

# Cyberware

## Installation

Fitting the body with cyberware involves surgery and can be an extremely painful process. A successful *medicine* skill check is required to install cyberware in this manner. The difficulty of the cyber surgery varies according to the system involved. Surgery difficulty and the damage done to the person as a result of a successful installation are listed with the equipment statistics. Also listed is the *cyber value* of the equipment, which comes into play when dealing with Dark Force Points and overload (see below).

The results of cyber surgery can be determined by the level of success of the medicine check. Use the following as a guideline:

**Failure:** The cyber system is not installed. Worse, the surgeon has botched the job. Patient takes more damage than he normally would have - increase damage by one wound level (a wound becomes a heavy wound, a heavy wound becomes incapacitation).

**Minimal (+0-5 over Difficulty):** System is installed, but just barely. Damage is normal, but system malfunctions on a *Mishap*.

**Average (+6-10 over Difficulty):** System is installed, but malfunctions on a *Complication*.

**Good (+11-15 over Difficulty):** Installation is successful. Normal damage,

**Superior (+16-25 over Difficulty):** Installation is successful and amount of time needed to recover from surgery damage is halved.

## Overload

The more cyberware one carries, the more strain it puts on both the body, the mind and the systems themselves. The result of this is often an overload, a breakdown of one of these three elements.

Whenever a cybered character suffers a *Mishap*, they must generate a *Willpower (Knowledge)* total against a difficulty number of their total cyber value. (Add the individual cyber values of each piece of equipment and double it, to come up with the total value.)

Success means the character has resisted overload. Failure means something bad has happened: a system has failed, the character has suffered fatigue damage (equal to the Result Points of the failure on the Damage Column) from the strain of supporting so much cyberware, or his mental stability has suffered in some way. These effects are normally temporary, and their nature should be determined by the gamemaster. They are in addition to any other effects of the setback.

## **Dark Force Points**

(As per normal cyber/DFP rules)

### **System TOU (Toughness)**

System Toughness represents the Strength of the system to withstand damage. If a location with cyber is hit (which means the GM will have to generate a hit location when the character is hit), the players must roll the System TOU verses the damage taken, in addition to his normal STR roll. First the player rolls his STR vs Damage to determine the damage he will be taking if any, then the cyberware system TOU vs the same damage value. Cyberware does not add to the person's STR like armor, it is integral part of the person; when they take damage, it takes damage.

## Standard Equipment

### Simerve

Artificial nerve fiber used to connect items of cyberware within the body. SimNerve is run from the brain through the spinal column and out its base to the various pieces of equipment.

SimNerve is essential to the smooth operation of any cyberware except Grade II and III syntheflesh.

There's a little bit of basic medical knowledge you need in order to understand cyberware. I know you don't want to be a doctor, so I'll give you the layman's condensed version.

To control the hardware directly from the brain, you need to have SimNerve installed. SimNerve allows direct communication between the brain and cyberware via artificial nerve fibers which connect the two. Attempts have been made to get around this, but something has to connect the brain and 'ware, and SimNerve is the best way to do this. On better cyberware, SimNerve is also used to enable tactile feeling on the cybered limb.

This next point is most often forgotten by neo's to cyber-ville. Unless you replace the entire body with cyberware, you will have body limits based on your biological body. Sure, it's possible to add an arm that has the strength to pick up a land rover, but as soon as the arm lifts more than the shoulder and back it's attached to can support, the shoulder will start to separate. If the user continues lifting, eventually the arm will be attached to the vehicle - maybe even gripping it with the full force of a Brodie cyberhand -but the rest of the body will no longer be attached to the arm.

One way to negate some of this is to use synthetic muscle. The artificial muscle fiber is applied throughout the whole body so that one may go beyond the body's normal limits. Unless you were incredibly strong to begin with, you still can't lift that rover. However, with synthetic muscle, you can become stronger overall. That is, you will be able to lift and carry more than you could originally because your overall Strength Attribute will be increased. There are two types of artificial muscle: basic SyntheMuscle, which is the combination of your own muscles with cyberware tendons and beefed up joints; and BioMuscle which, through the wonders of genetic engineering and Ishantran know-how, uses samples of your own muscles which have been strengthened and rephcated throughout the whole body. Either of these has to be installed, and like any medical procedure, there are risks.

Think about this before you run out to get that new cyberlimb.

### Syntheflesh

Artificial skin used to hide cyberware. It comes in various grades: Grade I syntheflesh is almost indistinguishable from flesh, even to the extent of being laced with SimNerve to allow for

reactions to stimuli; Grade II is visually adequate, but unable to transmit sensations to the brain; Grade III is crude and unconvincing, but the least expensive of the three.

Syntheflesh comes in various hues and textures to accommodate many different species. Note that when any syntheflesh is damaged (the character takes a wound on the area), it needs to be replaced - though the effects are merely cosmetic.

### **Neural Jack**

This is a device resembling a socket, used for interface with computers and S-Comp connections. A cable connects the user's jack with the machine, allowing for easy access. Neural jacks are most commonly installed in the temple or on the neck, lessening the amount of SimNerve needed to connect them to the brain.

### **Enhanced SimNerve**

The use of Enhanced SimNerve (ESN) increases the level of strain caused by cyberware, since it forces the body to provide energy to the cyberware from the user's own central nervous system.

So how does this work in game terms? For the purposes of figuring overload effects, someone using ESN has to roll against his *Willpower or Knowledge* - 1 after adding up his cyber rating total. For example, the Cyber Grunt has a *Willpower* of 3D and a total cyber rating of 8. However, when she rolls her *Willpower* check, if she has ESN, she rolls 2D+2 versus the value of 8.

### **Fooler**

So you're cybered-up and don't want anyone to know it. Fooler is what you're looking for. The Fooler is a specially-coated synthetic skin layer which masks the presence of cyberware in your body. Authorities don't like it for obvious reasons.

[Adds +2D to difficulty of sensors to detect cyberware.]

### **Weapon Jack**

Similar to a neural jack, a weapon jack is specifically designed to interface with weapons fitted with the corresponding neural-interface adapter. Usually the weapon's user plugs the weapon interface plug into the jack. A weapon jack enables the weapon's systems to report directly to the user's current cyber-enhancements, such as a Brodie LED. Signals from the gun are also relayed directly to the user's brain, increasing response time. A neural jack can be used for interface-capable weapons, but the weapon jack provides a leaner link to the weapon since it doesn't need to provide for the overhead of Scomp-connection conversion calculations. When used alone, a weapon jack adds +1D to the interfaced weapons skill attempt. When used in conjunction with an eye display system (Furtherman Hunter, EyeHUD, Brodie LED), the system adds +1D+1. Neural jacks used as weapons jacks provide 1 less point to all attempts than if the

weapon jack was used(+2 alone/+1D with eye display system). Weapon jacks are produced by Brodie and Furtherman.

### **Testron BodyVision**

“BodyVision is a subcutaneous system which can enhance the body's natural pigmentation or be used to give it a unique coloring of its own. Your mate will look in wonder at your enhanced beauty. Hey, I'm reading the brochure - of course, I don't normally use words like "subcutaneous." This is extremely fashionable amongst the club scene, where they constantly try to outdo one another with temporary body art. There are several prestigious skin art competitions held at various Core dance clubs. BodyVision is also used by Corporate Sector Authority to provide their special operatives with additional camouflage. In my opinion, for Fash Boys and Fleet Girls only.”

[Adds +1D to *sneak* or *disguise* skill checks.]

### **Cybernetic Organs**

Testron is the leader in cybernetic replacement organs. They are more resilient and longer lasting than natural organs. The most common organs replaced are heart (see "Broken Heart" below), lungs, stomach and liver.

[Increases a patient's STR by +2.]

**Broken Heart:** Testron has developed a multi-unit replacement circulatory system. They noted that a single centrally-located heart is much more susceptible to attack and damage and came up with this as a solution. Each of the major portions of the heart has been divided into a separate cybernetic pump (rejection rate < 0.005%) that can be dispersed throughout the body.

[In game mechanics, each heart-unit adds +2 pips (convertible to 1D for every 3 pips) to the person's roll versus dying when mortally wounded (see 2<sup>nd</sup> Ed. Rev. & Exp Rules). Keep in mind the locations of the character's heart units for purposes of hit location and *vital blow* checks.]

### **NetWorld Personal Jammer**

Protect your privacy anywhere with the NW Personal Jammer system! PJ blocks electronic, intrusion/eavesdropping systems by producing a white noise which interferes with emitted signals. System installation includes shielding for other personal cyberware on a piece-by-piece basis (User note: Make sure what you have is legal wherever you get NW PJ installed!).

[Adds +2D to difficulty to electronic surveillance rolls.]

### **Finger Stinger**

The finger stinger is a needle with a small sac, usually mounted in a finger. The sac may contain a drug of the user's choice, such as a fast-acting neurotoxin. This item requires SimNerve.

### **NetWorld Adjustable Comlink**

The Personal Comlink is implanted near the vocal and auditory organs of the user. Activation is via subvocalized command. Sounds received by the comlink are only audible to the user. For users with EyeHUD, a "screen" display capability is available so that verbal communications can be displayed. The additional cost for screen display hookup to EyeHUD is 500 credits.

### **Motion Scanner**

The motion scanner allows the user to detect motion up to 10 meters. It combines vibration and tactile input to sense motion. Used by miners and architects as well as law enforcement agents who have to chase suspects, it is often implanted in the hands or feet to aid detection of vibrations on walls or floors. Motion scanner is also available as a cyberhand module. **Cost:** 2000 if implanted into biological hand; 900 if added as a cyberhand module

[Adds +2 to *Perception* for detecting vibrations.]

### **Element Scanner**

The element scanner allows the user to identify the composition of items made of common substances. The scanner is usually implanted in a hand. It is also available as a cyberhand enhancement option. Cost: 2100 if implanted into biological hand;1000 if added as a cyberhand module

[Adds +1 to *sensor* attempts to identify composition of an item.]

## Optical Systems

All existing optical systems have been designed in such a way that up to three separate optical enhancements may be placed into a single standard eye unit (other eye units are outlined below as well). Thought control and a microcomputer allows the user to switch between the optics as a simple action. The only restriction is that the three enhancements must be of the same make (i.e. NetWorld, Brodie, Furtherman).

[Where noted, gamemasters can assume that each of these corporations have similar products because of inter-corporation incompatibilities. That is, Brodie has their own version of NetWorld's SuperSight, NetWorld has a Hunter module, etc. For cost purposes, assuming NetWorld as the base, Brodie will be 30% more expensive than NetWorld and Furtherman will only be 15% more expensive. However, Brodie and Furtherman modules will be more durable.]

### Bug Eyes

These multifaceted eyes gives the user near 270 degree vision. They may be enhanced with HeatSeeker or Low-Light enhancements. Bug Eyes are obvious cyberware. Although Bug Eyes aren't considered fashionable in most Core worlds, the wearing of Bug Eyes on the Varvag world by non-natives is seen as a polite attempt to "fit in."

[Adds +1D+1 to Perception attempts.]

### NetWorld SuperSight

A cybernetic eye fitted into the socket, the SuperSight provides a +2 bonus to use of the *Perception* rolls. The SuperSight is widely used but slightly more difficult to camouflage than cybernetic arms/ etc. Furtherman and Brodie have their own version.

### NetWorld Heat-Seeker

A visual unit designed to spot heat signatures of beings or objects. The Heat-Seeker provides a +1 bonus to *Perception* in low-light or dark conditions. Furtherman and Brodie have their own version.

### NetWorld Low-Light

This unit allows for improved vision in dimly lit conditions, providing a +1 to *Perception* in such settings. The unit will not function in total darkness. Furtherman and Brodie have their own version.

### Brodie Telescoptric

Capable of expanding the image of a far-away object by x25, the Telescoptric provides a +2 to *Perception* when examining such things. Networld and Furtherman have their own version.

### **Brodie LED**

This unit provides visual readouts of computer data and messages across the field of vision. The readout can be located in a corner of the field or overlaid upon it. Chips loaded into a chipholder hold the information. Networld and Furtherman have their own version.

### **Furtherman Hunter**

An optical unit which uses laser technology to sight in on a target, thus increasing the chance to hit him. It must be linked via SimNerve to the weapon and is commonly only used with subdermal weaponry. It provides a +2 to the relevant weapons skill when in use. Unlike a standard lasersight, it does not project a "dot" or require aiming to use - it is an integral bonding of the weapon to the eye. Networld and Brodie have their own version.

### **Testron Anti-Glare**

This isn't actually a separate module, but a specially developed chemical coating. I highly suggest grabbing some of this stuff, especially if you are expecting police pursuit. Nothing sucks worse than making a dodge around a corner, only to come face-to-face with a glaring spotlight. (How do you think I got caught? You don't actually think the donut-patrol could catch me, do you?)

[When characters experience a blinding attack, unprotected eyes will be blinded until the character can make a Moderate STR roll. Testron Anti-Glare allows cyboptics to adapt quicker and adjust, essentially giving a +1D bonus to the STR roll.]

### **NetWorld MicroOptics**

MicroOptics allows the user to magnify objects by up to x25 providing that they are viewed from a close distance (5 cm or less). Purely for the lab-rats. No practical use in the urban nightmare.

[This grants a +1D bonus to *Perception* when looking for details only visible through magnification.]

### **McGinley WatchDog**

In the past, tradition has demanded that optics replace normal eyes. But not so these days. McGinley has developed several different styles of optics for placement on other parts of the body. I mean, think about it: if you're waiting to ambush someone that's coming around the corner, do you want to slip a look if you have to move your whole head? Of course not - if you could simply slide a Visual Finger out around the corner, things would be much easier.

There are two benefits to the WatchDog systems. One, as described above, is flexibility and stealth. The second is that size is no longer a problem. Traditional eye socket models are



restricted to three modules per unit because of size considerations, but the WatchDog system can be designed to accommodate as many different options as desired.

[For sizing purposes, assume that a unit holding between one and three modules is eye-sized, a unit holding between four and six modules is twice the size of an eye, etc. These benefits do have a cost however. McGinley's WatchDog system modules (beyond the base units listed below) typically run about 30% more expensive than NetWorld's for the same comparative System TOU rating.]

### **Visual Finger**

This option places an optical system either in a finger or elsewhere on a user's hand (palm or back).

### **Viewer's Advisor**

This unit is 360 degree ringlet WatchDog that encircles any part of the body (including the head). Modules for this unit are set up on a rotating track that allows the user to scan in front, along his side or even behind him. Note: It does not add any benefits to preventing ambush or back attacks unless the unit is actually positioned for rear observation.

### **Heel! WatchDog**

This unit is similar to the Visual Finger, but designed for the foot.

### **The OverSeer**

Instead of a hand or foot mounted model, this unit is a rotating swivel that can be attached to a user's shoulder. Like the AdVisor, it can provide eyesight behind a target. It is more expensive than the standard AdVisor, but it comes with added TOU to protect it.

Personally, I prefer the SenseDog line which places the OverSeer with other sense units (see below) into a single unit. McGinley can custom design the OverSeer into any shape and many customers opt for the Owl, the Raven, the Parrot or the Snake models.

### **Enhanced Cyber-eye**

The Enhanced Cyber-eye replaces one biological eye and comes with varying Sight Add options (bonuses to vision-based *Perception* attempts). Cyber-eye installation causes an *Incapacitated* wound level. Basic Eye Units are produced by Brodie, NetWorld, and Furtherman. The Enhanced systems shown here also provide capability to eye option modules.

<b>Enhanced Eye Systems</b>	<b>Sight Add</b>	<b>Cyber Rating</b>
Furtherman Bonus View System	+1	0.5
Networld Supersight	+2	1

Networld Mondovision            +3            1.5

<b>Eye System</b>	<b>Install DN</b>	<b>Wnd level</b>	<b>Basic Cost</b>	<b>System TOU</b>
Furtherman	14	Incapacitated	1800	5D
Networld	14	Incapacitated	2250/3300	4D

### **Cyber-eye Options**

These options require installation of a cyber-eye. Each cyber-eye can hold up to three options, after which micro-fiber links to sensors placed elsewhere on the body must be used. Optical links are limited to one of these connections if all three slots are used in the eye. So, for example, a character may have three eye options used in his left eye and an optical link to a sensor elsewhere on his body from his left eye. His right eye can still hold up to three options and one sensor link. Different options may be selected for each eye. When using Cyber-scope(s) linked to EyeHUD or Hunter systems, a different weapon sight may be linked to each eye, potentially allowing the user to fire each weapon simultaneously at separate targets without taking targeting penalties (multi-action modifiers still apply).

### **Brodie Cyber-Detector**

This option allows eyes to "see" emissions from most standard cyberware.

[Adds +2 to *Perception* attempts to detect cyberware.]

### **NetWorld RangeScope**

This one allows the user to determine the range to objects within the eye's field-of-view. Range data can be displayed via NW LED, EyeHUD or incorporated into a datapacket for use by other systems interfaced with the eye.

[Provides +1 to applicable weapons skills.]

### **NetWorld Infrared**

The Infrared aids in detection of heat signatures in poorly lit conditions. Heat signatures left behind usually don't last very long (for example, a quarry's footprints in a dark, cool room). If the room is significantly cooler than the heat source was, the lingering effects are rapidly cooling to the room temperature. If the room is only slightly cooler than the remaining heat signature then the initial perceivable difference wasn't that great, and it will soon equalize with the ambient temperature.

[Adds +1 to *Perception* attempts of heat signatures in dark conditions.]

### **Furtherman Tracker**

The Tracker locks on and keeps the marker (cursor) on target. The target must stay in line-of-sight. The Furtherman Tracker is very useful in crowds and is popular with reporters, cops, and security personnel. It does not interface with weapon sighting systems, making this system acceptable cyberware even on worlds where weapons are forbidden.

[Adds +2 to *Perception* attempts when shadowing a target.]

### **Testron Cats Eye**

"See as well in moonlight as in daylight!" This is Testron's answer to NetWorld Infrared. The system maximizes use of available light, allowing the user to see in near-dark conditions. **Note:** Cats Eye requires at least a small amount of ambient light to operate.

[Adds +2 for *Perception* attempts in low-light conditions. When exposed to a blinding attack, user must make a Moderate STR roll to resist blinding]

### **Brodie Fiber Telescopic**

This is a 20 centimeter fiberoptic cable (2mm diameter) that extends through the iris of any standard cyberoptic. It will allow monocular vision (binocular if both eyes are equipped) with full range of cyber vision optics. It may be useful for looking around corners, under doors, through small holes and cracks. Players' imaginations should supply a myriad of mundane uses as well - such as working on a car engine or in other tight hard-to-see locations.

### **NetWorld EyeHUD**

This eye-based micro "Heads-Up-Display" presents data from jacked-in gun or body-mounted sensors as an overlay to the visual input from the eye. It can also be used to display information from other eye, ear or body sensors. It has a low level of system intelligence which allows the system to highlight conflicting information presented in the display.

[Adds +1 to *Perception* attempts when utilizing applicable information from multiple sensors presented in the display.]

### **Chromespec**

The Chromespec provides glare and flash protection for cyber-eye and systems installed in that eye. This is a cybernetic option and takes up one eye option space.

[Adds +1D+1 vs. blinding flashes, +1 to visual *Perception* attempts in high-glare environments.]

### **NetWorld Eye Lite**

This decorative eye wear spins pretty patterns in the eye. A tiny subcutaneous chip can be pre-programmed with a variety of images and patterns. It installs as a cyber-eye option.

*"Why giv'um a wink when you can show'um what you mean"*

- NetWorld Sales Pitch

# Auditory Enhancers & Auditory Systems

## Furtherman EVD

The EVD (short for "eavesdropper") allows characters to better hear sounds within the normal frequency range. This provides a +2 to *Perception* checks that involve hearing.

## Furtherman LF

This unit allows the character to more clearly hear low frequency sounds and those below the normal Human range of hearing. It provides a +1 bonus to *Perception* checks when listening to such sounds.

## Furtherinan HF

This auditory unit lets characters hear high frequency sounds, those above the normal Human range. It provides a +1 bonus to *Perception check* to discern such sounds.

## Furtherman Private Investigator

This auditory system is combined with a subvocally-controlled computer chip that allows a listener to filter out undesired sounds. For instance, if the character is in a busy TramWay and he wants to listen in on someone's conversation a few pillars down, then he can cut out any of the conversations of people between him and his target. I get all my best contracts this way.

[Each major group of sounds takes one round to cut out, but the Private Investigator then generates a +2 to auditory *Perception rolls*.]

## McGinley ListenDog

Like the WatchDogs, auditory systems can also be repositioned about the body. All of the same options as the WatchDog are available, including the custom designs. Needless to say, one can quickly see the benefit of the extra set of eyes and ears that a SenseDog can give.

## Ear Tap

Ear tap lets the user tap into local radio transmissions. The user can select a frequency or set it to scan a range of frequencies. A built-in processor allows received transmissions to be sifted for a specific pattern, so the user can search for a particular phrase or sound (i.e. voice, hum, repeated pattern) across a range of frequencies. A neural jack is needed so that the user can change frequencies at will.

[Adds +2 to auditory *Perception* attempts when receiving frequencies and/or searching for a particular pattern.]

## NetWorld Sonar Sound

Sonar Sound lets your ears act as sonar receptors. A mini-unit implanted elsewhere in the body projects an inaudible (to most species) signal. Bounce-back is received by the ears. Information may be displayed to the eyes via a Brodie LED or similar system.

[Adds +1 to *Perception* attempts in dimly-lit conditions when using sonar information.]

## Olfactory Systems

### McGinley BloodHound

An additional product for the SenseDog line is the smell-detecting BloodHound. A BloodHound is a computer-assisted smell identification unit. It has been programmed with over 200,000 different smells, odors, and scents. It can detect gases, determine the chemical mixture of atmospheres, and even increase the enjoyment of sniffing flowers.

Great, now I can tell exactly what it is that's floating downstream.

[Gives a linked user a +2 to any *Perception* check involving scent.]

## Taste and Vocal Systems

### Dr. Yuk

Produced by the Furtherman Corp, a Dr. Yuk system will help identify virtually any substance tasted. With just the briefest taste (Dr. Yuk prevents poisoning from doses this small), Dr. Yuk can correctly identify over one million separate chemicals and poisons. It comes in Standard, Forked-Tongue and Frog's Surprise models. Note: McGinley has a virtually identical model in its SenseDog line. No accidental poisoning for this punk. One's gotta be careful in my line of work. )

[Mr. Yuk gives a +2 bonus to taste-based *Perception* rolls.]

### NetWorld Persuader/McGinley Smooth Talker

Corporate execs at NetWorld have spent a lifetime controlling their people. Lifelong contracts that indenture even future generations make sure that their little serfs are kept in line.

Unfortunately, there is the occasional rebel that needs to be re-convinced of his objectives. In order to do this, many of the execs have been equipped with the NW Persuader vocal system. This system alters the exec's voice imperceptibly with a series of alternating low and high frequency tones that make his victims more susceptible to his will.

Needless to say, possession of a Persuader on Imperial and Corporate Sector worlds is considered a bad business practice at a minimum. On some planets, it is even considered illegal. McGinley has a similar model which is a little more powerful, but easier to detect. If you've got to go with one, I'd say support McGinley. NW does NOT need any more encouraging in the mind control division.

[The Persuader gives a +2 bonus to any vocal attempt of *con* or *persuasion*. The Persuader can be detected with a Moderate auditory *Perception* or higher. The McGinley provides a +1D, but is detectable with a Easy roll versus auditory *Perception*.]

# Tactile Systems

## Furtherman Hypertouch

A hypertouch system can be purchased for any section of a body, but most often it is used to replace the nerve center in the hands. This nerve system can also be combined with Furtherman's (and only Furtherman's) MicroOptics visual system for microscopic manipulations. This includes delicate surgery where precision is necessity. As this system replaces a hand's nerve centers, this system is not compatible with other cybernetic hand replacements.

[When replaced, manual Dexterity is increased by +2 when manipulating small or delicate objects. When combined with Furtherman MicroOptics system, add +3 to skill checks for microscopic manipulation.]

## Physical Enhancement Systems

### **Brodie Equilibria:**

Fitted in place of the inner ear, the Equilibria improves balance. Uses of *acrobatics*, *beast riding*, *dodge*, and *melee combat* (defensive only) receive a +1 bonus when the Equilibria is in use.

### **NetWorld Synthemuscle:**

Artificial tendons used to support cyber- limbs (those which increase Strength by +2 to +1D+2). Normal muscle would tear under the stress of cyberlimb use, but Synthemuscle can act as a shock absorber. Synthemuscle with cyberlimbs ( or a cybernetic skeleton) provides STR+2 (a cyberleg provides STR+1D; a cyberleg plus synthemuscle provides STR+1D+2).

If installed without a cyberlimb being present, Synthemuscle provides a +1D to STR

**NetWorld Intradermal Plate:** The most expensive and dangerous cybernetic operation is to have thick, rubbery intradermal plate installed over one's major muscles. Intradermal plate is normally installed on the chest and arms and can stop anything short of a blaster.+2D

**Furtherinan AdrenoCharger Dispenser:** A small injector fitted onto the adrenal glands, the AdrenoCharger shoots adrenaline directly into the bloodstream. This has the effect of increasing Dexterity and Strength by +1D for five minutes, At the end of this period, the character suffers a -1D penalty to all Dexterity and Strength-related actions for 25 minutes.

**Furtherman EndorphoCharger Dispenser:** Fitted into the intestinal tract, the EndorphoCharger dispenser is activated by SimNerve. It releases a dose of endorphin into the system, increasing the character's STR by +2 for 15 minutes. At the end of the boost period the character takes two stun-results in successive rounds.

**Becker QuickKill Dispenser.** Created by a small corporation headquartered in a Inner Rim system, Becker QuickKill is an improved version of the best of Furtherman's combat drugs. It combines the effects of the AC and EC drugs and minimizes the effects. The character injected with a dose of QuickKill (also known as "Cue-kay") gains a +1D to all actions involving Strength, and Dexterity for ten minutes. At the end of this time, the character suffers *no* ill effects. However, if the character is injected with QuickKill again in a twenty-four hour period, the character receives the normal bonuses, but "psyches out" - he or she becomes incredibly paranoid (+1D+2 to resist any *persuasion* attempts, but -1D versus any tricks that feed the character's paranoia) and very violent. The negative effect lasts for twenty minutes. If a third or subsequent dose is taken within twenty-four hours of the latest dose, the effects get even worse and take longer to go away (progressively).

Because of several legal suits pending (Furtherman is currently trying to gain control of Becker and will probably succeed - unless someone like NetWorld or Brodie "White Knights" the situation), QuickKill is increasingly hard to get - and is even illegal in some areas of space (Furtherman has been throwing its political weight around). However, some Imperial garrisons and some corporate troops are beginning to stock up on Q-K.

**Brodie MindEnhance Injector:** Attached to the base of the brain, the MindEnhance releases a stimulant into that organ which raises the Knowledge attribute by +1D by for 15 minutes. Attempting to release a second dose of MindEnhancer while the first is still in effect will result in the Mind dropping by -2D. The character suffers a stunned damage result upon using the MindEnhance and another at the end of the fifteen minute period.



**NetWorld PainShield Injector:** Designed for use by corp marines (and often included with their body armor), PainShield blocks the effects of physical damage. Thus, a character who is *wounded twice* will not suffer the penalty to all skill attempts due to the effects of the PainShield, although the wound is still present. (Characters who are *incapacitated* will still suffer the two stuns per round of activity, however, as their inability to feel the pain does not negate the damage.)

A single dose of PainShield will block discomfort for 15 minutes. At the end of this time, the character will suffer a *stunned damage* result and incur all the penalties associated with the wounds he or she has suffered.

**Furtherman NBX:** This is a small box filled with neural injectors that can be fitted beneath the skin. Each box can hold up to three doses of a particular drug (or a variety of same). Unfortunately, using the Furtherman "all purpose" requires one action - the character must spend an action manually triggering the injector. It does not require SimNerve to use.

## Prosthetics & Cyberlimbs

Despite the feeling among the Empire that cyberware (especially prosthetics) is somehow corrupting, prosthetics remain very big sellers, both through legitimate outlets and street surgeons. These fully functional arms and legs range from the top-of-the-line models (constructed of high quality plasteel and lined with SimNerve to relay sensations) to the cheapest units, made of metal and unable to feel anything. These are often constructed haphazardly and are too bulky to cover convincingly with syntheflesh.

Prosthetics are used to replace lost hands, arms or legs. Often, mercenaries, corp marines or adventurers in need of an edge will have a limb cut off and replaced with something cyber.

All prosthetics require SimNerve running between limb and brain for purposes of control, as well as Synthemuscle to prevent bones from cracking due to stress.

**Note:** Strength and Dexterity bonuses are for actions using the affected limb. For example, a Cyberleg of STR+ 1 doesn't apply if the character is crushing a can with her hand. However, Strength bonuses to the hand being used would be applicable. Gamemaster's discretion as to whether any bonus applies in a given action.

### Brodie Cyberhand

These can be attached to normal arms or fitted on to cyberarms. Base-line models are simply metallic or plasteel hands, while more advanced units can have tools or weapons included in the digits (these provide a +2 bonus to lock picking and prestidigitation skill checks).

Cyberhands can rend or crush wood, plasteel and some softer metals. They provide a STR+1 bonus to their users.

A basic replacement hand (no Strength or Dexterity adds) can be purchased for 3000 credits. Cyberhand can provide bonuses to Strength and/ or Dexterity as listed in the charts. Costs are cumulative, so for a hand with STR+1/DEX+2, the cyber rating would be 1.5, and the cost would be 12,000 credits. The basic replacement Cyberhand is necessary before adding options.

The cost for a cyberhand with STR+0; DEX+0 is 3000 credits. Its cyber rating is 0.5. The difficulty to install it is Moderate, the wound level caused is *wounded twice* and the Systems Toughness is 7D.

### Cyberhand

#### Chart

STR	CR	Cost
+1	0.5	+3500

+2	0.5	+4500
+1D	1	+6000
<b>DEX</b>	<b>CR</b>	<b>Cost</b>
+1	0.5	+4600
+2	0.5	+5500
+1D	1	+7000

### Cyberhands Options

Options can be added to the standard cyberhand.

**Tool Hand:** Personal interchangeable digits for a basic cyberhand mount. Favored by techies for delicate work.

[Adds +2 on all repair skills (may specialize for an extra +1)]

Hand includes: Cutters, ratchet attachment (selfsizing), micro-torch, probe electronics

**\*Magic (Illusion):** Magic options adds +1D to *Hide: sleight-of-hand* and +2 to *pickpockets*. User's note: Compartments and such allow sleight of hand and less legal pursuits.

**Artist kit attachment:** These spray or liquid painting digits used by artists are comprised of small cylindrical canisters of paint mounted with mini-sprayer or pressure brush. Available for most species with identifiable digits.

**Medic Hand:** Adds +3 on Medic/First aid skills, which include pulse rate, injection system, and a cleansing system for wounds, burns, etc.

### Cyberarms

Cyberarms, always include the cyberhand of the same cyber rating. The basic cyberarm (STR+0/DEX+0) costs 4000 credits and has a 0.5 cyber rating. The costs of added capabilities are cumulative, so a cyberarm with STR+2/DEX+1 costs 11,200 credits and has a cyber rating of 2.

In order to use a cyberarm rated at STR +2 or above, synthemuscle is required. Synthemuscle is also required for systems which are rated at DEX +1D+1 and above. This reflects the extra body strength required to compensate for motions of the arm. Cyberarms have a difficulty is Moderate to install, a system Toughness of 7D and cause an *incapacitated* wound level.

### Cyberarm Chart

<b>Strength Add</b>	<b>Cyber Rating</b>	<b>Cost</b>
+1	0.5	+1000
+2	1	+4000
+1D	1.5	+6000
+1D+1	2.5	+14000
+1D+2*	4	+32000
+2D*	5.5	+65000
<b>Dexterity Add</b>	<b>Cyber Rating</b>	<b>Cost</b>
+1	1	+3200
+2	1.5	+4800
+1D	2.5	+6000
+1D+1	4	+18000
+1D+2	5.5	+45000

+2D\*                    6.5                    +90000

\*Must have exoskeleton for body to be able to support modifications of this level without taking damage.

### **Hand 'Wares**

Brodie, McGinley and Furtherman are fully committed (or at least should be committed) **to** the belief that the handshake is not dead. Every deal should be closed with one. Why? Well, how else are you going to get up close and personal to use these wonders of hand destruction?

### **Brodie Shockfist**

Part of the hand's power cell energy is diverted into an electrical attack. You light up my life ... Fleet is definitely not too keen on these shockers.

[For 100 days off of the life of the battery, a damage value 5D electrical attack may be made (touch range only).] In ESN-supported systems, this electrical attack costs the user three *stunned* results]

### **Brodie RamFist**

A high-compression gas cartridge can be loaded into the base of the Brodie RamFist hand replacement. When the gas is released (when you hit somebody), the hand extends at high velocity. Up to ten punches may be made from a single gas cartridge.

Body Blow! Body Blow! Go For The KNOCKOUT!

[RamFist does STR+1D/7D damage.]

### **McGinley Venom**

A small gas nozzle may be placed in a fingertip or on the back of a punk's hand that can be triggered to release a small amount of gas. Gas cartridges can be purchased to cause effects anywhere from sleep to acidic burn to nausea (to simple blinding (small paint spray or fog cloud). It's even tougher to see if someone blasts your eyes with acid. Heh, heh ...

[Sleep gas: Moderate STR check or unconsciousness for five minutes. Acid: damage value 4D. Nausea: Moderate STR check or vomiting for three rounds. Blinding: Add +2D to the difficulty of sight-based skill checks.]

### **Furtherman Cutting Edge**

Furtherman has produced a cyberhand that opens up to reveal a miniature buzzsaw. This saw can be used to cut through wood, plasteel locks, and even flesh, the latter being its most helpless victim. Because they are difficult to detect or remove, these are illegal on most Core Worlds. Now, if only I had one ...

[Damage value STR+1D/7D.]

### **Cyberlegs**

Cyberleg installation includes one foot of the same cyber rating and adds level. The basic cyberleg (STR+0/DEX+0) costs 6000 credits, and has a cyber rating of 0.5. Similarly to cyberhands, in order to use a cyberleg rated at STR+1D or above, synthemuscle is required. The same is true for cyberlegs rated at DEX+1D+1 and above. This reflects the extra body strength required to compensate for motions of the leg. Cyberlegs have a Moderate difficulty to install, a system Toughness of 7D, and cause an *incapacitated* wound level. Cyberlegs increase ones running speed and jumping ability. (+2 to movement rating every level of STR)

### **Cyberleg**

## Chart

Strength Add	Cyber Rating	Cost
+1	0.5	+1000
+2	1	+2000
+1D	1.5	+6000
+1D+1	2.5	+14000
+1D+2*	4	+32000
+2D*	5.5	+65000

  

Dexterity Add	Cyber Rating	Cost
+1	0.5	+3200
+2	1	+4800
+1D	1.5	+6000
+1D+1	2.5	+18000
+1D+2*	4	+40000

\*Must have exoskeleton for body to be able to support modifications of this level without taking damage.

## Foot 'Wares

Need that special boost on the run? Check out these mobility enhancers. These are produced by an independent corporation that has been specializing in footwear since the early pedestrian days. Named after Hermes, or some other ancient religious figure, I never can remember who.

## Rollerboys

Extendable wheels can be dropped down from the base of these foot replacements that increase a user's speed.

[Adds +10 to movement *running* speed limit. Requires use of skill, *skating*. Add +1D to the difficulty if traveling over less than even terrain, +2D if attempting to go uphill.]

## Rocketeers

If skating isn't your thing, perhaps you'd prefer flight. A series of gas nozzles placed along the bottom and back can be used to give limited flight capabilities. They aren't terrific but they are functional. One gas cartridge will last one hour. I wasn't born with wings, so I gotta even the odds somehow.

[50 meters vertical limit; 140 meters horizontal limit. Treat like rocket pack. They are usable only by people with the Rocket pack operations skill and, even then, at +2 to the difficulty number.]

## Clampons

For the outdoorsman in the crowd, the corporation has provided extendable spike footwear. The foot replacements will help mountain climbers, runners, and cat burglars hold on even the slickest surfaces.

[Add +1D+1 to *running* or *climbing* skill checks on nonstandard surfaces.]

## Magnetics

Primarily for Espos and mercs, these foot replacements generate a low-grade magnetic field which secures a person to magnetic surfaces such as ship hulls. Somehow I think cat burglars are more likely to use these than clampons.

[While secured, *fall prone* results can be ignored and a person's resistant Strength for pushing or pulling is increased by +2D. Note: Plasteel is considered magnetic.]

## **Brodie Cyberskeleton**

These metallic or plasteel bones can be purchased as a whole skeleton or in individual parts. Physicians have found it is easier to simply replace the skeletal structure of someone who has had a catastrophic accident than go through a long period of treatment and therapy to heal them.

Cyberskeletons do not increase Strength. They provide support. Cyberlimbs and muscle combinations that add +10 or more to a character's Strength can only be supported with a cyberskeleton.

Cyberskeleton bones are extremely hard to break - a power suit's sphincter valves won't cut through them, and neither will most weaponry.

Gamemasters should also keep in mind that there can be serious drawbacks to cyberskeletons. For example, a character is shot in the chest with a slugthrower - he need not fear that the bullet will shatter a rib, but it may ricochet off one and cause even more damage. Or, the character's muscles and tendons may be pressed and torn by the impact more than if they'd had the natural "give" of a bone. In addition, a character with a complete cyberskeleton masses 175% of his or her pre-cybered mass.

## **Sheaths**

Special features that can be added to cyberlimbs for an additional cost, sheaths are concealed compartments that can be used to hold weapons or other small items. They are normally concealed under syntheflesh and can be opened only through a mental signal from the arm or leg's owner (unless, of course, the cyberlimb is damaged).

## **Black 'Wares**

These are definitely a no-no as far as Imperials and Espos are concerned, but if you can get a hold of them, life will be so much better. By the way, their manufacturer, Blacktronics, is one of the best in the illegal weapons division. But somehow, I suspect that McGinley might just outdo them soon.

## **Sonic Disruptor**

This arm-mounted energy weapon fires a low-level sonic beam that resonates clean through a target. It is easily concealable, but it draws a lot of power. [In ESN-systems, the user suffers three stunned results and a power cell is drained 200 days.]

**Damage Value: 7D**

**Range:**

Short: 3-25

Medium: 75

Long: 150

**Price: 20000**

**Ammo: 30**

**Ammo Price: 125**

## **Neutrino Nullifier**

Based upon the principles of the ancient neutron bomb, this is the preferred weapon of cyberware thieves. Not only does it cause a vicious amount of damage, it leaves non-organic materials (read: cyberware) unharmed (well, maybe a little gooey). Because, like the Sonic Disruptor, there are no magazines, it draws energy directly from power cells or ESN.

[The power cell cost is 250 days. The ESN cost is five shock.]

**Damage Value: 8D**

**Range:**

Short: 3-15

Medium: 50  
Long: 100  
**Price:** 20000  
**Ammo:** 20

## Weapons and Weapon Systems

Cybernetic weaponry is normally concealed beneath syntheflesh or included with a cybernetic arm or leg. It is triggered through impulses sent from the brain via SimNerve. Most Cyber weapons are highly illegal in Imperial space.

### **Brodie Serpent**

A small-caliber slugthrower that can be concealed in the wrist. It is a favorite among cyberweapons as it is easily concealed by syntheflesh and does not place the strain on the arm that larger weapons do.

*Firearms Skill*

### **Furtherman Enforcer**

A powerful submachinegun fitted into the forearm, the Enforcer is one of the more impressive slugthrowers currently available for subdermal use. The firing port is concealed in the heel of the hand and is fired by bending the hand back. Firing takes place at a mental command relayed via SimNerve.

Skill: *Firearms Skill*

### **Claws**

Long, lethal blades, claws are stored in the forearm and spring from the top of the wrist. Combat with claws is considered melee, with them doing STR+1D damage. Cyber ratings given are for one set of claws. Skill: *melee combat*

### **Electric Claws**

Similar to above, save that the claws carry a powerful charge with them. This makes them able to do more damage. When drained, they do the same damage as normal claws. Skill: *melee combat*

### **Razortips**

Thin daggers that extend from fingers or toes upon mental command. They average two centimeters in length, but larger and smaller daggers are available. Razortips do a STR+1 damage in melee combat.

Skill: *melee combat*

### **Fangs**

Sharp, plasteel replacements for the canine teeth, these can be either solid or hollow and filled with drugs or acid. Skill: *Brawling*

### **Razor Wire**

Stored in the wrist, razor wire can be snapped at an opponent with a sharp movement of the forearm. Up to two meters long, razor wire does STR+1D+1 damage. If the *melee combat* check fails by 10 or more, the razor wire snaps back on its wielder and does normal damage. Skill: *melee combat*

### **Rocket Digits**

Commonly known as "stubs," these mini-projectiles replace the last segment of the finger. Rockets fire from the fingertips either singly or in groups, and explode on impact. The rockets are only accurate for four meters. Characters can replace one or more fingertips at a cost of 700 credits each, but the basic

firing and interface unit must be purchased to operate. Rockets are illegal cybertech on planets which forbid weaponry. Damage Value (per Rocket) 3D+1

### **Furtherman Cyber-weapon Scope**

Upon SimNerve command, the scope switches view to that of a Cyber-eye. When combined with Brodie LED, EyeHUD or a similar system, the scope allows the view to be windowed on the display. This allows the user to aim around corners while only exposing the weapon to potential hostile fire. Cyber-eye, SimNerve, EyeHUD or other "full screen" display systems are required. A neural jack-interfaceable gun is also required. The Cyber-weapon scope isn't itself cyberware and its connections work through existing cyberware, so it doesn't carry a cyber rating or an installation difficulty.

### **Body Club**

A Body Club usually replaces an arm or leg. Now, a normal person would just go to Brodie or the like and get something decent installed. But for the loonie on the fringe, the Body Club has some attraction. The Body Club is just that: a club with a stub to act as a hand or foot, except that the Club is electrified so it can act as a stun baton. A power battery is implanted in the body (ESN won't provide enough of a kick), as well as insulation to protect the user from zapping himself. Some "kinder" dealers even provide prosthetic hooks to act as hands when the user isn't out zapping. The Club has to be recharged by plugging it into a power pack, or outlet (a surge protector is advised for the safety conscious - of course, the safety conscious individual isn't using a Body Club).

[Damage Value STR+3D/7D. Provides 20 hits before needing to be recharged(Reduce damage value by +1D for a drained Club). A *mishap* means the user may have zapped himself.]

### **Venom**

Now anyone can spit like a snake. Venom is a sac of toxin (the user can choose the toxin) implanted in the roof of the mouth with a pressurized projection system which enables the user to spit a venom at an opponent at close range. Part of the installation process is getting a vaccine/antidote installed at the same time. Don't let your medic forget this part - some unethical practitioners will install the system, then charge extra for the antidote. (Damage value determined by the toxin).

### **Available Toxins**

Street names of a few of the more popular toxins are Dufuss, Somynde and Scud. These toxins aren't legal, and a *streetwise* attempt (Prohibited for Dufuss, Extremely Illegal for Somynde and Scud) is required to obtain them. Base costs are listed, but these may vary by as much as 20% depending on locale.

**Dufuss** reduces the Knowledge & Perception attributes by -2D within 10 seconds of skin contact. Over the next hour, these attributes will decrease by another -1 pip. Dufuss isn't fatal, but recovery takes 4 to 6 weeks, with attributes returning at the rate of +1 pip per week. The antidote is usually in a liquid form and removes the toxin's effects immediately upon ingestion. Cost: Dufuss: 600 (Antidote: 750).

**Somynde** is fatal if left untreated. Upon skin contact, the victim loses -2 pips to Strength and -1 pip to Perception. Within 10 minutes, the victim loses another -2 pips to Strength and -1 pip to Perception. This continues every 10 minutes until the victim falls unconscious. Unless an antidote is applied, the victim will fall into a coma and eventually die. The antidote stops the progression of Attribute loss, then enables recovery at +1 pip per hour for each Attribute. The antidote works on skin contact. Cost: Somynde: 1200, (Antidote: 1800).

**Scud** attacks the victim's central nervous system. Within 5 seconds of skin contact, the victim takes a *mortal wound* unless a check versus Strength is made (Moderate difficulty). If the roll succeeds, then the

victim takes a *wound* instead. Another check should be made every ten seconds. Immediate treatment is necessary to avoid death. The antidote works on skin contact, removing one wound level per hour. Cost: Scud: 2400 credits, (Antidote: 3200 credits - or more, depending on desperation, and how well the victim gets along with his traveling companions!).

## Martial Arts Enhancements

Due to weapons being outlawed on many "civilized" planets, several advancements have been made to make the martial arts expert deadlier. These cybernetic augmentations may still be noticeable by sensor or vision checks. Local customs vary as to their acceptability.

### Subdermal blocking plates

These are placed on the blocking areas of the arms and legs. They add +1D to *brawling* blocks and provide +1D+1 physical/ 0 energy for the limb when taking damage from blocking.

### Subdermal Knuckle Implant

These are plasteel implants which cover the knuckles and the back of the hand and add STR+1D to punches. Also available in touch-activated version. The user just touches the activation patch, usually located under a limb or on back of neck.

### Subdermal Foot Implant

Subdermal knuckle implants have also been adapted to the feet, providing STR +1D to kicks.

### Flex-version Subdermal Implants

Upon SimNerve command, the plates will harden. This option reduces noticability until fighting. Then, once the fight is over, the plates will return to their original flexible state.

**Cost:** Hand 1200 Foot: 1500

Very Difficult to detect on active search while flexible

Heroic success to detect on casual search while flexible

### HeadButt Plate

When it's time to Use Your Head!!! The HeadButt plate gives a STR+2 on brawling and martial arts strikes when using the head.

## Armor & Armor Systems

### Furtherman Mini-shields

Furtherman has recently developed hand /body mini-shields which are activated by mental (SimNerve) command. Upon activation, the shields spring open. In appearance and shielding capability, they are like insect carapaces. In normal use, these appear to be merely skin-grafted decorations. Mini-shields are usually placed on wrists, ankles, and the chest or torso. They are often decorated as jewel-tone plates or inserts. A mini-shield may also be worn as a jewel inserted on the forehead or bellybutton.

**TOU/Max Value: +1D+1 physical / +2 energy**

**Mass:** N/A

**Cost:** 2000/graft

Note: Mini-shield is also available in a non-cybernetic spring-loaded bracelet version which is activated by a shake of the wrist. This is reputedly a 'genuine' article made by Kestarian artisans.

### Electro-Magnetic Pulse Shielding



In general, cyberware is installed with a basic level of interference shielding. Still, this shielding level is designed only to handle ambient interference levels. For protection against concentrated electromagnetic fields or pulses, EMP shielding is required. The EMP shielding comes in degrees of effectiveness.

All EMP Shielding I levels increase the difficulty of attempts to shut down or damage the protected electronics. Anyone using cyberware should take the first level it they wish to travel in space comfortably (i.e., without having their system shut down).

Level I	System TOU+3	+25%
Level II	System TOU+1D+2	+40%
Level III	System TOU+2D	+60%

### **EMP Weapons**

EMP weapons fire concentrated pulses of wide spectrum electronic frequency. These pulses attempt to disable or shut down electronics. The EMP weapon attacks the target system's Toughness. Use the results chart to figure wounds. Treat results as if the equipment had taken physical damage. An EMP bomb is also listed; the bomb's decreased effectiveness is due to its widespread pulse.

<b>Type</b>	<b>Shots</b>	<b>DN</b>	<b>Cost</b>
Hold out pistol	2	TOU	2000
Pistol	6	TOU-1	2200
Rifle	12	TOU-3	3100
Heavy Assault Rifle	30	TOU-4	4300
Bomb	1	TOU-2	2500

# Bioware Technology

## Biological Eye Replacement

A biological eye replaces a lost eye with an organic replacement. The Bio-eye, if matched well with the recipient, provides 20/20 vision. The best matches occur when the recipient has a cloned eye from their own tissue. This has prompted many clinics to offer eye cloning and storage. The eye-cloning procedure is relatively common and can be done in a single clinic visit. The replacement procedure is similar to installing a cyber-eye.

### Cloning

**Cost:** 4000 credits (procedure only, storage costs vary)

**Difficulty to Install:** Moderate

### Replacement

**Wound Level:** *twice wounded*

**Cost:** 3000 (procedure only)

**Difficulty to Install:** Difficult

Some clinics charge a fee for accessing the stored eye, often stated as a care and transfer (CT) fee. A failed *medicine: cloning* attempt means the eye replacement won't take upon installation, or the eye produces less than 20/20 vision. A failed *medicine* attempt upon installation means the eye unit is damaged or installed incorrectly so that it doesn't produce maximum performance.

## Glare-reducing Contacts and Enhancements

Glare-reducing (GR) contacts provide protection against glare and flash. The contacts work with biological eyes. [Adds +3 to Strength attempts vs. blinding attack, +1 to Perception attempts in high-glare.] Cost: 600 credits.

## Cloned Limb and Organ Replacements

Cloned replacement limbs and organs are available on advanced Core Worlds. The replacement is grown from a living sample. Many clinics offer cloning samples or limb storage for a fee. If an injured character has a cloned part already on storage, replacement can be done immediately upon entrance to the hospital. However, if the character has a sample on storage, the limb or organ will need to be grown. This takes four weeks if the clinic uses nanite accelerators, otherwise growth can take six weeks. Although it doesn't take additional time, most clinics charge a fee if they need to take the sample at the time of admittance for an injury/loss. Cloned replacements re-enable capability only unless enhancements are specifically purchased. Enhancements involve altering the genetic makeup of the

clone at the initiation of growth. Costs for the enhanced limbs and organs shown are in addition to the cost of the basic replacement.

A biological hand (or similar appendage) provides re-enablement only (STR+0/DEX+0). Treatment to replace a limb involves surgery and the character suffers a *twice wounded*, except in the case of hands and feet- installing these causes a *wound*. Healing nanites are often used to accelerate adaptation and acceptance of the new part.

The main factor in determining the individual's maximum allowable add is that individual's Strength. Their Strength before modification must be four times greater than the pip (converting 3 pips to 1 die).

Therefore, to have a +1D total Strength add, the character would need a Strength of 4D.

### Cloned Replacements

Replacement	Diff. to Install	Cost (credits)
Bio hand	Moderate	4000
Bio foot	Moderate	4500
Bio arm	Moderate	6000
Bio leg	Moderate	9000
Bio organ	Moderate	5000-100000*

\*based on organ, location and need; often, the more you need it the more it costs.

Enhancements for the various limbs and organs are listed below. The list is not complete as geneticists are constantly creating new alterations. Humanoid references are used when describing these biological enhancements, but similar capabilities are available for body parts with similar functions for many of the known species.

### Hand

Hand Strength and Dexterity enhancements can be purchased in increments. For most species, foot adds are limited to STR+2 and DEX+1. Increases are possible at the gamemaster's discretion.

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### Hand Enhancements

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#### Strength

Add	Cost
+1	+4500
+2	+6000

+1D	+9000
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**Dexterity**

<b>Add</b>	<b>Cost</b>
+1	+6000
+2	+9000
+1D	+15000

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**Arm**

Biological arm enhancements are purchased in increments as described in the table. An arm enhancement includes a hand of similar Dexterity and Strength. Muscle enhancement is part of the process, allowing Strength and Dexterity to be bought up without requiring synthemuscle. This extra procedure is reflected in the cost. This process limits the maximum value for Strength and Dexterity enhancements to the arm.

**Arm Enhancements**

<b>Strength Add</b>	<b>Cost</b>
+1	+3000
+2	+6000
+1D	+14000
+1D+1*	+32000

<b>Dexterity Add</b>	<b>Cost</b>
+1	+4800
+2	+6000
+1D	+18000
+1D+1*	+45000

\*Requires bio- or cyber-skeleton

**Leg**

As with the biological arm, biological leg enhancements are available. Muscle enhancement allows Strength and Dexterity increases without synthemuscle. Leg includes foot of similar Strength rating.

**Leg Enhancements**

<b>Strength Add</b>	<b>Cost</b>
---------------------	-------------

+1	+5000
+2	+9000
+1D	+12000
+1D+1*	+20000

**Dexterity Add Cost**

+1	+8000
+2	+12000
+1D	+16000
+1D+1*	+24000

\* Requires bio- or cyber-skeleton

## Bio-enhancements

### Brodie Skin Armor

Brodie skin armor consists of a cyberware nanite treatment to toughen the outer layer of skin. The nanites weave an extra-tough fiber into the epidermis. After deployment and weaving of the fibers, the nanites cease functioning. The fibers have an estimated effective lifetime of five years, after which they begin to decay. Brodie projects this lifetime based on "moderate" usage, meaning the actual lifetime may be influenced by the number and force of impacts to the fiber-weave system. [At the gamemaster's discretion, the lifetime may be reduced by one to three years for characters who have experienced significant damage to their skin armor.] Brodie recommends that the old fibers be removed (Moderate Difficulty, light wound, Procedure Cost 2300 Credits) before attempting to install new ones. Brodie skin armor covers all types of damage.

### Brodie Skin Armor

Effect	Cost	Diff. to notice
+1	8000	22
+2	12000	18
+1D	28000	16
+1D+1	60000	12

### Chiron Minitech Skin Armor

Chiron Minitech skin armor is similar to Brodie's, except that the nanites are biological and they excrete an organic fiber which is woven into the skin. This organic fiber sends root-like tendrils into the outer

layer of living skin tissue to draw nutrients to the fiber-weave thereby extending its functional lifetime to five years. After five years, the roots begin to weaken and are unable to penetrate the living tissue unless the procedure is repeated to correct and replenish the fiber. If not, the organic fibers will die off over the next three months, after which new skin armor may be applied. As with Brodie skin armor, serious damage may reduce the effective lifetime of the fiber-weave up to a maximum of three years.

### **Chiron Minitech Skin Armor**

Effect	Cost	Diff to notice
+1	12000	28
+2	18000	22
+1D	42000	18
+1D+1	90000	16

Note: Cyberware (mechanical) and bioware nanites should not be used on the same system. The two types of nanites will go rogue and fight which will cause deadly infections in the recipients

### **Medi-clone Biologically Enhanced Endoskeleton (Bioskeleton)**

When adding cybernetics, the replaced limbs are affected, yet without other bodily modifications the rest of the body remains unmodified. Full-body cybernetic increases to someone's basic Strength are accomplished using a powered exoskeleton. A Bioskeleton is actually a modification to a person's pre-existing skeleton. The Bioskeleton provides increased Strength (+1D), and provides additional support to cyberware by allowing the body to support cyber- or bioware limbs rated to +1D+1 Strength and +1D+2 Dexterity.

Bioskeletal development involves a series of nanite treatments administered over a period of 10 weeks. Over 30 different strains of nanites are used. These short-lived nanites gradually replace over 80 percent of the patient's original bone mass with an organic interwoven composite. This process increases the patient's mass by 25 % once complete. Shorter treatment periods are available at significant cost, risk, pain and recovery time.

A mix of mechanical and biological nanites are employed in various phases of the treatment program. The treatment schedule is very precise in order to avoid conflicts between the nanites. Injections are timed so that a new strain is introduced after the previous one has died off, but before the skeletal alterations begin to decay. If the treatment is discontinued before completion, the composite begins to dissolve, resulting in the patient taking one wound per week (cumulative), starting from the treatment's rated wound level. The character will take up to a total of one less wound than the number of treatments already taken, with a minimum of one wound accruing from even just one missed treatment. Recovery begins once the character resumes treatments or is hospitalized.

## Bioskeleton Treatment Chart

Treatment Length	Diff	Wound Level	Cost
10 weeks	Moderate	<i>wounded</i>	65,000
8 weeks	Difficult	<i>wounded</i>	85,000
6 weeks	Difficult	<i>wounded</i> <i>twice</i>	125,000
5 weeks	Very Difficult	<i>wounded</i> <i>twice</i>	175,000
4 weeks	Very Difficult	<i>Mortal</i>	250,000

If treatment is resumed, the first two injections will repair the damage already done, after which the number of injections which remained in the treatment program before cessation must be completed to produce the Bioskeleton. Hospitalization, without reinstating the Bioskeleton treatments will enable the character to recover, but the character's Strength attribute will be reduced by -2D, and the Dexterity and Mechanical attributes will be reduced by -1D each.

The chart above gives the wound level, Difficulty to install and cost for different treatment program lengths. The more the process is sped up, the more it is likely to fail. The wound level is sustained throughout the treatment period, reflecting the level of adaptation the body is forced to undergo for that time.

## General BioWare

### 3rd Hand

This is the human name for it, anyway. The 3rd Hand is a biological organism which produces an extra limb. The limb is normally retracted, making it almost unnoticeable. Upon activation, usually by touch, the limb extends to a length of 10 centimeters. The tip is covered with tiny suction cups, enabling the limb to hold light items. The organism can be implanted on the torso, or onto standard human-sized arms or legs (requires enough organic mass to attach to and derive nutrients from). Wound level caused: *wounded*. Cost: 6200 credits.

### Gills

Gills allow oxygen-breathers to breathe underwater by drawing existing oxygen from the fluid and sending it to the lungs. Gills work in water and other oxygen-containing fluids. They are grown into the recipient's system over a period of three months. During the initial growth period, the subject incurs a wounded

twice result. Gills are also available in versions which draw other substances from fluids. Cost: 4500 credits.

### **GekkaGrip Bioware**

Turn your pores into microscopic suction cups! Cling to walls, ceilings, and those annoying slickpaper infoshets! Available for hands and feet - can also be added to just about any patch of your own skin! Be a master of Liars Poker! Do away with pockets altogether! [Adds +2D to *climbing* attempts, +2 to prestidigitation attempts. Character must have some type of skin armor to help support the skin or it will rip off-] Wound level caused: *wounded*. Cost: 3000 credits per 4 by 4 centimeter patch.

### **Fusion**

A specific drug can be fused with the user's body so that it is dispensed at a defined dosage over a set period of time, or until an antidote is Fused with the user. Useful for long-term application of prescription drugs, or for use of drugs which enable adaptation to a foreign environment. The CSA has often made Fusion technology available to scouts and surface troops. Fusion can be used to kill, as well. Cost: 400 credits and cost of drug.

### **Nitrodrenalin**

Nitrodrenalin is a small gland implanted alongside the adrenal gland (or its alien equivalent). At a mental command, it will release a dose of Nitrodrenalin, a synthetic organic supercharger. Nitrodrenalin gives +2D to the character's Strength, and Dexterity, although it cannot cause the character to exceed the species maximum. The attribute increases are maintained until the character turns the gland excretion off or falls unconscious. The gland contains enough Nitrodrenalin for 12 combat rounds and it will replenish used doses at the rate of 1 dose per Standard hour. Nitrodrenalin use has its drawbacks, however. Its use places a great strain on the user's body. Body temperature increases continuously and the character has a base Moderate vs. Strength to prevent overheating, or take the resultant damage. This difficulty increases by 1 level every two rounds that Nitrodrenalin is used. Regardless of the success of the Strength roll, the Nitrodrenalin user takes one stunned damage per round of use. One other effect is that a Nitrodrenalin user will show up very well on infrared (+2 to sensor attempts to detect character).

Nitrodrenalin was discovered during a Corporate Sector fringe skirmish by a corporate merc unit. The defenders were surprisingly effective against the mercs despite inferior numbers and antiquated equipment. Finally, at extreme cost, the mercs won. The team's medic examined the enemy corpses and discovered the tiny Nitrodrenalin gland. A few experimental units have employed the Nitrodrenalin gland, and usage is becoming more widespread among special advance combat teams among the Espos. The cost for implantation of the Nitrodrenalin gland is 20,000 credits. The procedure causes an *incapacitated* wound, and has a Moderate install difficulty.

## **Martial Arts Bio-Enhancements**



## **Block Booster**

Block booster toughens skin and bones at blocking points on the user's arms and legs (or appropriate limbs). Emplacement requires three doctor visits to apply successive injections at three to five day intervals. This is a minor medical procedure which causes a *stunned* wound. Note: This could cause early cases of arthritis. [Adds +1D Strength to limbs and +2 *brawling combat* blocks only. Difficulty to Install: Moderate, Cost: 1500 credits.

## **Tough Strike**

Tough Strike helps the martial artist pack more of a punch. An injection causes calcium deposits to harden on the knuckles and back of the hand. Only one clinic visit is required for injection. [Adds +2 *Brawling* only. Difficulty to Install: Moderate. Wound level caused: stunned. Cost: 2000 credits.]

## **Brain-skin**

Brain-skin is not the real name of the technology, but it serves as a close-enough moniker. Espo researchers found that live brain cells could be extracted from a still-living brain and kept alive via grafting and other support means. The impulses from the cells can be interpreted, and even directed. Brain cells mixed with other live tissue are grafted to a recipient's skin, where the graft acts in a manner similar to neural chips (Knowledge and Skill 'softs). This technology is believed by some to be an outgrowth of Live Tissue Computing. The graft can be directed to provide data on different topics, although whether the graft is, in effect, pre-programmed toward specific tasks or directed by the user is unclear. This technology, like Live Tissue Computing, has raised concerns among many members of the Empire and CSA. For one thing, the source of the brain cells is unknown and this has caused fear that the brains may be grown and banked to provide organic material for Brain-skin and similar technologies. Only two labs perform Brain-skin grafts, both under the CSA. This technology is very expensive, and very few recipients are known of. Both labs are very secretive with their client lists. [In known cases, it adds +1D to the skill chosen. Cost: N/A.]

## **FluidCrys**

Also known as LiquidIce or Waterjewels, FluidCrys is a clear viscous fluid which, when poured over skin, beads, then hardens into fiery diamond-like crystals. Popular as jewelry, no "practical" use has been found. The bioware version allows the wearer to ingest the FluidCrys, producing skin jewelry at random locations on the body. Luckily the FluidCrys seems to know the difference between internal organs and external skin. [Wound Level Caused: *Light*. Cost: 1500 credits per bottle.]

## **Skin Blade**

No one really knows how a Skin Blade works, or even if it is organic or mechanical in composition. The only documented Skin Blade devices appear in scout reports as small silver rings. These rings, when placed over a small body appendage such as a finger or toe, cause that appendage to have the ability to

turn into a metal-like blade. This blade is extremely tough (Strength 7D), and very sharp. The appendage can be transformed upon command. Commanding this transformation however, takes some practice in muscle control. Skin Blades do STR +3D/9D damage in melee combat. Cost: N/A. [Wound Level Caused: *Heavy*.]

### **Personal Paint**

Comes in several varieties: reflective, "stealth" black, and a variety of colors. When applied, the cream is translucent; body heat causes it to activate. The paint applies like a thin coat of facial/body cream. It washes off with water, so it isn't too useful in rain. Personal paint is also available in an ingested form. [Adds +1 to (Sneak vs Sensors (reflective, stealth) or Perception (stealth): Gamemaster's discretion as to whether situation is applicable.] Cost: 200 just decorative; 800 for sensor defeating; doubled for ingested form.

Skill Ware	Diff. to Install	Wound Level Caused	Cyber Rating	Cost
NW Chip Reader, vI	Moderate	incapacitated	0.5	900
- ,vII	Moderate	incapacitated	1	1200
SkillNerve, vI	Difficult	mortal	1	3500
- vII	Difficult	mortal	1	6500
- vIII	Difficult	mortal	1	18000

## SKILL CHIPS

### Skillssofts and Knowledgesofts

Knowledge and skill-softs are chips which allow the user to "plug in" a capability. The user must be equipped with a chip reader, which is considered cyberware. Collectively known as neuralsofts, 'softs come in three varieties: Knowsofts, Trainingsofts, and Skillssofts. A Hybrid of Training and Skill softs is also available for certain skills. Knowsofts provide supplemental information on a particular subject. Knowsofts affect skills based on the Technical, Knowledge and Perception attributes. Trainingsofts provide information on how to do an Strength, Dexterity, and Mechanical-based skill. For example, a martial arts Trainingsoft would list the maneuvers necessary to perform a sidekick. Such a list could be displayed on an EyeHUD or other display system (such as an audio cyberimplant). Skillssofts directly control the body's actions, and as such, provide the user with skills based on Dexterity and Strength. Use of a Skillssoft requires SimNerve and SkillNerve to interface the impulses from the chip to the central nervous system. Someone using a martial arts Skillssoft would be capable of performing a sidekick as directed by the chip. Chipped skills provide a basic level of capability, but do not replace genuine learning. If a trained martial artist used a martial arts Skillssoft, he would be limited to the skill level of the chip since the chip's impulses would override the user's own commands. Neuralsoft costs can vary by as much as 50% from the prices listed here depending on location and the buyer's skill in haggling. Note: Since there are viruses even in 'softs, players should consider getting HeadCheck.

### NetWorld Chip Reader

A neural chip reader is necessary to use any Skill, Training, Hybrid, or Knowledgesofts (hereafter collectively referred to as neuralsofts). Chip reader vI handles Knowledge and Training 'softs. Chip reader vII handles all four types of neuralsofts by providing a connection interface to SkillNerve for Skillssoft use.

### SkillNerve

This add-on to SimNerve enables the use of Skillssofts. SimNerve connects the central nervous system to the cyberware, but is shielded in between. SkillNerve is an addition to SimNerve which interacts with the, muscle groups themselves. This allows commands sent from a Skillssoft to interact with the chip user's muscles. This is also why the chip's impulses override the user's natural ability in a skill.

### Neuralsoft Charts

The number after the add (in the "Adds" column) is the maximum level which the chip can provide. In the case of Skillsofts, the chip overrides the user's natural skill ability as stated above. The maximums listed are for those with high Dexterity, Strength or Mechanical attributes. Therefore, even though a chip might be capable of providing a +3, if the user already has a very high attribute, the chip's effectiveness is limited. This is due to the programming and nerve interface limitations of the chipware itself.

<b>Knowsofts</b>	<b>Technical, Knowledge &amp; Perception Based</b>	
<b>Adds</b>	<b>General</b>	<b>Specialization</b>
+1/6D	2000	1500
+2/6D+2	4000	3000
+1D/7D+1	8000	6000

<b>Skillsofts*</b>	<b>Strength, Mechanical, and Dexterity Based</b>	
<b>Adds</b>	<b>General</b>	<b>Specialization</b>
+1/5D+1	8000	6000
+2/6D	18000	15000
+1D/6D+2	40000	35000

\*Skillsoft use requires a minimum Strength of 2D+2 for most 'softs. This reflects the user being able to use the chipped skill without damaging himself.

**Trainingsofts**

**Strength, Mechanical, and Dexterity Based**

<b>Adds</b>	<b>General</b>	<b>Specialization</b>
		<b>n</b>
+1/5D+1	2000	1500
+2/6D	4000	3000
+1D/6D+2	8000	6000

**Hybridsofts**

Hybridsofts are basically Training softs with body language and mannerisms added. To get these movements, though, one still has to have SkillNerve installed.

Hybrid Chips are only available for skill specializations.

Hybrids also work a bit differently than Skillsofts. If the character has a general skill in, for example, *Cultures* at Knowledge +1D along with a specialization of and additional pip to *Cultures: Wookiee rituals* and then he chipped a Hybrid *Cultures +2 Wookiee rituals*, his total would be +3 pips in *Cultures: Wookiee rituals*. The character's +1 pip specialization does not help although his general skill levels do. This is in contrast to a Skillsoft, which would only provide the chip pips. Practice with the chip is still necessary; one week of practice is needed for each +2 of chip adds.

### Hybridsofts

Adds	Specializations
+1/6D+2	3000
+2/7D+1	7000

The following list shows skills not covered individually and details about what Hybridsofts are available in various markets. All the following chips are Hybrids, and therefore must be applied only to skill specializations.

**Con:** Teaches basic con-artist tricks and produces the matching body language.

**Culture:** It can teach the rituals, customs, and body languages. For those rituals involving body motion (dances, gestures), the 'soft directs the user's body accordingly.

**Intimidation:** Provides techniques of the of effectively intimidating and a few actions as well.

**Streetwise:** This chip needs to be appropriate to the area it is used in. It provides information on where and how to cut deals, along with a few convincing moves and body language.

**Survival:** This chip needs to be matched to an area or a terrain. It shows survival techniques and helps in related actions (such as slowing breathing).

**Persuade:** This chip provides the words and body language to charm another. It must be culture and species specific.

**Disguise:** For a given disguise, this'soft provides tips and moves

### Examples of 'Softs

So let's say you want to have that extra bit of know-how at your fingertips. I've listed some 'softs which can help you out. They don't replace the real thing, but having a surprise tucked away in your head can never hurt.

### **Brawling: Martial Arts Trainingsoft**

Brawling: Martial Arts Trainingsofts are available in a variety of martial arts styles. Trainingsofts provide a maximum of the first pip in learning one martial arts style. Trainingsofts cannot be used to gain successive adds in the skill. Cost: 2000 credits.

### **Brawling: Martial Arts Skillssoft**

Brawling: Martial Arts Skillssofts are available in a variety of martial arts styles. Use of this 'soft requires a practice period of one week per one pip for the user to adapt to the chip's commands. Continued practice with the chip is also necessary. It is important to insure the 'soft was programmed for a similar species, as the greater the difference between the intended user species and the chip's user, the less effective the chip becomes. This Skillssoft provides a maximum of 1D in brawling: martial arts. The chip user must either use the chipped skill during the course of an adventure, or specifically take time to practice. Otherwise, at the gamemaster's discretion, the chipped skill acts at one lower skill level during the next use. Cost: 6000-15000 credits, depending on the martial art style difficulty and the legality of the chip.

### **Scholar Knowledgesoft**

Scholar Knowsofts provide supplemental data regarding a particular scholarly science or subject. The user must already have the specialized scholar skill for the chip to provide the add to skill attempts using that specialization. An untrained user might access the information, but wouldn't be proficient in how to apply it. Similar to Scholar Knowsofts, Medicine Knowledgesofts provide medical information to the user and also must be used by a skilled user. [Adds +1 to scholar specialization skill attempts.] Cost: 1500 credits.

### **First Aid Knowledgesoft**

First Aid Knowledgesoft provides information on basic first aid. [Adds +1 on first aid attempts. It does not provide a modifier to medicine attempts] Cost: 2000 credits.

### **Navigation Knowledgesoft**

Navigation Knowsoft provides supplemental navigation information regarding a specific area. For example, a Astrogation Knowsoft would provide information on a specific sector or sectors of space in a format suitable for use with common starcharts. However, this Astrogation 'soft wouldn't provide any assistance in navigating across the continents of Haven. Cost varies; 1500 - 8000 credits, depending on locale and detail of information.

### **Vehicle Piloting Knowledgesoft**

*Vehicle Piloting* Knowsofts don't really tell one how to pilot the craft, but they do provide quick access to ship stats and procedures. This can be useful when looking for the emergency evacuation procedures while firing the main weapons, as well as correctly performing pre-flight checks. There are 'soft versions for space ships, air ships, repulsorlift vehicles and ground vehicles, etc.. VP 'softs can provide +1 pip to vehicle piloting operation attempts by a skilled user in an unfamiliar craft. Craft type must match the 'soft, and the user must be skilled in the use of that category of craft (spacecraft, motorcycle, etc.). Cost range: 1500 - 2000 credits.

### **EVA Maneuver Knowledgesoft**

This 'soft gives information on EVA suit donning and doffing, suit equipment and tether points, basic airlock procedures, and EVA tool use for a common set of tools. EVAM 'soft gives +1 pip for EVA maneuver attempts. Cost: 1500 credits.

### **Persuasion: Seduction Knowledgesoft**

This 'soft provides knowledge of sexual relations. 'Softs are species-specific, so the appropriate 'soft must be chosen. A variety of customs and species 'softs are available. Note: The soft only provides information, not ability and the user must have the *charm* skill. [Adds +1 to Persuasion: Seduction attempts.] Cost: 1500 credits.

### **Arithmachip5**

This is really just a math knowledge chip. It's useful when you need to do those lightning-fast calculations "in your head." Rumor has it that the /soft occasionally screws up; like once in 27 years. Not a problem, unless your luck runs out. [Adds +1 to Mechanical or Technical skills where math knowledge is a component of the skill. If a *complication* occurs, the 'soft may comp on have glitched the calculation.] Cost: 2500 credits.

### **HeadCheck**

HeadCheck is a headware Neuralsoft virus checker program. It can be used in a head-chip version or as a stand-alone unit. The stand-alone unit is usually preferred - why risk putting a polluted virus checker in your head? [Adds +2 to *computer programming, Perception, or sensor* attempts to discover virus]. Stats for cyber- version shown.

### **Infochips**

This next item is really a type of knowledgesoft. Any given chip is subject-specific. That is, you don't learn to find the Brodie HQ bathroom from a Furtherman Corporate-Housing chip.

Large organizations such as the Empire, Corporate Sector, planetary governments, and even corporations like NetWorld and Brodie have thousands of rules and regulations. Infochips are available to keep this information at the disposal of new employees and their bosses (or even any work-for-hire types

like friendly mercenaries). Many corporations distribute "employee introduction" chips to their workers to help the newcomers become familiar with corporate policies and culture. These chips are informational in nature, and do not contain sensitive or proprietary information. Infochips will give one or two adds to Intellect-based attempts to "know one's way around" an unfamiliar organization with modifications based on the situation.

## **Entertainment 'softs**

If you don't like the way your life is going, just borrow another one for a while. Of course, these 'softs are for entertainment purposes only.

'Entertainment softs are the ultimate escapist passion. Users, commonly referred to as softheads, just plug in their favorite game, sensations or "simulated experiences." Most major brand productions include a set of buffer commands which the chip sends to the chip reader to damp out physical responses to the chip's sensory inputs. When active, this buffering action tends to give chip users a dull zoned-out look. All entertainment softs require the user to have an installed neuralsoft chip reader.

The popularity of these 'softs vary. Some planets expressly forbid them, while on many worlds, they are common entertainment. Gamesofts are popular among those on long-term space or planetary missions. Some worlds even have entire entertainment industries devoted to producing "sensies" in which actors are fitted with sensory-experience recorders which copy the actor's sensations to chips which can then be produced as an entertainment package. Major Sensie houses edit the 'softs before production in order to remove any unpleasant sensations, and to augment the 'softs' sensory transmission quality. Black or Dark market 'softs often haven't been edited, and users of these 'softs risk exposure to negative sensations as well as an overall poorer recording quality. The Empire forbid the use of sensies anywhere in their ranks.

Gamesofts usually run from 20 to 100 credits, while major Sensie productions can cost 50 to 200 credits depending on where the 'soft is- bought. Black and Dark market 'softs cost whatever the seller can get for them.

## **Immersive training**

Finally, someone came along and developed the "smart-pill" everyone's been waiting for. This thing's a major boon to orgs like CSA that want their people to learn the org's own brand of "skills-with-a-message."

For those equipped with a neuralsoft reader, immersive training no longer requires cumbersome sensory-interaction apparatus such as virtual reality goggles or digit-command readers. Now a trainee's sensory inputs can be controlled via the immersive-training (IT) 'soft. IT 'softs are programmed to provide a user with a totally immersive experience in which learned skills can be applied. The 'soft produces the sensory inputs a person would experience in the programmed environment, and allows the training subject to



input responses to that environment. So in the case of aircraft flight training, the trainee experiences the motions, views, and other sensations of being in an aircraft. The trainee's responses, such as joystick commands, are fed back to the 'soft. The 'soft then uses these actions to modify the program, and hence, the sensory experience. 'Softs have to be attuned to the species of the user. Due to the intensity of the immersive experience, someone exposed to an incorrectly programmed or unmatched 'soft needs to make a Moderate Willpower check to avoid developing hallucinations or other mental glitches.

The Espos have replaced many of their cockpit and ship-command-center hardware simulator training programs with IT-based programs (although their grunt-busting practices remain the same as before). This has caused significant cost savings, as hardware simulators are expensive to build and maintain. Critics express concern that the fidelity of the IT 'soft is limited to the perceptions and programming ability of the 'soft's programmer, and as such may limit the trainee's ability to develop insight into handling off-nominal situations.

IT 'softs can reduce the time it takes to learn a new skill. IT'softs exist for vehicles, battlesuits and powered armor, along with a variety of custom developed technological items.

	System	DN to Install	Wound Level Caused	Cyber Rating	Basic Cost	System Notes TOU
<b>Misc. Items</b>						
SimNerve		Moderate	mortal	1/0.5	500	* Used to communicate commands from brain to hardware. Necessary for all cyberware except for Synthflesh II & III
Enhanced SimNerve (ESN)		Difficult	mortal	1.5	1875	
Syntheflesh		Easy	stunned	0/0.5	200-650	N/A Fake flesh used to cover cyber. Cyber Value for Grade I only
Fooler		Moderate	wounded twice	1.5	6000	4D Adds +2D to difficulty of sensors to detect cyberware.
Neural Jack		Moderate	incapacitated	0.5	1100	3D Used to access cybernetically capable computers via SimNerve
Weapon Jack		Moderate	incapacitated	1	900	4D +1D to the interfaced weapons skill attempt. When used in conjunction with an eye display system, the system adds +1D+1.
Power Cells		-			200	4D
Testron Body Vision		Moderate	wounded twice	1.5	6000	N/A Adds +1D to sneak or disguise skill checks.
Organ Replacement		Difficult	mortal	2.5	50000	7D* Increases a patient's STR by +2.
Broken Heart		Difficult	mortal	2	50000	7D* Each heart-unit adds +2 pips (convertible to 1D for every 3 pips) to the person's roll versus dying when mortally wounded
NW Personal Jammer		Difficult	wound	0.5	3600	5D Adds +2D to difficulty to electronic surveillance rolls.
Finger Stinger		Moderate	stunned	0.5	1000	5D
NW Adjustable Comlink		Moderate	wound	1.5	1500	5D
Motion Scanner		Moderate	wounded twice	1	2000	6D Adds +2 to Perception for detecting vibrations. Cost: 2000 if implanted into biological hand; 900 if added as a cyberhand module
Element Scanner		Moderate	wounded twice	1	2100	6D Cost: 2100 if implanted into biological hand;1000 if added as a cyberhand module Adds +1 to sensor attempts to identify composition of an item.
<b>Olfactory Systems</b>						
McGinley Bloodhound		Moderate	stunned	0.5	1250	6D Gives a linked user a +2 to any Perception check involving scent.
<b>Taste and Vocal</b>						
Dr. Yuk		Moderate	stunned	0.5	1000	6D Mr. Yuk gives a +2 bonus to taste-based Perception rolls.
NW Persuader		Moderate	wounded twice	1	10000	4D The Persuader gives a +2 bonus to any vocal attempt of con or persuasion. The Persuader can be detected with a Moderate auditory Perception or higher.
McGinley Smooth Talker		Moderate	wounded twice	1	12500	5D The McGinley provides a +1D, but is detectable with a Easy roll versus auditory Perception.
<b>Tactile Systems</b>						
Furtherman Hypertouch		Moderate	wounded twice	1	5000	4D When replaced, manual Dexterity is increased by +2 when manipulating small or delicate objects. When combined with Furtherman MicroOptics system, add +3 to skill checks for microscopic manipulation.
<b>Auditory Systems</b>						
Furtherman EVD		Moderate	wounded twice	0.5	1250	5D +2 to hearing Perception rolls
Furtherman LF		Moderate	wounded twice	1	1500	5D +1 to Perception detection low-frequency sounds
Furtherman HF		Moderate	incapacitated	0.5	1500	5D +1 to Perception detection high-frequency sounds
Ear Tap		Moderate	wound	1	1800	5D Adds +2 to auditory Perception attempts when receiving frequencies and/or searching for a particular pattern.
NW Sonar Sound		Moderate	wound	0.5	2800	5D Adds +1 to Perception attempts in dimly-lit conditions when using sonar information.
McGinley SenseDog Line: Base Unit		Moderate	wounded twice	1	4000	6D

Overseer Module	Moderate	wounded twice	0.5	1500	6D
ListenDog	Moderate	wounded twice	0.5	1250	6D

### Optical systems & Visual Enhancers

Bug Eyes	Moderate	wound	1.5	2700	4D Gives the user near 270 degree vision. Adds +1D+1 to Perception attempts.
NW Supersight	Moderate	wounded twice	1	2250	4D +2 to Perception
NW Heat-Seeker	Moderate	incapacitated	1	2300	4D +1 to Perception in dark; Allows sight in darkness via infrared
NW Low-Light	Moderate	wounded twice	1	1900	4D +1 to Perception in dark; Negate all but total darkness
Brodie Telescoptric	Moderate	incapacitated	1	2300	5D Magnification x25;+2 to Perception at long distances
Brodie LED	Difficult	incapacitated	1.5	4500	5D Provides LED info thru cyber-eye; interfaces with Scholar Chips
Furtherman Hunter	Moderate	incapacitated	1.5	3750	5D +2 to weapons skill when used with Simnerve link to weapon
NW Telescoptric	Moderate	incapacitated	1	1750	4D Magnification x25;+2 to Perception at long distances
NW LED	Difficult	incapacitated	1.5	3500	4D Provides LED info thru cyber-eye; interfaces with Scholar Chips
NW Hunter	Moderate	incapacitated	1.5	3250	4D +2 to weapons skill when used with Simnerve link to weapon
Brodie SuperSight	Moderate	wounded twice	1	2950	6D +2 bonus to use of the Perception rolls.
Brodie Heat-Seeker	Moderate	incapacitated	1	2350	6D +1 bonus to Perception in low-light or dark conditions
Brodie Low-Light	Moderate	wounded twice	1	2500	6D +1 to Perception in dark; Negate all but total darkness
Brodie Hunter	Moderate	incapacitated	1.5	4200	5D +2 to weapons skill when used with Simnerve link to weapon
Furtherman SuperSight	Moderate	wounded twice	1	2600	5D +2 bonus to use of the Perception rolls.
Furtherman Heat-Seeker	Moderate	incapacitated	1	2100	5D +1 bonus to Perception in low-light or dark conditions
Furtherman Low-Light	Moderate	wounded twice	1	2200	5D +1 to Perception in dark; Negate all but total darkness
Furtherman Telescoptric	Moderate	incapacitated	1	2000	5D Magnification x25;+2 to Perception at long distances
Furtherman LED	Difficult	incapacitated	1.5	4000	5D Provides LED info thru cyber-eye; interfaces with Scholar Chips
NW Basic Eye	-	-	-	100	4D
Brodie Basic Eye	-	-	-	150	6D
Furtherman Basic Eye	-	-	-	125	5D
Furtherman Bonus View System	Moderate	incapacitated	1	1800	5D +1 to sight Perception
NW SuperSight	Moderate	incapacitated	1	2250	4D +2 to Perception
NW MondoVision	Moderate	incapacitated	1	3300	4D +3 to Perception
Brodie Cyber-Detector	Difficult	incapacitated	1	6000	5D Adds +2 to Perception attempts to detect cyberware.
NW Range Scope	Moderate	incapacitated	1	3350	4D Provides +1 to applicable weapons skills.
NW Infrared	Moderate	wounded twice	1	1900	4D Adds +1 to Perception attempts of heat signatures in dark conditions.]
Furtherman Tracker	Moderate	incapacitated	1	2000	4D Adds +2 to Perception attempts when shadowing a target
Testron Cats Eye Low-Light	Moderate	incapacitated	1	2200	4D Adds +2 for Perception attempts in low-light conditions.
Brodie Fiber Telescoptric	Difficult	incapacitated	1	3400	3D
NW EyeHUD	Difficult	incapacitated	1.5	6500	4D Adds +1 to Perception attempts when utilizing applicable information from multiple sensors presented in the display.
Chromespec	Moderate	wounded twice	1	1000	6D Adds +1D+1 vs. blinding flashes, +1 to visual Perception attempts in high-glare environments.
NW Eye Lite	Moderate	stunned	0.5	500	5D

Testron Anti-Glare				500	+1D bonus to the STR roll against blinding attacks.
NW Micro-Optics	Moderate	incapacitated	1	1750	4D This grants a +1D bonus to Perception when looking for details only visible through magnification.
Brodie MicrOptics	Moderate	incapacitated	1	2300	6D
Furtherman MicroOptics	Moderate	incapacitated	1	2000	5D
McGinley Watch Dog Line					
Visual Finger Base Unit	Moderate	wounded twice	1	500	4D
Advisor Base Unit	Moderate	incapacitated	1.5	750	4D
Heel! Base Unit	Moderate	wounded twice	1	350	4D

### Physical Enhancements

Brodie Equilibrium	Difficult	mortal	1.5	4300	4D* +1 to acrobatics, beast riding, dodge, melee combat (defensive only) and some other balance related skills.
NW Synthemuscle	Moderate	incapacitated	1.5	12500	4D* +1D to STR; normally installed to support cyberlimbs
NW Intradermal Plate	Moderate	mortal	2	22500	STR+2D against all attacks.
Furtherman Adreno-Charger	Easy	wounded twice	1	4500	4D* Holds the Adrenocharger chemical (5 doses)
Furtherman Endorpho-Charger	Moderate	incapacitated	1	4500	4D* Holds the Endorphocharger chemical (5 doses)
Becker QuickKill	Moderate	incapacitated	2.5	9500	5D+ Holds the Becker QuickKill (can hold Endorphocharger or Adrenocharger also) (8 doses)
Brodie Mind-Enhance Injector	Difficult	mortal	2	8000	5D+ Holds the MindEnhance chemical (5 doses)
NW PainShield Injector	Moderate	incapacitated	2	7500	5D+ Holds the Painshield chemical
Furtherman NBX	Easy	wound	0	4000	5D+ Holds the any drug; manually triggered; does not require Simnerve.

### Prosthetics

Cyberhands					See rules & table for Cost and bonuses
Brodie Cyberskeleton	Difficult	mortal	2	30000	9D Base STR+3 to all actions; supports cybernetic muscles
Sheath	Moderate	wound	0.5	900	2D Concealed sheath for small weapons; can open on command from SimNerve.
Body Club	Moderate	incapacitated	1.5	3000	4D Damage Value STR+3D/7D. Provides 20 hits before needing to be recharged(Reduce damage value by +1D for a drained Club). A mishap means the user may have zapped himself.
Brodie ShockFist	Moderate	wounded twice	1.5	7500	7D 5D electrical attack may be made (touch range only)
Brodie RamFist	Moderate	wounded twice	1.5	6500	7D RamFist does STR+1D/7D damage.
RamFist Gas Cartridge				400	
Sub-dermal Knuckle Implant	Moderate	stunned	0.5	800	6D add +1D to brawling blocks and provide +1D+1 physical/ 0 energy for the limb when taking damage from blocking
Sub-dermal Foot Implant	Moderate	stunned	0.5	1000	6D add +1D to brawling blocks and provide +1D+1 physical/ 0 energy for the limb when taking damage from blocking
Flex-version Knuckle Implant	Moderate	wound	1	1200	6D
Flex-version Foot Implant	Moderate	wound	1	1500	6D
HeadButt Plate	Moderate	wounded twice	0.5	1200	4D
McGinley Venom	Moderate	wounded twice	1	6500	6D
- Sleep capsule	-	-	-	500	- Sleep gas: Moderate STR check or unconsciousness for five minutes.
- Acid cartridge	-	-	-	750	- Acid: damage value 4D.

- Nausea	-	-	-	600	- Nausea: Moderate STR check or vomiting for three rounds.
- Paint	-	-	-	75	-
- Fog	-	-	-	75	-
Furtherman Cutting Edge	Moderate	wounded twice	1.5	9000	7D Damage value STR+1D/7D.
Lockpicks	Easy	stunned	0.5	500	6D
Scissors	Easy	stunned	0.5	200	6D
Microlight	Easy	stunned	0.5	400	6D
Interface Jack	Easy	stunned	0.5	1600	6D
Rollerboys	Moderate	wounded twice	1	3000	7D Adds +10 to movement running speed limit. Add +1D to the difficulty if traveling over less than even terrain, +2D if attempting to go uphill.]
Rocketeers	Moderate	wounded twice	1.5	10000	7D 50 meters vertical limit; 140 meters horizontal limit. Treat like rocket pack.They are usable only by people with the Rocket pack operations skill and, even then, at +2 to the difficulty number.
Clampons	Moderate	wounded twice	1.5	10000	7D Add +1D+1 to running or climbing skill checks on nonstandard surfaces.
Magnetics	Moderate	wounded twice	1.5	10000	7D Add +1D+1 to running or climbing skill checks on nonstandard surfaces.
ToolHand	Very Difficult	wounded twice	1	5000	7D Adds +2 on all repair skills (may specialize for an extra +1)
Magic (Illusion)	Very Difficult	wounded twice	1	4500	7D
Artist Kit	Very Difficult	wounded twice	1	3500	7D
Medic Hand	Very Difficult	wounded twice	1	6500	7D Adds +3 on Medic/First aid skills
Cyberarms and cyberlegs					See rules & table for Cost and bonuses

### Weapons

Brodie Serpent	Easy	wound	1	2400	6D Damage Value 3D+1, range 3-8/15/30; ammo 3; ammo cost 35
Furtherman Enforcer	Moderate	wounded twice	1.5	12500	6D Damage Value 4D, range 3-10/25/50; ammo 12; ammo cost 30
Claws	Moderate	wounded twice	2	3500	5D Damage Value STR+1D/5D
Electric Claws	Moderate	wounded twice	2	3500	7D Damage Value STR+2D/7D or STR+1D/5D unpowered; holds ten charges; and takes 30 min to recharge
Razortips	Moderate	wound	1	2200	4D Damage STR+2; may be filled with poisons, drugs, or acids.
Fangs	Easy	stunned	0.5	1400	4D Damage Value STR+1; may be filled with poisons, drugs, or acids.
Razor Wire	Moderate	wound	1	1100	6D Range up to two meters; STR+1D+1/6D damage
Sonic Disruptor	Moderate	wounded twice	1.5	20000	7D Damage Value: 7D Range: Short: 3-25 Medium: 75 Long: 150 Price: 20000 Ammo: 30 Ammo Price: 125
Neutrino Nullifier	Moderate	wounded twice	1.5	20000	7D Damage Value: 8D Range: Short: 3-15 Medium: 50 Long: 100 Price: 20000 Ammo: 20
Rocket Digits	Moderate	wound	1.5	3600	4D Damage Value (per Rocket) 3D+1 Range: 10-25/50/150
Furtherman Cyber-weapon Scope	N/A	N/A	N/A	2500	N/A
Body Club	Moderate	incapacitated	1.5	3000	4D Damage Value STR+3D/7D. Provides 20 hits before needing to be recharged(Reduce damage value by +1D for a drained Club). A mishap means the user may have zapped himself.
Venom	Moderate	wound	1.5	2700	4D Damage value determined by the toxin (See Dufuss, Somynde and Scud)

### Armor Chart

<b>Armor Type</b>		Price	Armor Notes
Furtherman Mini-shields	N/A	2000	+1D+1p / Activated by SimNerve, appears like insect carapaces. TOU/Max Value: +1D+1 physical / +2 energy Mass: N/A Cost: +2e 2000/graft
EMP Shieldin& Level I	N/A	3000	+1D Increases the difficulty of attempts to shut down protected electronics
EMP Shielding, Level II	N/A	3500	1D+2