 KD per 5 OP and 2 Humanity, up to a max of 60. All other characteristics (INT, WILL, PRE, TECH, REF, DEX) are the same as that of the original person. You may buy options for you arms, legs, eyes, ears, etc., as normal.

For 3 OP and no Humanity cost, the cyborg body (torso, head, arms, legs, and all) can be shaped and rounded to look "in style." For 5 OP it can be covered with artificial skin (plastic skin). For 10 OP it can be covered with synthaflesh (cloned, artificial skin), making it at least appear perfectly human.

Optronics

Optronics are cybernetic devices that enhance the visual senses. Cybernetic eyes are available for those who want, or need, a mechanical eye replacement. Some modifications can be installed on a natural eye, and these are noted as lens implants. A human eye can have at most two different lens implants (per eye). A cybernetic eye can have up to four. So, for instance, if you had two cybereyes, you may have up to eight lenses (or cybereye options). If you want the same modification for both eyes, you must buy the option for both eyes. Some implants require a cybereye and cannot be implanted in a human eye. These are noted as Cybereye Options.

CyberEyes

TL: 6

Surgery: MA

Cost: 2 OP

Humanity: 5 (or 1D6+1)

This is a cybernetic eye replacement. The eye looks natural and is set to match the original eye, unless another color is desired. A cybereye may have four options (lenses or cybereye options).

You may choose a new eye color when you get cybereyes, including the popular solid chrome or gold appearance.

There are less expensive cybereye version available. These are mechanical 'borg-like,' external camera eyes. Price for these is 1 OP, but HC is 8.

Borg Optical Implant

TL: 6

Surgery: MA

Cost: 3 OP

Humanity: 10 (or 3D6)

These external multi-camera lens eyes look like something out of a sci-fi cyborg movie from the 1980s. They are easy to mistaken for the cheaper cybereyes (above), but don't be fooled! These optical implants are able to house up to six lens options instead of the usual four.

CyberEye Lenses and Options

Imaging Enhancer

TL: 6

Surgery: N

Cost: 1 OP per level

Humanity: 0.5 per level

This cybereye option is an implanted image enhancing system. IE adds a bonus to visual rolls as it makes it easier to see details. Each level gives a +1 to all vision related Perception rolls. You may get up to five levels. This can only be installed in cybereyes.

Optical Readout

TL: 6

Surgery: N

Cost: 1 OP

Humanity: 1

This displays cybernetics, weapons links, and biomoniter data in a display window that appears to the right of the wearer's vision. It does not come in a lens form and can therefore not be implanted in a natural eye. It can only be installed in a cybereye.

3-D HUD Optical Readout

TL: 7

Surgery: N

Cost: 4 OP

Humanity: 4

This is the new optical readout system. It can display biomoniter data, ALU chip equations and graphs, thermograph vision, etc., all in a windowed format. The windows are placed in various locations in the user's vision. They appear as boxes floating in the air several feet away. These windows can then be moved around to where ever the user wants them to be. He can also expand and shrink the size of the window. He can even go as far as making the entire horizon a huge window of his biomoniter data, or create a thermal image viewing window. It does not come in a lens form and can therefore not be implanted in a natural eye. It can only be installed in a cybereye.

Auto-Chrome

TL: 6

Surgery: N

Cost: 3 OP

Humanity: 2

This is an implanted lens that prevents the wearer from being blinded by light. When a bright light flashes or a laser beam strikes the eyes, it will "chrome out" causing the light to be reflected. This is why in most flash camera pictures people with this lens appear to have glowing eyes. Otherwise the eyes look normal. Basically, with auto-chrome you cannot be blinded by flashes or lasers. This can be installed as a lens in natural eyes.

Amps (light amplification)

TL: 6

Surgery: N

Cost: 3 OP

Humanity: 1

This implanted lens amplifies all available light when in 'starlight' darkness. It allows you to see without penalty in darkness. However, it can not work in total darkness; there must be some ambient light present. Auto-chrome is recommend to prevent sudden exposure to light. This can be installed as a lens in natural eyes.

Thermograph TL: 6
Surgery: N
Cost: 4 OP
Humanity: 4

This implanted lens allows you to detect infrared light and varying degrees of heat. No penalty for darkness, even total darkness; however, your view of the world is somewhat abnormal, so it might take some getting used to. It also grants a +3 to see living beings during the day and adds modifiers to tracking skills (+5 if the trail is 10 minutes old, +2 if 20 minutes old, +1 if 30 minutes old, etc). With the 3D-HUD ORS, you can make a floating window of the thermographic picture while background is normal optical vision. This can be installed as a lens in natural eyes.

Microscopic Vision TL: 6
Surgery: N
Cost: 3 OP per level
Humanity: 2

Each level doubles the magnification of objects, up to six levels. Level 1 = x10, Level 2 = x100, Level 3 = x1000, etc. Only available for cybereyes.

Telescopic Vision TL: 6
Surgery: N
Cost: 3 OP per level
Humanity: 2

Eyes can zoom in on object that are at a distance, up to six levels. Level 1 = x2, Level 2 = x4, Level 3 = x8, Level 4 = x16, Level 5 = x32, Level 6 = x64. Only available for cybereyes.

Ultra Violet TL: 6
Surgery: N
Cost: 3 OP
Humanity: 4

This implanted lens allows your eyes to interpret UV light. Vision is normal within 30 meters. For every 5 meters away from this maximum, the vision roll is at a -1 unless there is a powerful UV source available. This implant can be installed as a lens in natural eyes.

Active UV TL: 6
Surgery: N
Cost: 5 OP
Humanity: 5

This cybereye option is just like the above, accept it comes with active UV light projectors. Vision is normal, even it total darkness. However, others who can see UV will see your eyes glowing bright violet. This is only available for cybereyes.

Retinaprint TL: 6
Surgery: N
Cost: 6 OP
Humanity: 6

This can store up to 10 different retinaprints of other people. You can obtain prints by looking into the person's eyes and taking a 'snap-shot.' This is illegal, however, because it can be used to fake the ID of some one to get past a retina-scan lock. More memory storage can be added. Each additional print of storage cost 1 CP. This is only available for cybereyes.

VideoCamera TL: 6
Surgery: N
Cost: 2 OP
Humanity: 2

This is digital camera installed inside a cybereye. It can record up to 1 minute of video or 1000 snap shot images. For each extra minute and 1000 stills, the cost is +1 OP. At TL 7 the capacity is x3. At TL 8 the capacity is x10. This modification is only available for cybereyes.

Audiotronics

Audiotronics are cybernetic devices that enhance the sense of hearing. Cybernetic ears are available to those who want or need a mechanical ear replacement. All mods below can be installed in a natural ear; however, a natural ear can have only one modification per ear. A cybereal may have up to six options.

CyberEars TL: 6
Surgery: MA
Cost: 2 OP
Humanity: 5 (or 1D6+1)

This is a cybernetic ear replacement. The ear looks natural and is set to match the original. Any of the audio enhancements below are available, but a cybereal can have up to four additional options. There is a less expensive cybereal version available. It is mechanical, external, and inhuman looking. The price for this cruder version is just 1 OP, but HC is 7.

CyberEar Options

Acoustic Enhancer TL: 6
Surgery: N
Cost: 1 OP per level
Humanity: 0.5 per level

This is an implanted hearing booster. The acoustic enhancer gives a +1 bonus per level to hearing Perception rolls. You may get up to five levels.

Parabolic Hearing TL: 6

Recovery: 2 days

Surgery: N

Humanity: 1 per level

This is the ability to zoom in on a particular sound. Each level of Parabolic Hearing doubles the range a certain sound can be heard, up to three levels. You are also able to discern the direction from which the sound originated.

Radio Wave Hearing TL: 6

Surgery: N

Cost: 3 OP

Humanity: 4

The user can pick up radio signals in the air, such as long-waves, radio-waves, short-waves, and microwaves. With the receiver's built-in radio band decoder, the user can change channels, listen to broadcasts, and so on. It will not decode scrambled signals, only standard radio signals.

Subsonic Hearing TL: 6

Surgery: N

Cost: 2 OP

Humanity: 1

User can hear in subsonic frequencies. Range is one block.

Ultrasonic Hearing TL: 6

Surgery: N

Cost: 2 OP

Humanity: 1

User can hear ultrasonic frequencies. Range is 1 kilometer.

Audio Recorder TL: 6

Surgery: N

Cost: 2 OP

Humanity: 2

This is digital audio recorder. It can record up to 1 hour of audio. Each additional hour costs +1 OP. At TL 7 the capacity is x3. At TL 8 the capacity is x10.

Other Senses

These are other senses that cannot be categorized as hearing or vision. They are somewhat alien, beyond the scope of human perception, but with the right modifications have been adapted to useful cybernetic enhancements.

Lidar TL: 6

Surgery: MA

Cost: 5 OP

Humanity: 6 (or 1D6+2)

The user has a complete laser radar image of his area. No vision penalties for anything except objects that block the view. Lidar or laser receivers can detect the user.

Sonar TL: 6

Surgery: MA

Cost: 5 OP

Humanity: 5 (or 1D6+1)

Same as lidar but with sonar instead. Uses ultrasonic pings to image the area. Detectable by ultrasonic hearing or sensors. It cannot be jammed, but a loud noise will disable it for 1D6 seconds.

Electro-Field Sensors TL: 7

Surgery: M

Cost: 5 OP

Humanity: 8 (or 2D6+1)

This modification enables a user to see electromagnetic fields. He automatically has the Direction Sense talent while on a planet because of the electromagnetic fields. He can also see electromagnetic fields and tell if an electronic device is operating.

Mass Spectrometer TL: 7

Surgery: M

Cost: 4 OP

Humanity: 10 (or 3D6)

A small mass spectrometer is implanted in your sinus cavity. It can sense and analyze any substance in the air. By itself, it adds a +2 to the Science: Chemistry skill for identifying substances, but only if the substance is gaseous or has an odor. If the spectrometer is connected to an optical readout, the readout will display a listing of the substance's chemical make-up.

Multi-Sensor Array TL: 7

Surgery: MA

Cost: 15 OP

Humanity: 15 (or 4D6+1)

This is a small sensor pack installed in your chest cavity. This sensor array can scan using all known methods, such as radar, sonar, ultrasonics, thermograph, X-ray, optical, laser, and spectrography, to generate complex data on anything being scanned. It can tell size, mass, molecular configuration, temperature, interior layout, and it can identify the object if it is listed in the database. This cyber-version sends all collected information directly to the user's brain.

You must still make an Everyday System Operations (Multi-Sensor) roll (DV 14) to understand the information. If an object is being scanned, information on its mass, volume, density, molecular make-up, metallic properties, EM field properties, temperature, texture and interior/exterior shape will be provided if the roll is a success. If an area is being scanned, a picture and map of the area is generated in the user's mind, and the location, speed, size, and mass of every object within a one hundred meter radius is also provided.

If the user has cybereyes with an optical readout, he may switch to 'multi-view.' What he sees is a full 3-D rendering of everything within view. He could look through or into vehicles, walls, or other objects. Nothing should be able to escape his omniscient vision (+5 Perception). There are no penalties for darkness, smoke, fog, or any other condition. If the user is trying to see something cloaked, invisible, or protected by EMC, this is resolved as per the appropriate ECM conflict rules.

This unit has a built in power cell that must be replaced once a day or recharged for two hours.

Communications

These are cybernetic enhancements which allow a character to better communicate, either vocally or by radio/comm transmission.

Implanted Comm **TL: 6**

Surgery: M

Cost: 3 OP

Humanity: 2

The user can broadcast on any comm frequency out to five hundred kilometers. Speech is subvocal, and audio is piped to the inner ear. +3 OP to add a scrambler/decoder.

Implanted Cellphone **TL: 6**

Surgery: M

Cost: 2 OP

Humanity: 3

This is a cellular telephone implant, which allows the user to call any phone number over cellular systems he Note that the user must pay for cellular service separately. Speech is subvocal and audio is piped to the inner ear. +3 OP to add a scrambler/decoder.

Datalink **TL: 6**

Surgery: M

Cost: 2 OP

Humanity: 2

This is a broad-band computer datalink. It enables the user to relay and receive data from the datalinked system (i.e., send what he sees or receive what they see) . It can relay data or images remotely from a drone, droid, vehicle, etc. Range is 500 km. This is *not* a neural computer interface. The signal is just video/audio I/O.

Satellite Up-link **TL: 6**

Surgery: M

Cost: 5 OP

Humanity: 5 (or 1D6+1)

This system is similar to a datalink link combined with a satellite tracking system. With this you can call or broadcast anywhere in the world and even to orbit or other planets in the system if you also have an Implanted Comm. If you have clearance, you could even control a satellite using this uplink.

Orientation System **TL: 6**

Surgery: MA

Cost: 4 OP

Humanity: 3

In order to use this system, you must have an optical readout in your cybereyes. The Orientation System consists of a small, external datachip jack and a mapping unit that displays to your optical readout. Data for the orientation system is via a mapchip. Mapchips can be a basic street city map (1 OP), a city map with streets/sewage/electrical/maintenance access ways (2 OP), or an intricately detailed building (2 OP, subject to availability). The orientation system gives you a complete map of the area so you always know where you are until you leave the area mapped in the chip, effectively granting Direction Sense.

If this is linked to a datalink (i.e., to the Internet) or satellite up-link, you may have complete access to maps for millions of buildings. There is, however, a yearly SatLink charge of 5 OP for this link-up, but you can use it on any civilized world with a compatible satellite network and map database system.

Subsonic Voice **TL: 6**

Surgery: M

Cost: 2 OP

Humanity: 2

You can speak in the subsonic range. Only those with Subsonic hearing can hear your voice. Range is about one block.

Ultrasonic Voice **TL: 6**

Surgery: M

Cost: 3 OP

Humanity: 3

You can speak in the ultrasonic range. Only those with Ultrasonic hearing can hear your voice. Range is about half a mile.

Voice Synthesizer **TL: 6**

Surgery: M

Cost: 2 OP

Humanity: 3

The voice synthesizer allows you to mimic any voice pattern recorded onto the synthesizer's memory. It can store up to ten voices.

Silver Tongue **TL: 7**

Surgery: M

Cost: 3 OP

Humanity: 3

This works similar to a synthesizer, but is far more subtle. When you speak, your voice carries a harmonious, subsonic tone which humans find pleasing. This can be modulated to provide effects ranging from a dramatic, awe-inspiring voice for speeches, to a soft, blissful tone for singing. In effect, this modification grants a +1 to PRE.

Radio Jammer

TL: 6

Surgery: M

Cost: 3 OP per level

Humanity: 2 per level

A radio jammer can distort or scramble radio signals by sending out bursts of radio interference. As an implanted device, you can activate or deactivate your radio jammer at will. For every level, the radio jammer has a 10 meter radius and gives a -1 penalty to anyone sending or receiving a radio message. At the -4 level, most messages sound like static, but a skilled operator can cut through the noise by using his skill at a -4 penalty.

Bug Jammer

TL: 6

Surgery: M

Cost: 4 OP per level

Humanity: 4 (or 1D6) per level

A bug jammer is specifically designed to cancel the ability of any 'bug' spy device used for surveillance. Note that it is possible that the bug can tell when it is being jammed, this is not necessarily true for all cases. For each level, the bug jammer has a 4 meter radius.

Active Radar ECM

TL: 6

Surgery: MA

Cost: 5 OP per level

Humanity: 4 (or 1D6) per level

A radar ECM is used to scramble active radar signals by filling the air with a haze of static noise, making it harder to pinpoint the target. It is usually quite obvious to the radar operator that he is being jammed. For every level the radar ECM has a 10 meter radius and gives a -1 penalty to anyone attempted to track or lock on to the protected target, including the use of electronically guided weapons, such as radar guided missiles. At the -4 level, a radar guided missile will be at -4 to hit you. Most other missiles will, of course, be unaffected.

Active Sensor ECM

TL: 7

Surgery: MA

Cost: 5 OP per level

Humanity: 2 per level

At TL 7 a more advanced ECM system comes along. A sensor ECM (or SCRM) can distort and scramble any active sensor signal by countering the active 'pings' with electronic, thermal, EM, and radiation haze. For every level, the SCRM has a 10 meter radius and gives a -1 penalty to anyone trying to scan or lock on to the protected target.

Neurotronics

Neurotronics are microchip implants wired directly into the brain. The chips listed below act as an extension of the brain, giving users the advantages and disadvantages imposed by the chip. Optionally, the chips may be external and removable, which requires a chip slot on the side of your head, usually near the temple or behind the ear. This external chip slot cost 2 OP (8 days recovery time). Such quick-chip neurotronics can be easily removed or added.

Unlike *Cyberpunk*, these chips do not require you to have some sort of basic CPU processor to 'interpret' the data. It is assumed that neuro-cybertechnology is refined enough that the neuro-electrical connections are compatible with your brain and nervous system, operating with their own independent signal interpreter. If you'd rather use *Cyberpunk's* cyberware, then play *Cyberpunk*.

Psychiatric Implants

TL: 6

Surgery: MA

Cost: varies

Humanity: 3

This implanted chip can add or remove a single psychological complication, personality trait, or compulsive behavior. However, each chip gives a -1 to INT. The chip's OP cost equals the OP value of the complication - 5 OP. At TL 7 the -1 INT problem has been resolved, but it does not cost - 5 OP less.

Berserker Chip

TL: 6

Surgery: MA

Cost: 3 OP

Humanity: 5 (or 1D6+1)

This gives the user the Berserker personality trait; however, it is controllable. The chip can be programmed to 'set off' on a certain condition or spoken word, such as the word "flowers" or "squirrel" or if the user sees a cat, a tree, etc. Any Intensity level (mild, strong, severe, etc.) may be taken for no change in cost; this is simple a function of its design.

Dork Chip

TL: 6

Surgery: MA

Cost: 1 OP per -1 to INT

Humanity: 5 (or 1D6+1)

This reduced the user's INT by a given amount. The cost is 1 OP per -1 INT. This is often implanted in slaves.

Meta-REM Chip TL: 6
Surgery: MA
Cost: 4 OP
Humanity: 5 (or 1D6+1)

You need very little sleep because your EEG is regulated to make up for the loss. You only need about six hours of sleep each week. On the down side, you are a Light Sleeper.

Pain Buffer Chip TL: 6
Surgery: MA
Cost: 3 OP
Humanity: 3

Probably the single most popular chip around. The body's pain sensors are numbed, so the user does not feel as much pain and shock when he or she takes damage. In game terms, the user receives the High Pain Threshold Talent. Reduce the effects of Stun damage by 2 (even for killing hit) and the effects of impairing wounds by 2.

Arithmetic Logic Unit TL: 6
Surgery: MA
Cost: 6 OP
Humanity: 5 (or 1D6+1)

Popular with students and engineers. This is a chip that has an on-board clock and timer accurate to the picosecond. You always know exactly what time it is. It maybe used as an alarm clock or timer. This chip can also function as an advanced floating-point scientific calculator. It gives the user the Time Sense and Lightning Calculator Talent and can do almost all types of math, including graphs, advanced calculus, and matrices. With optic readout it can display equations and graphs.

Coordination Chip TL: 7
Surgery: MA
Cost: 7 OP
Humanity: 5

This chip gives you the ability to fully coordinate your body and balance. You have a +3 to any DEX roll to keep balance, useful for skills such as climbing, acrobatics, and athletics. This chip also gives Ambidexterity.

Eidetic RAM TL: 6
Surgery: MA
Cost: 3 OP
Humanity: 4 (or 1D6)

This chip lets the user record what he or she sees and senses, effectively granting the Eidetic Memory Talent, but this device can only store up to a day's worth of memories.

Neural Operating System TL: 7
Surgery: CR
Cost: 6 OP
Humanity: 10 (or 3D6)

This amazing new chip is an operating system for the brain. Using 1 terabyte RAM, it lists all your memories and knowledge in an advanced file structure. When you want to remember something, the chip knows where it is stored in your brain and finds it. In effect this chip grants Eidetic Memory and gives a +1 INT. If the chip is destroyed or removed, you loss all memories and have total amnesia.

Boosted Reflexes TL: 6
Surgery: MA
Cost: 4 OP per level
Humanity: 8 (or 2D6+1) per level

This is a complete neural rewiring done to your nerves by swarms of microscopic surgeon nanites. It greatly increases the speed at which instructions pass through your body. Each level of Boosted Reflexes gives you a +1 to REF, which also increases your SPD. You can only have level 1 at TL 6. At TL 7 there are 2 levels, and at TL 8 you can get up to 3.

Reaction Accelerator Booster TL: 6
Surgery: MA
Cost: 4 OP per level
Humanity: 8 (or 2D6+1) per level

The Reaction Accelerator Booster Implant (RABI) is another reaction accelerator chip that can enhance a user's response time. Each level of RABI increases your SPD by +1, allowing to you move and react much faster. At TL 6 you can only get level 1. At TL 7 there are 2 levels, and at TL 8 you can get up to 3. However, TL 6 RABIs have an unknown bug; they give the user the Complication Epilepsy (Severe[15], Uncommon), occasionally throwing the user to a fit of spasms and shakes. At TL 7 this side effect has been eliminated.

Combat Reflex Booster TL: 7
Surgery: MA
Cost: 6 OP
Humanity: 10 (or 3D6)

Derived from the same technology as Boosted Reflexes and RABI, the Combat Reflex Booster is an auto-response neural feedback system which allows the user to automatically react to danger. In game terms, this gives the Blind Reaction advantage and level 2 Combat Sense (if you already have combat sense, it adds +2 levels). You are also a Light Sleeper. However, CRB users suffer from mild Berserker rage. At TL 8 the Berserker rage has been eliminated, although the user always remains somewhat edgy.

Skill Chips

TL: 6

Surgery: MA

Cost: 1 OP per level

Humanity: 1 per level

A Skill Chip give the user a skill as long as it is installed. It gives +1 point in the skill for every level, up to a max of three levels (up to +3 in the skill). At TL 7 this maximum is increased to +5. This chip will override, not augment, an existing natural skill of the same type. You may have as many skill chips as equal to your INT. Many people have a bag full of skill chips and an external chip slot for quickly clipping in an clipping out the chips. Note that this cybernetic device works differently than similar ones in *Cyberpunk*.

Data Chips

TL: 6

Surgery: MA

Cost: 1 OP

Humanity: 2

Data Chips are ROMs that hold information. They are accessed as if they were a "on-line" manual or book, complete with indices and pages. It may take several seconds to locate a specific piece of data.

A few of the available chips are:

The Complete Works William Shakespeare

A modern law book

A world telephone directory

Encyclopedia Britannica

Emotion Chip

TL: 6

Surgery: MA

Cost: 3 OP

Humanity: 10 (or 3D6)

An Emotion Chip gives you a constant emotional feeling. Any emotion is available, from bliss to anger, from love to fear, from excitement to hatred. Only one emotion can be accessed per chip, and you cannot have more than one turned on at a time. It may be activated at will. While chip is off you feel emotions normally.

Null-Emotion Chip

TL: 7

Surgery: MA

Cost: 3 OP

Humanity: 10 (or 3D6) +1 per level

Have too much Humanity? Want to be on the side of the Machine, or join the latest Cyber-Goth cult? This quickest, cheapest, best way to lose Humanity in a hurry. A variation of the Emotion Chip, this device prevents *any* emotions from occurring at all. You are totally emotionless. On the positive side, you never react emotionally to any situation, keeping a calm, purely intellectual perspective at all times. On the down side, you lose a lot of humanity. As a option, you can even lose more. For every 5 additional points of HUM lost, the cost of the chip is +1 OP. So a -30 HUM Null-Emotion Chip would cost 7 OP (30 / 5 = 4 + 3 OP).

Empathy Chip

TL: 7

Surgery: MA

Cost: 5 OP

Humanity: 5 (or 1D6+1)

This is a more advanced form of the Emotion Chip. The Empathy chip allows the you to select any emotional state, including none at all. If you are angry, you can select calmness. If you are sad, you can easily cheer up. This chip allows a user to negate any emotion he or she is currently having, replacing it with a new one whenever he or she wishes it. The effect is that you can never really be upset or hatefully angry, unless, of course, you want to. You are in full control of your emotions, which effectively gives you a +1 to PRE.

Humanity Emulator

TL: 7

Surgery: MA

Cost: 1 OP per point

Humanity: +1 per level up to 5 HUM

The Humanity Emulator is a chip which actively gives the user an artificial personality. Each level gives a +1 to Humanity! This can cover, but not solve, the effects of humanity damaging implants. The Humanity Emulator can only emulate humanity to a limited point. The maximum characteristic score that a Humanity Emulator can support is up to Humanity 5. A person with a HUM of 12 who gets five levels of Humanity Emulator will *not* have a 17. However, if person who has a HUM of -10 gets 15 levels, it will bring him up to HUM 5. You're still cold and distant to humanity, but at least you're not a cyber-psychopath.

Memory Implant

TL: 6

Surgery: MA

Cost: varies

Humanity: 5 (or 1D6+1)

These are chips that allow you to have an certain set of experiences (i.e., go on vacation somewhere). A 1 hour tour of Yosemite, for example would cost 2 OP; a day trip on a luxury cruse would cost 4 OP. A week as a secret agent on Mars would cost 8 OP. A vacation with your favorite neurovid stars costs 10 OP. The memory stays as long as the chip is in. You will recall the trip or vacation as if you had really been there.

Cranial Computer

TL: 6

Surgery: CR

Cost: varies

Humanity: equal to OP of computer's cost

This is a small computer implanted in cavities within the skull. It is directly tied to the brain itself, making it a direct neural interface link (see Neural Computer Interface). Because the head cannot hold anything over 1 kg, the computer must be smaller than this. Thankfully, the final weight of the computer is half the listed weight because the cranial computer does not

come with a case or display screen or keyboard.

The computer should be built in accordance to the computer rules for your gameworld (*Cyberpunk*, *Bubblegum Crisis*, etc.). If no such rules exist, you should adapt them or discard this modification. OP cost should be translated from the computer's final cost, and the cost of implanting it is equal to 2x this cost (in money). Humanity cost is equal to the computer's OP cost.

BattleComp

TL: 6

Surgery: CR

Cost: 10 OP

Humanity: 14 (or 4D6)

A small battle computer is installed in the base of the neck. If the wearer is knocked out, but not too badly messed up (reduced to negative 2xBODY in HITS--in other words, dead), the battlecomp will kick in. It will fight with all the user's skills at the current level and will not go into total Berserker mode until the eyes are destroyed (Extreme Berserker). Unlike the Berserker Chip, though, the battlecomp will fight logically. It is unaffected by pain or emotions and has no memories of the former person. Be warned, however, that the computer cannot tell the difference between friends or foes....

AI BattleComp

TL: 7

Surgery: CR

Cost: 20 OP

Humanity: 20 (or 5D6+2)

Similar to the battlecomp but with an AI. Interfaced with the AI, the user has instant access to the computer's skills. Military AIs typically have expert systems with skill of +4 in Tactics and Strategy, and detailed databases on equipment and enemy information. Other skills (such as weapons, demolitions, driving, etc.) can be wired in with a +1 for +1 OP per level, up to +5. The computer can be plugged into most civilian and military vehicles to serve as the pilot, or it can be linked into a communications system or computer net. The AI does not have an independent personality.

When the AI BattleComp is installed, it becomes part of the user's mind. When the user is knocked out, it will act like a normal battlecomp, though it will know friend from foe and will not act in a self-destructive manner. It cannot be used to retain memories.

Braincorder Implant

TL: 8

Surgery: CR

Cost: 30 OP

Humanity: 20 (or 5D6+2)

The ultimate insurance policy, a braincorder implant is a neural-net micro-supercomp usually implanted in the torso in a tough shell (20 KD, 40 SPD). Wires run up through the spine and lace the brain with a

nanoscopic weave of neuro-sensitive tendrils. Through these sensors the braincorder is able to keep a continuous copy of the subject's neural patterns (his mind), including memories, thoughts, skills, emotions, etc. If the person is killed and the Braincorder is still intact, its recorded data can be downloaded into a neural-net computer matrix or a new clone body for an instant resurrection.

Braincorder Remote Link

TL: 8

Surgery: MA

Cost: 40 OP

Humanity: 20 (or 5D6+2)

This is the same as above, but instead of the Braincorder story the data inside the user's torso, the neural signals are transmitted to a Braincorder bank. This information could be stored at a commercial brain-bank for a monthly service charge or at your private remote braincorder at home (or in your ship or vehicle). Even if your body is totally destroyed, the brain record will not also be destroyed and is easily recoverable. However, your brain signal could be jammed or even intercepted, and if the place where your braincorder is stored gets destroyed....

Total Mind Transplant

TL: 8

Surgery: CR

Cost: 20 OP

Humanity: 20 (or 5D6+2)

This is not a brain transplant or an implanted chip. Rather, a braincorder is used to re-write the neural patterns in a brain to suit the neural-net matrix where the copy of the other mind is stored. This overwrites whatever personality was in that brain (if any), and the new mind takes over. The body's DEX, CON, STR, BODY, and MOVE remain the same, and the braincorded mind's INT, WILL, PRE, and TECH are used. REF is the average of the body and mind's REF scores, plus any cyberenhanced REF modifiers.

Neural Interfaces

These neural interfaces are the command/control processes for translating data to neural commands, images, signals, and impulses. You must also buy one or more Neural Interface Plugs (see below), as well as the Interface chips for the desired features.

Neural Computer Interface Chip TL: 6

Surgery: MA

Cost: 4 OP

Humanity: 1

This popular chip allows a human and computer to directly interface. A computer user basically becomes "one with the machine". Effects vary depending on the gameworld, but the default effects are +2 to all computer skills.

Neural Vehicle Interface Chip TL: 6

Surgery: MA

Cost: 5 OP

Humanity: 1

This chip gives its user direct neural control of a vehicle. Any vehicle can be neurally controlled, including cars, jets, mecha, and battlesuits. By default, this grants a +2 to the skill (or skills) to control the vehicle, but this bonus may vary from gameworld to gameworld. If weapons are an integrated component of the vehicle, such as with mecha, you have a +1 AV to use these weapons. The cost of making the vehicle neurally controllable depends on the gameworld.

Neural Tech Interface Chip TL: 6

Surgery: MA

Cost: 3 OP

Humanity: 1

This chip gives its user direct control over heavy machinery, diagnostic equipment, scientific equipment, or any TECH related unit which has a compatible interface system. This direct control gives a +2 to operate that machine (+2 TECH skills) when linked.

Smart-Targeting Interface Chip TL: 6

Surgery: MA

Cost: 3 OP per level

Humanity: 5 (or 1D6+1) per level

In order to use this chip, you must have both a cybereye and a smart-link on the gun. The smart-link system on the gun acts as an active location tracking system, so you see via your cybereye a targeting cross-hair in front of you which tracks with where the gun is pointing. Each level of STIC (up to 3 levels at TL 6) grants a +1 WA. At TL 7 you can have up to level 4; each additional level of technology increases this maximum level by one. The gun must also have

a smart-link interface (cost varies per gameworld, but assume at least a +2 OP cost).

Neural Interface Plug TL: 6

Surgery: M

Cost: 1 OP

Humanity: 2

You may have all the Interface chips you want, but to use them you must have one or more interface plugs. This is the external socket where a neural device is connected, by wire or direct contact. Usually plugs are installed in the wrist, palm (for Smart-weapons), temple, behind the ear, but conceivably they could be placed anywhere. One plug can serve all the interface translation chips, but only one at a time. To use more than one interface at a time, you will need multiple plugs.

Wireless Interface Plug TL: 6

Surgery: M

Cost: 2 OP

Humanity: 3

Same as above, but this device is internal and completely wireless. There is no plug at all; the signals are sent by an IR or RF signal.

BioTechnology

BioTechnology

Biotechnology is a set of sciences concerned with using technology to manipulate or create life. Cloning, gene-splicing, viral engineering, and genetic engineering are all biotech sciences in common practice today. Imagine what biotech science we will have 300 years from now!

Like all sciences, biotechnology has its roots in the distant past. Thousands of years ago, the first microbes were used for fermentation, and man began the practice of controlled breeding and cross breeding of animals to create more domestic and better-suited breeds.

Until the 20th century, that was pretty much the extent of biotech. Indeed, much progress our knowledge of germs and Darwinian evolution was made in the 18th-19th century, and who can forget the eye-opening Gothic horror novel written by a young English girl, but true biotechnology did not arise until after the 1950s. And the true Frankenstein scientist did not make their appearance until the early decades of the new millennium....

Alternate Worlds

It is possible that in a more fantastic setting, biotech could arise in TLs far earlier than TL 6. The obvious setting is TL 4, where mad German scientists go about creating monsters and mayhem. In a truly evolved Frankensteinian world, the Mysterious Science which Frankenstein used to resurrect his creation might well be refined and perfected. Remember, it was not Victor's intention to create a monster. It was Victor's dream to extinguish death. By creating life from dead matter, he believed he could use such alchemy to insure immortality and even built a better human. Victor stated quiet clearly that it was his intention to create a human being of gigantic stature, massive strength, great speed, and limitless mobility--a true super-man who transcended humanity. His creation was a monster only because he shunned it.

But if Victor had succeeded, and if he were able to introduce his life-giving alchemy, the world might well be at TL 8 biotech in a TL 4 setting.

Cloning

Cloning is the process of replicating a single or multi-cellular organism, resulting an exact duplicate. Single-celled organisms do this all the time in asexual reproduction. Most multicellular organisms do not. It is possible with late TL 5 genetic engineering to create a clone of a large organism, a sheep, for instance, by transplanting a cellular nucleus into the nucleus of a fertilized egg and then placing this resulting egg back inside the mother sheep. The resulting organism will be an exact duplicate of the original nucleus donor. Obviously, this process is extremely primitive, but over time it will be refined and improved (assuming those ignorant morons in Washington don't outlaw it! Sorry, but I just can't stand politicians who so blind they... ah, never mind.)

TL 6 cloning offers several major breakthroughs. The most obvious is self-duplication. This is not, however, entirely feasible at TL 6. This is not to say it is impossible at TL 6 (or even TL 5); it is just not worthwhile and is probably illegal. The clone body will be a completely new individual, a baby twin. At TL 7 it is possible to make a full brain transplant, and at TL 8 to transfer memories into a new brain using a braincorder.

The greatest benefit of TL 6 cloning is in food production and medical science. It is conceivable for certain highly successful breeds of plant or farm animals to be cloned, so as to optimize food production. Medically, however, the benefits to humans is much more rewarding.

With cloning technology, a complete individual does not need to be grown. Through controlled culturing and guidance of cellular growth, it would be possible to grow various independent body parts in growth tanks. Fruitful research in skin cloning is already underway today. In the future, not only will it be possible to grow replacement skin for burn victims, but new organs and replacement limbs as well. The need for cybernetic prosthetics may never be developed if biotechnology outstrips cybertechnology.

At TL 6, organs and limbs take several weeks to grow. Skin can be grown in days; a simple organ, such as a liver or kidney, in three weeks. A limb or complex organ, such as heart or lung, will take upwards of six weeks. A full human body would grow normally and would probably be implanted in a surrogate mother. However, in late TL 6 it might be possible to grow a child in a growth vat. This would still take nine months to incubate, and then the child would grow and live as any normal person.

By TL 7 accelerated growth vats have been developed. With these, it takes only a week to grow simple organs and three weeks to grow complex organs and limbs. A human can be completely grown to adulthood in one year. However, the technology for 'memory transfer' still does not exist. It is possible, at TL 7, to actually transplant a brain into a new clone body. The brain will still age, and die after 100+ years, but the body will be as young a vibrant as ever. Fortunately, at TL 7, technology for mental programming is available. Through hypnotic programming, drugs, and virtual reality, it is possible to program a force-grown human to a limited extent. These humans would not be fully developed people, more than likely having a 'robot' mentality. In an alien or fascist society, such people would probably be soldiers, genetically superior warriors given basic communications, survival, and fighting abilities. On the other hand, it would also be possible force grow and program a person for any task or job, from waste reclamation to nuclear engineering. That programmed task would be the only thing they were capable of doing, however, unless they learn other skills on their own.

At TL 8, the forced growth of body parts takes just days, and a new human body can be grown in a month. The technology for braincording and mind transfer now exists, opening up never before imagined dreams of perfect immortality.

At TL 9 and 10, everyone is pretty much unaging anyway. It is hard to imagine biotech at this stage of development, but living machines of cellular metalloids and radically new organic bioprocesses could be emerging or even perfected.

Mind Cloning

In bad sci-fi movies, people are often cloned and magically retain all of the original's memories, skills, and personality, up to the point of their death. This is flatly absurd, and not even the dumbest person on Earth should fall for that that stupid notion. Not even in a super-cinematic, most unrealistic adventure should this nonsense be tolerated.

Let me step off of my soapbox and continue. At TL 8 braincording is introduced (at TL 7 it might be extremely experimental). Basically, braincording is a process where the state and formation of every neural synapse in the frontal lobes and cranium are recorded into a digital form, and stored in a database, or 'brain bank'. From here, the mind may be transferred to a complex neural network or be used as a foundation to build a complex neural network, virtual or physical, where the personality reawakens as a computer, often referred to as a 'ghostcomp.' This ghostcomp could then become an AI or be loaded into a droid.

Alternatively, the braincording could be played back into a 'clean' brain. That is to say, if a

person dies and his mind were stored in a brainbank, all his family or friends have to do is get his body cloned and have his braincording downloaded into the clone. However, he will only remember things up to the point of his last braincording. At higher TLs the process become better, more reliable, and more refined.

The social, political, moral, and even theological aspects of mind cloning is up to the GM and his gameworld. It is perfectly feasible that it is illegal or only available to the extremely rich and powerful. On the other hand, in an interstellar campaign, it may be required to keep a monthly update of your brain and have a clone body in stasis, ready to awaken if you die, if for no other reason than the fact that space is huge and we can never overpopulate it, so immortality is a fact of life.

The cost, availability, and legality of mind cloning is strictly up to the GM. It should, however, be limited in some way; otherwise the game might break down into a bad case of Paranoia. No pun intended.

On the other hand, in a more fantastic campaign, it might be possible to transfer soul into a new body, thus transferring a shadow of the memories, skills, and personality, imprinting themselves on the brain. Alchemical methods might also be available where memories and skill are chemically codable, and can be 'drained' and 'injected' into people.

Genengineering

Genengineering is obviously short hand for genetic engineering. This is the fine art of tinker with the source-code of life: DNA, the bio-program that makes us tick.

TL 6 genetic engineering will be primitive, clumsy, and filled with mistakes. These mistakes, if serious enough, could shut down all research and end biotech science for certain gameworlds. We will assume this not the case for the purposes of this Plug-In. At TL 6, it is possible to fix many genetic disorders. Potential parents will seek out gene therapist to test their DNA for possible problems. If any problems are found, the parents may opt for an *in vitro* fertilization. The egg, once fertilized, is then tested for disorders. If some are found they can be corrected by direct alteration of the DNA before the cell beings to multiply. Once fixed, the egg can be implanted back into the mother for normal development.

It is also possible at TL 6 for parents to use this same process to customize their children. They can chose its physical characteristics, such as sex, eye color, hair color, adult body weight, etc. This can lead to problems (i.e., an entire generation or males or females, millions of blond, blue eyed children, etc.)

and therefore may be illegal. Even if illegal in some nations, other nations it may well consider engineering legal. In this case parents can just move to the Netherlands for a year or two and make a custom kid there.

At TL 7 more advanced genetic engineering is developed. The human DNA is well understood and new features and abilities can be actively programmed. Even more radical retroviruses or robotic nanomachines can alter the DNA of full-grown individuals, erasing genetic disorders or programming new features. It can take months or even years for such new features to manifest in a grown subject, but it is possible. At TL 8 and higher TLs, it is possible not only to alter the DNA of adult subjects, but also to accelerate the growth of the changes with advanced nanotechnology.

Genie Characters

A genie (short for genetically engineered) is a person whose DNA has been heavily modified or perhaps even completely artificially generated. At TL 7 and higher, these individuals are often grown in vats, as many mothers have no wish to undergo pregnancy and labor. Genies could also be super-soldiers, bioroid robots, or special purpose units.

At TL 6, genie characters are built as normal characters under Fusion rules. They will rarely have severe complications and physical disadvantages, unless there are side effects of their engineering. It is possible to engineer Talents and increased characteristics, but since this is done at birth the game mechanics work the same for character creation. Genies might have the Oppressed complication (snubbed by others), which will give extra OP to build the character.

At TL 7, however, more unusual things can be done. Splicing of human and animal genes is possible. This means that it is now possible to engineer people with non-human abilities. It is possible that this splicing carries over certain animistic features (by accident, intent, or requirement), such as fur, tails, horns, fangs, cat-eyes, scales, and the like. These people will have Distinctive Feature Complications, but in a society with many such people, such traits may be common. In a society where this gene splicing is rare (or illegal or shunned), animalistic traits could be devastating socially.

At TL 8, many of the carry-over features can be done away with (if desired) and all special advantages retained. More radical and more alien abilities can be artificially created. Perhaps at TL 8 or TL 9 living organic machines can be forged from cellular metals, and truly exotic genomorphic abilities may manifest.

Genie characters are built with Option Points. Many of the new advantages are 'Powers', which cost Power Points. Remember that 1 PP = 5 OP. For instance, a genie character with Discriminatory Smell (a canine ability) cost 1 PP, or 5 OP. However, as an option, the genie may have a distinctive canine feature, such as fur and a snout. This would not be cancelable and a constant occurrence (15+15), though with minor skill and combat effect, this would give 6 OP. Overall, you just gained 1 OP! In all likelihood, you might also give the character other canine abilities, Acute Smell (5OP), ultrasonic hearing (5OP), and Night Vision Talent (3OP), for an overall cost of 12 OP.

You may build your own custom genies, as outlined above. Remember, at TL 7 you can only replicate things seen in nature. At TL 8 you can replicate powers not seen in nature, but still scientifically feasible, such as vacuum support (Safe Environment Vacuum, 5 OP). At TL 9, who knows what modifications can be made?

Optionally, GMs may charge humanity cost for genies. He may charge whatever he wishes, if any, and Humanity cost can return OP to lessen the cost of the template itself. For every 5 HC, the OP cost of the template is reduced by -1. That is to say, if the template has a Humanity cost of 20, it would cost 4 OP less.

Below are some good templates for various 'animen' and bioroids.

Genie Templates

Genie Templates range from dog-men to fish-men, from zero-g workers to radiation hardened bioroids. All are TL 7. The GM can feel free to make many more templates (often referred to as Series Models, in corporate terms). Humanity costs are listed but are completely optional.

Gemini Series

Cost: 20 OP

Humanity: 10 (or 3D6)

The first commercial male genie template, designed simply to make a better man. The Gemini package is a simple set of DNA codes used to lock in desirable human features to insure attractiveness, longevity, good health, and vitality. Other features, such as hair color, eye color, and like characteristics can also be programmed. It is very conceivable that Gemini comes out in late TL 6.

Chars: +1 INT, +1 BODY.

Talents: Longevity, Handsome +2, Immunity to common diseases.

Powers: None

Complications: None (unless Oppressed)

Athena Series

Cost: 20 OP

Humanity: 10 (or 3D6)

The first commercial female genie template. Like Gemini, this package is a set of DNA codes used to lock in desirable female features to insure attractiveness, longevity, good health, and vitality. Other features, such as hair color, eye color, and other characteristics can also be programmed. The Athena series may come out in late TL 6.

Chars: +1 INT, +1 CON

Talents: Longevity, Beautiful +2, Immunity to common diseases

Powers: None

Complications: None (unless Oppressed)

Prometheus Series

Cost: 18 OP

Humanity: 20 (or 5D6+2)

Second generation of enhanced human templates. The Prometheus series improves upon the old Gemini design, adding new features while keeping cost at an acceptable level. Prometheus series is also more customizable. Prometheus series is developing early to mid TL 7. The -1 to PRE and Shyness was an unforeseen glitch that made this series a bit more introverted.

Chars: +1 INT, -1 PRE, +1 BODY, +1 DEX

Talents: Longevity, Handsome +1, Immunity to common diseases, Eidetic Memory, and Acute Vision

Powers: None

Complications: Frequently Shy [5] (Minor, 3 OP), possibly Oppressed as well.

Ajax Series

Cost: 25 OP

Humanity: 25 (or 7D6-1)

Another Second generation enhanced human template. Unlike Gemini and Prometheus, however, this design was not meant to be simply better all around human being. The Ajax series was an obvious attempt to make a bigger, stronger, and faster human. Many Ajax series people became athletes or joined the military. Ajax series are notoriously stubborn sometimes.

Chars: -1 INT, +2 BODY, +2 STR, +1 MOVE, +5 END

Talents: Longevity, Immunity to common diseases, High Pain Threshold, Rapid Healing

Powers: None

Complications: Frequently Stubborn [10] (Minor, 4 OP), Frequently Delusional (overconfidence) [5] (Minor, 3 OP), possibly Oppressed as well

Artemis Series

Cost: 20 OP

Humanity: 30 (or 8D6)

A second generation enhanced human template, primarily female (though male versions are not uncommon). It was the intention of the development groups to create a female vastly superior to older models. Though not completely successful due to massive cost expenditures, the Artemis series is an extremely good buy.

Chars: +1 INT, +1 PRE, +2 CON, -1 STR

Talents: Longevity, Beautiful +2, Immunity to common diseases, Common Sense, Lightning Calculator, Night Vision, and Speed Reader

Powers: None

Complications: Frequently Impulsive [10] (Major, 10 OP), Frequently Delusional (overconfidence) [5] (Minor, 3 OP), possibly Oppressed as well

Achilles Series

Cost: 18 OP

Humanity: 30 (or 8D6)

Achilles was the first genie soldier series. Like all genie soldiers, Achilles is considered a bioroid, force grown and programmed in a military genetics facility, trained for combat and killing. Achilles are by no means disposable, but they are rarely considered human. These are later replaced by more reliable models, which are not so moody and bad tempered.

Chars: -1 INT, +2 BODY, +2 CON, +2 REF

Talents: Blind Reaction, Combat Sense +1, High Pain Threshold, and Night Vision.

Powers: None

Complications: Frequent Bad Temper [5] (Major, 8 OP), Infrequent Berserker [10] (Major, 8 OP), Constant Oppression: Slave [20] (Minor, 7 OP)

Hercules Series

Cost: 30 OP

Humanity: 40 (or 12D6)

An improvement over the erratic Achilles series, Hercules bioroid soldiers are much more dangerous and much more loyal. However, like all genie soldiers, Hercules soldiers are considered to be property of the state, born, grown, and trained in military genetics facilities. All Hercules units have a chemical death-switch which can be activated if they go rogue.

Chars: -2 INT, +3 BODY, +2 CON, +2 REF, +10 HIT, +10 STUN

Talents: Ambidexterity, Combat Sense +2, High Pain Threshold, Night Vision, and Rapid Healing

Powers: None

Complications: Frequent Sense of Duty [10] (Major, 8 OP), Constant Oppression: Slave [20] (Minor, 7 OP), Susceptibility (auto-destruction) [5] (Extreme, 10 OP)

Nemesis Series

Cost: 20 OP

Humanity: 30 (or 8D6)

A genie assassin, the Nemesis series is fast, mobile, and cunning. Most are female, though not all, and like all bioroids considered the property of the state. Nemesis units do not tend to fare well in heavy combat situations, but they are unmatched in one-to-one combat. Many are specially trained in martial arts such as ninjitsu.

Chars: +2 CON, +2 REF, +2 MOVE, -1 STR

Talents: Ambidexterity, Combat Sense +2, High Pain Threshold, Night Vision, Acute Vision, Intuition, Direction Sense.

Powers: None

Complications: Frequent Bad Temper [5] (Major, 8 OP), Frequent Sense of Duty [10] (Major, 8 OP), Constant Oppression: Slave [20] (Minor, 7 OP).

Feline Series

Cost: 32 OP

Humanity: 30 (or 8D6)

The Feline series was one of the first and most successful 'animan' genie templates, developed in mid TL 7. The Feline series was often chosen by already bio-altered parents who wanted children with super-human abilities. This series is a genetic cross of human and cat DNA. Feline is primarily chosen for females, whereas Leo (developed from lion DNA) is the preferred choice for males. Like many animen templates, a Feline has several distinctively cat features, including fur, cat-ears, whiskers, retractable claws, and a tail.

Chars: +2 DEX, +1 REF, +2 MOVE

Talents: Acute Vision, Night Vision, Animal Empathy, and Light Sleeper

Powers: Retractable Claws (1 DC), Superleap (+10 meters)

Complications: Constant Distinctive Features [15] (Minor, 6 OP), Frequently Impulsive [10] (Major, 10 OP), possibly Oppressed as well

Leo Series

Cost: 35 OP

Humanity: 30 (or 8D6)

Along the same lines as Feline series, the Leo series was developed from lion DNA to build a stronger, more lion-hearted individual. Developed at the same time as Feline, Leo did not actually take off until the second generation of genie hybrids, by which time the idea of human/animal gene-splicing was actually fashionable. Like many animen templates, Leo has distinctive lion features, including fur, big cat-ears, lion-face, retractable claws, and even a gorgeous mane.

Chars: +2 BODY, +1 STR, +1 MOVE

Talents: Acute Vision, Night Vision, Combat Sense +1, Light Sleeper

Powers: Retractable Claws (1 DC), Danger Sense (base value 10).

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well

Canis Series

Cost: 28 OP

Humanity: 35 (or 9D6)

Basically, a dogman. The Canis series was never incredibly popular -- it wasn't cute, it wasn't too smart, it wasn't quick or agile, and it often smelled bad. Nevertheless, many Canis men became detectives, policemen, or military scouts, and their unique abilities were always appreciated.

Chars: -1 INT, +1 BODY, +2 CON, +1 WILL

Talents: Acute Smell, Intuition, and Direction Sense

Powers: Discriminatory Smell, Tracking Sent, Ultrasonic Hearing

Complications: Constant Distinctive Features [15] (Minor, 6 OP), Frequent 'Habit' (bad odor) [5] (Minor, 3 OP), possibly Oppressed as well

Fenris Series

Cost: 38 OP

Humanity: 35 (or 9D6)

More popular than Canis, the Fenris series is developed from cross human/wolf DNA. However, many of the actually wolfish advantages were inadvertently removed while scientist attempted to eliminate the terribly wolfish aggression. Even so, the Fenris series flaunts some unique abilities. All Fenris people are extremely wolf-like in appearance, including thick gray fur, claws, and a tail.

Chars: +1 REF, +2 CON, +1 MOVE

Talents: Acute Smell, Acute Vision

Powers: Retractable Claws (1 DC), Danger Sense (base value 10), Discriminatory Smell, Infrared Vision

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well

Kongo Series

Cost: 37 OP

Humanity: 40 (or 12D6)

Kongo series animen are designed from crossing human and gorilla DNA. Many Kongo bioroids were created for military use, but later the series was authorized for commercial development. Civilian Kongomen became construction workers, athletes, or joined the military or police. Their brute strength and massive size also made them popular as bodyguards and Mafia musclemen.

Chars: -1 INT, +2 BODY, +3 STR, +2 CON

Talents: High Pain Threshold, Rapid Healing

Powers: Armor +6 KD (thick skin).

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well

Merman Series

Cost: 28 OP

Humanity: 35 (or 9D6)

With the colonization of the ocean, it became obvious that some people had to be engineered to adapt to this new environment. Mermen (and Mermaid) series genie templates are built from a cross of human and several oceanic creatures. Desired features extracted from the DNA of various fish was integrated into human DNA. This process was extremely complex, and was perfected only in late TL 7. Merman are able to operate completely amphibious, in and out of water. However, their bodies are scaly and fish-like, with gills on their neck and webbed hands and feet.

Chars: +2 CON, -1 DEX, +1 REF

Talents: Direction Sense, Rapid Healing

Powers: Life Support (Breathe Underwater), Swimming (+10 swim movement), Active Sonar

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well)

Mentaloid Series

Cost: 20 OP

Humanity: 35 (or 9D6)

Consumer demand of the late TL 7 era showed an increasing desire to have smarter children with larger brain areas and a greater capacity to perform mental tasks. These "Mentaloids" were destined to become brilliant scientists, engineers, and military leaders. Because body mass and strength were no longer a driving factor, these areas were sacrificed in exchange for a much larger brain size. These people were short, fragile, but had abnormally large heads with a cranium twice the size of an ordinary human's.

Chars: +3 INT, +2 WILL, +1 TECH, -2 BODY, -2 STR

Talents: Longevity, Immunity to common diseases, Eidetic Memory, Intuition, Lightning Calculator, Speed Reader

Powers: Enhanced Perception (+2 all senses)

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well)

Apollo Series

Cost: 10 OP

Humanity: 10 (or 3D6)

The ability to live comfortably in zero-gravity was a much desired trait for the children of families in deep space or on space stations or low gravity moons. Apollos have denser bones that do not decalcify in low gravity. Furthermore, their metabolism has been tweaked for optimal performance in low to no gravity. They can operate in full gravity but are just as uncomfortable in Earth gravity as Earthers are in no gravity. Apollos are fairly indistinguishable from normal humans and are a mid to late TL 7 development.

Chars: +2 DEX, +1 CON, -2 STR, -1 BODY

Talents: Longevity, Immunity to common diseases,

Immunity to zero-G effects, Direction Sense

Powers: None

Complications: None (unless Oppressed)

Astrolus Series

Cost: 48 OP

Humanity: 40 (or 12D6)

Astrolus is a TL 8 version of the Apollo series. It is much more advanced, using artificial living machines and metallic tissues to perform various highly unnatural functions, like vacuum support, radio communication, and radar sense, just to name a few. Astrolians are reasonably humanoid, though their skin is dark gray with a metallic sheen. Many people, however, find this skin tone extremely attractive, and it is actually duplicated as a fashion in some places. As an unforeseen benefit, this radiation reflective skin is also partially effective against energy weapons! Astrolians can operate in the total vacuum of space, in direct solar radiation, or in the frigid cold for up to thirty minutes.

Chars: none

Talents: Longevity, Immunity to common diseases, Immunity to zero-G effects, Direction Sense

Powers: Radar Sense, Radio Hearing and Transmission, Self-contained Breathing, Safe Environment (Vacuum, High Radiation, and Intense Heat, and Intense Cold), Armor +5 EKD

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well)

Icarus Series

Cost: 26 OP

Humanity: 25 (or 7D6-1)

Man has always dreamed of flight. Technology proved to be the vessel of flight, but mankind was still unable to make himself personally take flight and soar with the birds. That is, until we engineered a special breed of humans from falcon DNA. The Icarus series was not developed until TL 8 due to massive problems of creating wings strong enough to support the weight of a human being. Icarus models have a light yet strong bone structure, powerful muscles, and a pair of great feathered angel-wings. Icarians (as they are often called) do bear a striking resemblance to angels. As for all animan at TL 8, it is possible to erase most of the animalistic features, as is the case with Icarians. The only non-human features of an Icarian are the huge wings folded across his back; otherwise he or she bears no other bird-like features. Many Icarians go shirtless or wear special backless shirts so their wings are not impaired.

Chars: +2 CON

Talents: Longevity, Handsome +1, Immunity to common diseases, Acute Vision

Powers: Flight (+15 flight Movement)

Complications: Constant Distinctive Features [15] (Minor, 6 OP), possibly Oppressed as well)

Genetic Modification

In the early ages of genetic engineering, traits and genie series modifications could only be done on embryos. However, by TL 7, advancements in bio-nanotechnology and retrovirus programming led to the ability to alter DNA strands within adult, fully developed subjects. A retrovirus or nanomachine would enter a body, replicate itself, and deliver a new DNA strands to every cell in the person's body, splicing in the new genetic code. It would take years for these changes to slowly manifest, but it was a common practice. People would have undesirable features removed, characteristics and traits altered, and even opt for entirely new Series upgrades (or delete the code for their current Series, if they found it undesirable). This process was very expensive, however, and so only the wealthy could afford such luxuries. Although the OP cost is no different (5 OP for a +1 characteristic, 3 OP for a Talent, etc), the GM should set a high monetary cost. And remember, at TL 7 it takes years for the changes to show.

At TL 8, however, bio-nanites are not only able to splice in the new DNA code, but also can actually simulate cellular growth. The changes are then able to manifest in months, not years, and sometimes even weeks if the changes are small ones. The cost is also drastically less, as the process has become more refined and commercially available. At TL 8 many people completely change their bodies dozens of time in the course of their highly extended lives, trying out the latest genie series model, the hottest animal fade, or flashiest new biotech feature.

At TL 9 and 10, biotechnology allows for rapid and radical changes to occur in days or even hours. Such genomorphic abilities allow a person to inject himself with a new set of genetic code and quickly transform into something completely different. Such amazing superscience is hard to imagine, but five thousand years from now, anything is possible.

Brain Boosters

Above and beyond normal genetic alternations, many bio-enhancements have been developed as a hybrid of cybertech and biotech research, as the two fields draw in closer and closer and the boundary between flesh and silicon becomes a hazy blur. Most of these enhancements are added using nanotech procedures, as the 'wetwork' is far too delicate for surgery.

BioChips

TL: 7

Cost: x1.5

Humanity: -2 listed HC

Biochips are neurotronic implants which are made not of silicon, but of living, artificially grown

neurocircuitry. Any of the Neurotronics listed in the Cybertech section can be made Biochips at TL 7. OP cost is x1.5 listed value, but HC is 2 less. Biochips are completely immune from EMP and can never short out.

Synaptic Enhancement Accelerator TL: 7

Surgery: MA

Cost: 14 OP

Humanity: 6 (or 1D6+2)

The SEA is a electro-neural stimulator that is shot into the brain. Once instated, the synapses on the neurons double, giving a +1 to DEX, a +1 to REF, and a +1 to INT. This process can only be done once; a second injection will kill the user in a catastrophic seizure.

Mnemonic Hippocampus Enhancement TL: 8

Surgery: MA

Cost: 4 OP

Humanity: 5 (or 1D6+1)

A dense, highly concentrated clump of gray matter is grown in the hippocampus area of the brain. This additional brain matter increases both short and long-term memory, boosting INT effectively by +1.

Neural Organic Computer

TL: 8

Surgery: CR

Cost: 15 OP

Humanity: 30 (or 8D6)

A biological computer is grown inside your brain. It bonds with the your brain, filling the brain's crevices, and opens up several sections of the brain that are closed off to the conscious mind. It gives a +2 to INT and a +1 to TECH. It may also trigger the sudden manifestation of psychic powers (or some other superpowers).

Enhanced Organs

New and enhanced organs with functions and abilities far above those of normal human organs have been engineered as a result of advanced biotechnology. Many of these enhance organs may find their way into the genetic code of new genie series models, thus eventually becoming an integral part of the human genome in distant generations to come.

Adrenaline Booster

TL: 6

Surgery: MA

Cost: 5 OP

Humanity: 6 (or 1D6+2)

The Adrenaline Booster is a pack of four extra adrenaline glands attached to each kidney. It gives +2 to STR in combat. This STR increase lasts for 1 hour, after which STR is then at -3 for 2 hours due to muscle strain.

Thyroid Booster

TL: 7

Surgery: MA

Cost: 15 OP

Humanity: 8 (or 2D6+1)

The Thyroid Booster is a special genetically engineered thyroid gland that replaces the original thyroid. It doubles the user's metabolic rate, EEG, blood pressure, respiration, and digestion. The user must consume twice as much nourishment and water as well. Overall, it adds +5 to the user's REC score.

Advanced Respiratory System

TL: 7

Surgery: CR

Cost: 7 OP

Humanity: 8 (or 2D6+1)

Also called AIRSYS. A new pair of lungs are grown and enhanced with extra alveoli, replacing the old lungs. The user can hold his breath twice as long and can effectively function at higher altitudes. This also adds 10 to the user's END total, representing the body's ability to exert itself more strenuously.

Advanced Circulatory System

TL: 7

Surgery: CR

Cost: 6 OP

Humanity: 10 (or 3D6)

A new heart is grown that is twice as strong, and new blood glands replace the ones in the bone marrow. With this super-heart, the user cannot die from a heart attack. The new heart and blood also adds 10 to the END total.

Enhanced Liver

TL: 7

Surgery: MA

Cost: 5 OP

Humanity: 8 (or 2D6+1)

A new, genetically engineered liver is implanted which can extract toxins, poisons, and alcohol better than a normal liver. The user cannot become intoxicated by alcohol and takes only half the effects (and damage) from poisons and harmful drugs. However, newer designer drugs and poisons are often designed to by-pass enhanced livers, so beware.

Enhanced Digestive Flora

TL: 7

Surgery: MA

Cost: 5 OP

Humanity: 8 (or 2D6+1)

This process enhances the digestive flora in your stomach and intestines. This enhancement makes it possible to gain nutrition from almost all organic materials, like tree bark, wood, leather, etc. You can basically gain sustenance from anything organic, and can eat almost anything, even rotting food, with no ill effects, though it might taste horrible. However,

things which are truly poisonous will still harm you, unless you have other biotech mods.

Decentralized Circulatory System

TL: 8

Surgery: CR

Cost: 10 OP

Humanity: 15 (or 4D6+1)

You are heartless. You do not need a central pumping organ. All your major blood vessels have muscles that contract and expand to push blood through your body. You can't be shot in the heart. Nor can you get heart attacks or heart diseases. If a blood vessel or artery is cut, the muscles will contract, cutting off the blood flow so you cannot bleed to death. In effect, this grants +5 HITS and immunity to bleeding damage. This modification cannot be combined with other circulatory system enhancements.

HyperThrombocyte Gland

TL: 7

Surgery: MA

Cost: 3 OP

Humanity: 3

This is a genetically engineered gland that is implanted next to your liver. This new gland will generate millions of enhanced platelets whenever you take damage that has caused bleeding. In effect this will stop all blood loss in 1D6 seconds. This can be a live-saver as 64% of all violent deaths are caused by blood loss.

HyperErythrocyte Gland

TL: 7

Surgery: MA

Cost: 4 OP

Humanity: 3

This is a genetically engineered gland that is implanted next to your spleen which makes millions of enhanced red blood cells. These new blood cells can absorb three times more oxygen than normal red blood cells. However, because the body still makes normal blood cells the gross absorption is only one point five times more. You require 20% less oxygen and can go with out oxygen 50% longer. Overall, this enhancement also adds 5 to your END.

HyperLeukocyte Gland

TL: 7

Surgery: MA

Cost: 5 OP

Humanity: 4 (or 1D6)

This is a genetically engineered gland that is implanted into the spleen. It makes millions of enhanced white blood cells. These new white cells can fight off infection better than normal white cells, reducing the effect of diseases by half. It is not hampered by immunity destroying diseases such as AIDS, but it only works against bacteria, not viruses (i.e., it can not get rid of AIDS, the flu, etc.).

Body Enhancements

For the most part, body enhancements are taken care of by genetic engineering. However, a few special bio enhancements are available which do not require genetic alteration. Though many of these are considered bio-cybertech, a few are listed below.

Gills

TL: 6

Surgery: MA

Cost: 3 OP

Humanity: 5 (or 1D6+1)

You have a pair of gills grown on your neck. When under water, the lungs stop and the gills begin all breathing. You cannot drown unless the gills are damaged or destroyed. When out of water the gills close up and the lungs are used.

Nictitating Membrane

TL: 6

Surgery: M

Cost: 1 OP

Humanity: 1

A nictitating membrane is grown under the eyelid and acts like a second, transparent eyelid. The membranes allow the user to see clearly under water, and they also provides eye protection against some liquids and gases.

Enhanced Senses

TL: 7

Surgery: MA

Cost: 2 OP per Sense

Humanity: 2 per Sense

You may make any of your senses acute (as per Acute Sense talent). The operation can only be done on normal organs. It cannot be done on cybereyes or cyberears.

Viral Enhancements

Since the beginning of our history, viruses have plagued mankind, killing countless millions. But viruses are not evil and do not have to be harmful. With advanced genetic reconstruction, retroviruses (RNA viruses, such as those derived from HIV) can greatly benefit mankind.

Aside from the genetic re-sequencing retroviruses, a few others are listed below.

Anti-Toxin Strand

TL: 7

Surgery: N

Cost: 8 OP

Humanity: 8 (or 2D6+1)

This is a virus that is injected into the blood stream, taking 1D6 days to spread throughout the body into all organs and nerves. It increases immunity to non-metallic poisons, halving their effect (or damage).

This virus cannot stop corrosive substances like acid, nor can it absorb metals like lead or mercury.

Mega-Munity Strand

TL: 8

Surgery: MA

Cost: 15 OP

Humanity: 5 (or 1D6+1)

The MMS is a tailored anti-virus virus. Once injected, the MMS takes 1D6 days to spread through the entire body. It reproduces until each body cell has an MMS virus in it. The MMS will attack and destroy all virus, from the common cold and flu to the AIDS virus. You get total immunity to all diseases and virus.

Note: The MMS is tailored for a specific individual's DNA.. If it is injected into someone else, the MMS will identify every cell in that person as a virus and destroy his or her DNA. The person will take one hit point of damage every hour, and this damage cannot be stopped. A good but expensive poison.

Methuselah Strand

TL: 8

Surgery: MA

Cost: 30 OP

Humanity: 10 (or 3D6)

The Methuselah Strand is a strand of virus which enters the cells in a body and resets their biological clocks. The Methuselah Strand also destroy free radicals and repairs cancerous cell damage. In effect, the user becomes completely unaging. He or she will never age past an effective age of thirty. If the user is older when this injection is taken, the virus will not reverse aging, but some of the cosmetic effects may vanish over the course of several years.