

Robotic Systems

Type of Intelligence: Transferred Intelligence

Original Budget: 14,000,000 credits.

Current Worth: 15,140,000 credits.

Body Style

- **Basic Humanoid** (P.S. 14, P.P. 12, P.B. 6, Spd. 22) (2 million)
- **Frame Reinforcement: 1** (350,000)

Power Source

- **Micro-Fusion Power System** (5.3 million)

Locomotion

- **Human Legs** (350,000)

Propulsion System

- **Concealed Micro-Hover System (linked to Micro-Fusion)** (600,000)

Audio & Communications

- **Advanced Audio System** (150,000)
- **Built-In Language Translator** (32,000)
- **Modulating Voice Synthesizer** (w/ voice disguise program) (42,000)
- **Radio Signal Scrambler System** (10,000)

Optics

- **Advanced Robotic Eyes** (160,000)
- **Live Video Transmitter & Receiver** (170,000)
- **Targeting Display Eye** (4,000)
- **Thermal-Imager** (32,000)
- **Visual Recognition Combat Computer** (200,000)

Sensor Systems

- **Barometric Scanner** (11,000)
- **Bug Detector** (30,000)
- **Chemical Analyzer** (left hand, pinkie finger) (50,000)
- **Depth Gauge & Alarm** (3,000)
- **Explosives Detector** (50,000)
- **Gyro-Compass** (600)
- **Motion Detector** (15,000)
- **Radar Detector** (10,000)
- **Radiation Detector** (1,200)
- **Robot Radar System** (600,000)
- **Sensory Antenna** (120,000)
- **Universal Fingerjack** (left hand, index finger) (150,000)

Special Features

- **Clock Calendar** (200)
- **Cosmetic Enhancements**
 - **Artificial Blood System** (500,000)
 - **Human Hair Implants** (5,000)
 - **Minor Body Characteristics** (2,000)
 - **Realistic Eyes** (10,000)
 - **Realistic Skin Overlay** (75,000)
 - **Sculpted Facial Features** (50,000)
- **Cyber-Disguise Type AA-1** (450,000)
- **Depth Tolerance** (60,000)
- **Hyperlink Weapons Interface** (100,000)

- **Increased P.S. Attribute:** P.S. 40 (10,000 credits for each point beyond 14) (260,000)
- **Increased P.P. Attribute:** P.P. 20 (10,000 credits for each point beyond 12) (80,000)
- **Increased Speed Attribute:** Spd. 122 (10,000 credits for each point beyond 22) (1 million)
- **Increased Actions Per Melee:** One Additional (500,000)
- **Laser Resistant Coating** (100,000)
- **Secret Compartments** (2 medium-sized; one in each leg) (6,000)
- **Self-Repair Micro-Robots** (1 unit) (100,000)
- **Space Worthy** (50,000)
- **Touch Sensing System** (1 million)

Weapon Systems

- **Chemical Spray** (right arm/hand; acid (1D4 M.D.), blinding agent, tear gas, sleep spray, smoke) (60,000) (+3,000 for chemicals)
- **Direct Feed Weapon Energy Link** (120,000)
- **Frame Reconfiguration System** (left forearm/hand to particle beam cannon) (214,000)
- **Particle Beam Blaster** (right arm/hand) (80,000)
- **Retractable Knuckle Blades** (both hands) (24,000)

Type of Intelligence

Transferred Intelligence: Transferred Intelligence (TI) is a completely alien technique found only in rare robots created on some alien world or dimension. It is not an artificial intelligence at all, but an as of yet unknown process in which the mind of a living being is transferred from the mortal body into the robot body. Actually, the transference is more than intellect. It's more of a life essence transferal, because the complete mental, emotional, and energy (P.P.E./I.S.P.) essence of a living, intelligent being is transferred and housed inside the robot! The process leaves the physical body an empty, but living, shell. The original organic body can be stored and sustained for years by high—tech medical systems, although muscles will atrophy and body weight and strength is lost. In some cases, the living subject may volunteer to permanently forsake the mortal body in favor of the artificial one. In some ways, this may sound like a full conversion cyborg, but the process is far more dramatic and complete, leaving absolutely no organic brain, tissue, organs or fluids. The entire body is a machine and only the electrical impulses that are the mind have their origins in flesh and blood long forsaken.

The transferred essence is housed in an artificial brain similar to the design and function of the neural intelligence. The brain or essence housing unit is usually quite small, about the half the size of the human brain to that of a chicken's egg, and is located either in the head or chest (the latter provides main body protection). Because the intelligence and essence are of organic origin, the robot will have a strange but living aura, will register as a psychic presence, can be affected by psionic attacks, and will have a small amount of detectable P.P.E. (though never enough to be a spell caster). This character may even possess limited psionic powers, and is subject to stress, insanity and mental fatigue, though not physical pain or disease, and is resistant (+5 to save) to possession. However, the robot does not need to eat or maintain any animal-like bodily functions, and only requires four hours of sleep or meditative rest per day (24 hours). Destroying the brain housing will effectively kill the robot. Once dead, the essence cannot be recaptured, it is gone. If the brain housing unit is removed intact and without serious damage, the housing unit can hold the transferred essence for 3D6+22 years without a larger, physical body or power source. After that period, the mind and essence will leak out of the housing unit and vanish. However, if placed inside a robot body and given a sense of life and purpose, the transferred essence can last for an estimated 2D6x10+200 years before exhibiting signs of mental degradation or trauma such as memory loss, deterioration of skills (reduce – 1D6x10%), delusions, or a range of dangerous insanities. A short 2D4 years later, the failing life essence will cease to exist.

Note: The T.I. robot character should be extremely rare, probably alien or the result of an unexpected accident.

Body Style

Basic Humanoid: The frame for this robot is approximately the size, shape and build of a typical human or humanoid, 6-8 feet (1.8 to 2.4 m) tall, but can be as large as 10 Feet (3 m). Humanoid also means *two* legs and feet, *two* arms and hands, one head (a nose and mouth, and a pair of eyes and ears are optional depending on the robot style). Other than the general humanoid shape, the robot is clearly a machine.

Basic Physical Attributes: P.S. 14, P.P. 12, P.B. 6, and Spd. 22 (approx. 15 mph/24 km).

Size: Six to eight feet (1.8 to 2.4 m). Increase cost by 50% if larger, up to ten feet (3 m).

Light Frame: 300 pounds (135 kg) and 120 M.D.C. main body.

Body Cost: Two million credits.

Frame Reinforcement (optional): Add 100 pounds (45 kg) and 100 M.D.C. points to the main body for *each reinforcement* to the frame. As many as five reinforcements can be done, but each instills a cumulative skill penalty of -5% to Prowl. Cost: 350,000 per each reinforcement.

Power Source

Micro-Fusion Power System: A tiny, micronized fusion reactor designed for small, human sized and animal robots and androids. Never needs recharging or refueling. This miniature power system can also be used in larger robots (any size) if so desired. Cost: 5.3 million credits.

Locomotion

Human Legs: A pair of bipedal, humanoid size legs and feet. Cost: 350,000 credits per pair.

Increased Speed Attribute: Each of the basic body frames that utilize legs are listed with a standard speed attribute. However, the speed attribute for leg units can be increased. The maximum for humanoid legs is Spd 220 (150 mph/240 km). The maximum for animal and insect legs is about a Spd of 423 (approx. 300 mph/480 km). Of course, vehicular propulsion and flight capabilities can be built into a humanoid or other robot form as an alternate, faster propulsion system.

Cost for Additional Running Speed of Legs: 10,000 credits per each Speed point beyond the basic system attribute. Thus, to increase a Speed of 22 to a Speed of 32 costs 100,000 credits.

Propulsion

Concealed Micro-Hover System: A concealed hover jet system of tiny jet boosters built into humanoid or animal robots. The hover jets are strategically located in the feet, hips, back, chest and/or underbelly. When not engaged, the jets are completely unnoticeable. Basic System Cost: 500,000 credits; can be linked to the power system for an additional 100,000 credits. Maximum Speed: 200 mph (320 km). Maximum Altitude: 500 feet (152 m).

Audio & Communications

Advanced Audio System: Amplified stereo hearing in the full decibel range, the same as the cybematic Amplified Hearing (see page 49 of Rifts Ultimate Edition). The 'Bot can hear frequencies inaudible to the human ear, like a dog whistle (as well as wide-band radio), enabling the character to hear almost inaudible sounds at up to 360 feet (110 m) away.

- At 75 feet (22.9 m), sounds as quiet as one decibel, softer than a whisper, can be heard.
- At 150 feet (45.7 m), sounds as quiet as 10 decibels, a whisper, can be heard clearly.
- At 360 feet (110 m), sounds in the normal conversation range of 30 decibels can be heard as if the character was standing only a few feet (one meter) away. This is the maximum range for eavesdropping on conversations. Only sounds of 70 decibels (e.g., the sound of heavy traffic) or louder can be accurately heard and the location pinpointed from 500 to 1,000 feet away (152.4 m to 305 m).

The Amplified Hearing also enables the character to accurately estimate the distance and location of the sound source, and recognize specific, known sounds and voices at a base skill of 35% plus 5% per level of experience. Background noise, such as other conversations, traffic, machine noise, etc., as well as barriers like closed doors and walls, will decrease the range and clarity of what can be heard. G.M.s should use their discretion and common sense. Bonuses: +3 on initiative, +1 to parry, and +2 to dodge.

Radio Capabilities enable the robot to listen to commercial radio stations, citizen band (C.B.), police bands, shortwave and other radio transmission frequencies. Also comes standard with a Universal Headjack (see below) for tapping into computers, radios and audio equipment directly. Radio Range (transmissions and receiver): 50 miles (80 km) in the city, 100 miles (160 km) in the wilderness, both require a retractable antenna; half range without one.

Universal Headjack: Included in the Advanced Audio System. This is a special connector or "jack" that is built into the robot's head, usually at the base of the head or behind the ear (for androids, the Headjack is easily concealed behind hair or folds of skin). Enables the 'Bot to plug into audio, sensory, robot, and computer equipment, including most communications equipment, radios, video systems, radar, detection/warning devices, microphones, surveillance systems, and more conventional items like CD players, televisions, disc recorders, and so on. The Headjack receives transmissions from the device that's plugged into it and transmits them to the 'Bot. The character can see and hear audio and video information from the device without needing external equipment.

The basic system can be upgraded to include a built-in radio receiver and transmitter which will allow the 'Bot to receive and send radio transmissions as if he were using a walkie-talkie. It is so effective that the 'Bot can transmit a whisper, or the voices of other people within six feet (1.8 m) of him. Range: 3 miles (4.8 km). Cost: 16,000 credits, in addition to the basic Headjack system.

Increasing the system for long-range, wideband and broadband transmission will require an additional upgrade for calibrating and switching channels, a micro-amplifier, and an antenna implanted in the head. Range is increased to 50 miles (80 km) and further increased to 100 miles (160 km) if an additional long-range, telescoping antenna is plugging into the Headjack.

Cost: 150,000 credits for the entire Advanced Audio System.

Built-In Language Translator: Starts with 13 different languages, including the nine major regional ones, plus Russian, Kittani, Naruni, Splugorth, and Demongogian; 200 others can be added. Level of accuracy is 88.8% when listening to only one or two speakers and languages at a time. Drops to 68%, with a six second delay, when trying to translate 3-6 speakers simultaneously, 20% if more than that. Cost: 32,000 credits. Illegal in the Coalition States.

Modulating Voice Synthesizer: Enables the robot to change, disguise and humanize its voice by altering tone, bass, pitch, etc. Can also speak in a sound frequency inaudible to normal humans, but audible to normal canines, bats and mutant dogs, as well as other 'Bots, cyborgs, and characters with a cybernetic Ultra-Ear. Base skill at imitating voices is 10% +13% per each additional level of experience. Cost: 30,000 credits. Add 12,000 credits to get a voice disguise program with over 200 different human and D-Bee accents and inflections. Illegal in the Coalition States.

Radio Signal Scrambler System: Linked to the radio system to send and receive coded messages. Cost: 10,000 credits.

Optics

Advanced Robotic Eyes: Includes color vision, 3-D analysis and depth perception, passive nightsight, infrared and ultraviolet vision. Range: 2,000 feet (610 m). Cost: 160,000 credits. **Note:** Infrared vision emits a pencil-thin beam of infrared light, invisible to the human eye, but visible to another infrared system, to illuminate its target in darkness. The narrowness of the beam limits the scope of vision to about a 10 foot width (3 m). *Nightsight* is a passive image intensifier that electronically amplifies existing ambient light to provide a visible picture without emitting any trace light of its own.

Other optical features can be added for an additional cost. Note that a Robot's eyes may be small and relatively human, but more often than not, they look like a large camera lens or a cluster of camera lenses from tiny to the size of a softball. The eye lens may even be telescoping and make a humming, buzzing or clicking sound as the lens adjusts. As many as 10 Optic Features may be added to one robot eye.

Eye: Targeting Display: Imposes crosshairs on a target, adding a bonus of +1 to strike with any ranged weapon (both eyes). **Note:** Two targeting eyes still provide only a +1 bonus to strike, not +2. Cost: 4,000 credits.

Eye: Thermal-Imager: The lens converts the infrared radiation of warm objects into a visible image, enabling the robot to see heat as represented by bands of color. Ideal for targeting and tracking at night; can see in darkness, shadows, and through smoke, but can only see the heat radiation clearly, not all the details of the surrounding area. Range: 3,000 feet (914 m). Bonus: +1 to strike in darkness. Cost: 32,000 credits for a pair. Illegal in the CS.

Live Video Transmitter & Receiver: Transmission range is 20 miles (32 km) in the city, and 60 miles (96 km) in the wilderness, unless hampered by some sort of interference. Live feed is most common, but up to two hours of digital video can be recorded and stored on a memory chip. Cost: 50,000 credits for a single basic color and sound system, 150,000 credits for a pair of camera eyes. Add 20,000 for synchronized digital and audio recording and transmission. Add 40,000 credits for broadband capabilities (and double the transmission range).

Visual Recognition Combat Computer: A special system tied to the optic systems. The computer recognizes 30,000 enemy targets including vehicles, robots, insignias, uniforms, known monsters, D-Bees and enemies. An additional 2,000 targets can be added to the memory. Bonus: +5% to Intelligence skill. Range: Equal to optic system; usually 2,000 to 6,000 feet (610 to 1828 m). Cost: 200,000 credits.

Sensor Systems

Barometric Scanner: A sensor unit that measures the barometric pressure, humidity and air temperature around the robot. Besides the obvious, the scanner indicates changes in these areas which may indicate the coming or end of a storm or an unnatural environmental event. Cost: 11,000 credits.

Bug Detector: A small device that picks up radio signals from surveillance listening devices (bugs). Range: 60 feet (18.3 m). Cost: 30,000 credits.

Chemical Analyzer (left hand, pinkie finger): The tip of the analyzer is located within the index finger. By touching the tip of the finger to a solid or liquid, and after about two minutes of analysis, the robot will know the substance's chemical composition

(*Chemistry: Analytical skill at 88%*, for purposes of identifying substances and their chemical makeup). Cost: 50,000 credits.

Depth Gauge & Alarm: An internal device that can calculate underwater depth. A digital counter can indicate the exact depth via internal audio or HUD system imposed over the 'Bot's vision, and make warning sounds when the character is within 100 feet (30.5 m) of his maximum depth tolerance. Cost: 3,000 credits.

Explosives Detector: Sniffs out and detects explosives within 12 feet (3.6 m). Also used to scan an individual, vehicle or container to detect even small amounts of explosive materials and residue from explosives (less than one ounce), but such a scan must be done at close range, within three feet (0.9 m), to pinpoint the location of the explosive. The type is not known, although the signal will be larger/louder if there is a large quantity of explosives or it is an extremely powerful device. Cost: 50,000 credits.

Gyro-Compass: A device that can be implanted almost anywhere on the body. It enables the 'Bot to always locate north and the other directions, as well as up and down. Ideal for pilots of aircraft and power armor, as well as underwater operations. Cost: 600 credits.

Motion Detector: The reliability of the detector is quite limited, but it can be used to accurately assess wind direction and wind speed, and to detect the rapid approach of large moving objects, such as a vehicle, aircraft, power armor, etc., whose rapid approach or large size causes a disturbance in the air. A motion detector is especially useful in the dark because the speeding object must usually be within 500 feet (152 m) to create a detectable air current. Likewise, the motion sensor will detect the movement of somebody/thing moving nearby, within 40 feet (12 m), but only if the sensor user is motionless or barely moving itself. The sensor can also detect sudden changes in air current and pressure caused by somebody opening a door or window, and can estimate speed of travel when inside an open-air (or open window) vehicle. Cost: 15,000 credits.

Radar Detector: A tiny radar receiver that alerts the robot when he is being scanned by radar; 80% accuracy. Unfortunately, determining the direction or source of the radar probe is only 60%. Cost: 10,000 credits.

Radiation Detector: Detects and measures the amounts of harmful types of radiation and warns its owner. Includes nuclear, atomic, and microwave radiation. Cost: 1,200 credits.

Robot Radar System: A sophisticated radar system, suitable for ground to air monitoring. Can identify up to 96 targets and simultaneously track 42. Requires the robot to fly or get to high ground, or to utilize an extendible dish. Range: 50 miles (80 km) and is able to detect a cruise missile-type target, rocket bike or power armor flying as low as 500 feet (152 m)/200 feet (61 m) in an open area/plains without other ground clutter. Lower than that and the target is lost. Can also identify the speed of ground vehicles when a radar beam is directed at one specific target; works like a police officer's radar gun. Cost: 600,000 credits. Ideal for giant and vehicular robot types.

Sensory Antennas: Registers vibrations in the air indicating movement, as well as having touch and heat sensors. The retractable antennas enable the 'Bot to maneuver even in total darkness by feeling its way around. Range: Touch, usually 3-10 feet (0.9 to 3 in) depending on the size of the robot (never larger than one third the robot's height). Bonus: Penalty for blindness is half and adds a bonus of +1 to dodge. 1D4+4 M.D.C. per antenna. Cost: 120,000 credits per pair. Whether the 'Bot has two or 10 antennas, the bonuses and abilities remain the same.

Universal Fingerjack (left hand, index finger): Allows use of the Universal Headjack through the finger; see *Advanced Audio System*. The artificial finger can plug directly into communications systems, radios, sensory equipment, and robots, to receive direct data transmissions. Cost: 2,400 credits.

Special Features

Clock Calendar: An internal device that keeps continuous track of the exact time, down to the 100th of a second, as well as the calendar date. Cost: 200 credits.

Cosmetic Enhancements: A variety of techniques and materials can be used to create an accurate simulation of a living creature. Often used for androids and animal 'bots. All bonuses are cumulative.

Artificial Blood System: A quarter inch (6 mm) thick circulatory system continuously flows with an artificial blood-like fluid. The pumping is done with a device that sounds like a real heart, designed to speed up and slow down according to other body movements. If the unit is cut, the artificial blood will flow realistically, clot quickly, and give the appearance of a real flesh-and-blood injury. Cost: 500,000 credits.

Human Hair Implants: Looks and feels just like real human hair. Cost: 5,000 credits for head only, 20,000 full body; looks completely natural, +2 P.B.

Minor Body Characteristics: Finger and toe nails, teeth/fangs, beard stubble, moles, pimples, scars, etc. Cost: Approximately 2,000 credits each.

Realistic Eyes: Conceal the artificial appearance of the robot eyes, +2 P.B. Cost: 10,000 credits.

Realistic Skin Overlay: Looks and feels like the real thing. Complete with fake musculature. Fire resistant and tough, 5 M.D.C. main body. Increases P.B. +2. Cost: 75,000 for a six foot (1.8 m) humanoid or animal. Add 5,000 credits for every additional foot (0.3 m).

Sculpted Facial Features: A unique, individual face and teeth designed by skilled artists, complete with simulated muscle movement to complement full facial expressions, frowns, smiles, angry looks. etc., +3 P.B. Cost: 50,000 credits. Movie star face adds 40,000 credits to the initial cost and another +3 P.B.

Cyber-Disguise Type AA-1: A complete robotic disguise system built into the face; only applies to androids with realistic human or D-Bee cosmetic features. Bladders placed under the skin and facial supports can move, expand, contract, or change shape, enabling the 'Bot to change the shape and look of its face. The cheeks and lips can be puffed up to look fatter, more pronounced, or smaller/thinner, the chin can be made to become rounder or more pointed, the nose wide and flat or bulbous or pointed, or even smaller or larger (most noses have four distinct looks). Likewise, the ridges of the eyebrows can be adjusted to protrude or retract, the lines of the forehead made to look more pronounced or diminished, while the micro-gears and bladders around the eyes can add or reduce eye wrinkles or make them appear rounded, narrow or slanted. Those with "mood eyes" can also change the color of the iris. Similar chemical implants induce a 20% change in the color tone of the skin. Artificial hair, that can change into five different colors and 15 different shades, replaces real hair. The hairline is also changeable with a little manipulation.

The 'Bot can program up to six different faces into the disguise unit. The transformation into these computer stored faces requires approximately 1D4 minutes to compete. Skin pigmentation changes require one hour. If the 'Bot has the *Disguise* skill, then it can attempt to alter its features manually, with an infinite number of guises, while the AA-1 Cyber-Disguise helps make the character's artistry seem all the more convincing (it provides a +15% bonus to the *Disguise* skill). Cost: 450,000 credits.

Depth Tolerance: The robot is designed for use in and underwater water without ill effect or damage. Includes watertight internal compartments and the ability to withstand depths up to 1,000 feet (305 m). Cost: 60,000 credits. Depth tolerance can be increased by 200 feet (61 m) at the cost of 100 credits, up to 17,800 feet (5,425 m), roughly 3 miles (4.8 km).

Hyperlink Weapons Interface: The robot can, via a Headjack or Fingerjack, connect to a compatible gun and effectively become "one" with the weapon. Doing so provides the weapon and user with a number of "smart features." The 'Bot can only use his Hyperlink with a high tech, electronic weapon that has a Hyperlink upgrade. Melee weapons and guns without a Hyperlink upgrade cannot be "linked" with. If the character has a "wireless" Headjack, then he can use the Hyperlink's various features without actually holding the gun, so long as the gun is within 10 feet. Keep in mind, however, that wireless Hyperlinks can be blocked or hijacked by others using electronic countermeasures.

Using a Hyperlink, the character can do the following while connected to a gun:

- +1 to strike with Single Shots, Bursts, and Aimed Shots.
- Mentally activate and deactivate the gun.
- Mentally activate and deactivate the gun's safety.
- Always knows the exact ammo count of the weapon, whether it uses cartridges or e-clips.
- Always aware of the weapon's current condition including heat buildup, material stress, recharge time, and if the weapon is jammed or damaged.
- Mentally change the firing mode of the weapon as a free action.
- Mentally eject magazines or e-clips as a free action.
- Mentally switch damage settings as a free action.
- For combo weapons, the character can mentally switch the ammo or energy output as a free action.
- Fire the weapon without physically pulling the trigger. This counts as Shooting Wild. Only possible with guns that have a computerized firing mechanism; weapons that depend purely on a mechanical process to fire (most low-tech firearms, for instance) are not applicable.
- See through the weapon's sights without holding the sights/scope to his eye. This is accomplished via a small camera or sensor attached to the upgraded gun. Allows for the character to perform targeted shooting around corners or over cover without having to expose his head. Only possible if the character has some form of visual receptor such as a robotic eye, cybernetic eye, or HUD helmet.

Cost: 100,000 credits.

Increased Actions Per Melee: The following is the cost, per number of attacks per melee, when purchased at the time of initial creation. Upgrades at a later date will cost *double*. And no, the creator cannot buy just one attack at 500,000 credits and then another attack at 500,000 credits, he or she must decide now, how many attacks are desired and purchase that total number.

- 1 additional attack per melee costs \$500,000 credits.

- 2 additional attacks per melee costs 1.1 million credits.
- 3 additional attacks per melee costs 1.8 million credits.
- 4 additional attacks per melee costs 2.9 million credits.
- 5 additional attacks per melee costs 4.5 million credits.
- 6 additional attacks per melee costs 6.4 million credits.
- 7 additional attacks per melee costs 9.4 million credits.
- 8 additional attacks per melee costs 15 million credits.

Increased P.P. Attribute: Costs 10,000 credits per each P.S. point beyond the basic system attribute. Thus to increase a P.P. of 12 to a P.P. of 22 costs 100,000 credits. The maximum for small 'Bots is P.P. 20, medium and humanoids P.P. 26, and Large (11-24 feet/3.3 to 7.3 m) is a maximum P.P. of 24.

Increased P.S. Attribute: P.S. is Robotic. Costs 10,000 credits per each P.S. point beyond the basic system attribute. Thus, to increase a P.S. of 12 to a P.S. of 22 costs 100,000 credits. Small robot's is a maximum P.S. 30. Medium/humanoid-size (5-10 ft/1.5 to 3 m) is a max P.S. 40. Large (11-24 feet/3.3 to 7.3 m) is a maximum P.S. of 50.

Laser Resistant Coating: This reflective ceramic coating partially deflects the damage of lasers. As a result, lasers only do half damage to the character. This cannot be combined with any other type of coating. Cost: 100,000 credits. **Note:** The laser resistant coating is located beneath the skin overlay and artificial blood system. The robot must suffer 5 M.D.C. in a single spot before the benefits of the coating take effect in that location.

Secret Compartments (2 medium size; one in each leg): Hollow compartments can be built into the legs and chest of the robot. The largest possible is approximately 12 inches long (0.3 m) and four to six inches deep, but are usually half that size or smaller. The smallest are about the size of the change purse, just big enough to conceal a few credit cards, coins, lock picking tools, electronic bugs or components/chips, and so on. The larger compartments are ideal for storing supplies, tools, hand-sized equipment, hand grenades, and small handguns. Game Masters and players should use common sense regarding the number of compartments. Generally speaking, each leg and chest can accommodate two medium-size or one large compartment, or as many as six small each. The arms can only accommodate one small compartment on the forearm and upper arm, but only if no weapon systems are built into or onto them. Cost: 1,200 credits for each small, 3,000 for each medium, and 4,800 for each large.

Self-Repair Micro-Robots: This system allows for a robot to begin repairing itself almost immediately after being damaged. A unit filled with miniature repair robots is housed in each extremity, as well as the torso. When the robot takes damage, the repair system sends out the micro-robots and they begin to fix the damage. Each unit of micro-robots can only fix 20 M.D.C. of damage, and this takes about 1D6x10+90 minutes. If multiple systems are purchased, however, then each unit can repair 20 M.D.C. simultaneously. Once the unit has made its 20 M.D.C. worth of repairs, then it must replenish its reserve of raw materials. This can be accomplished by releasing the micro-robots onto sources of appropriate building materials. Two hours of salvage time is required for the robots to gather and process the materials; more than one unit can replenish itself at a time. Once the micro-robots have completed their salvaging, they can again repair 20 M.D.C. of damage.

Most of the robot's armor, basic systems and support structure require M.D.C. metal, so the raw materials must be salvaged from M.D.C. metal alloys. Other systems may require more specific materials, such as M.D.C. ceramics, plastics, rubber, glass, crystals, and various chemical compounds (hydraulic liquid, lubricants, coolants, etc.). Nearly all of the materials needed to properly repair the robot are *synthetic*; they are unlikely to be found in their finished form in nature. Likewise, most of the substances must be *mega-damage*; S.D.C. substitutions are not possible. Realistic skin overlays and other cosmetic android features may also be repaired by the micro-robots, but not with 100% effectiveness. Each time a certain cosmetic feature or area of "skin" is repaired or reformed by the micro-robots, the lifelikeness of the feature is reduced by 10%; this, in turn, reduces any associated bonuses (but not M.D.C.).

Note: The Self-Repair Micro-Robots are not capable of making extremely sensitive repairs to critical systems (the micro-fusion reactor, memory storage banks, essence housing unit, etc.), nor can they replace or reconstruct missing or destroyed limbs. Likewise, they cannot resolve software problems or computer viruses. These various forms of damage can only be mended with the aid of skilled technicians (such as Operators), and likely only in the appropriate facilities (a workshop or robotics lab).

Space Worthy: A body designed to withstand extreme cold, radiation, and the vacuum of space. Cost: 50,000 credits.

Touch Sensing System: Closely simulates the human sense of touch. Cost: 1 million credits.

Weapons

Chemical Spray (left arm/hand; starts with acid, blinding agent, tear gas, sleep spray, & smoke): The chemical spray can be built into the legs or chest and released as an area effect gas around the 'Bot (fills a 20 foot/6.1 m area). To be able to spray at a particular target, the chemical system must be built into the arm and hand, or mouth of the 'Bot. The directed spray is usually a fluid, and twice as many doses of the liquid can be stored as the gas. Effective Range: 40 feet (12.2 m). Rate of Fire: Each spray counts as

one melee action. Payload: Can hold a total of 20 individual doses and as many as five different chemicals. One dosage of CO2 foam or any gas counts as two normal doses. Spray System Cost: 60,000 credits.

- Spray Chemicals: The following chemicals are what is commonly available. Area of Effect: All sprays affect a five foot (1.5 m) area. Gas versions affect a 20 foot (6.1 m) diameter and hang as a cloud for one melee round, affecting anyone who enters it. Saving Throw: 16 or higher for nonlethal chemicals, 12 or higher for deadly poisons and acid.
- Acid: A concentrated corrosive typically used for dissolving rock, cleaning metal, and other such work. Available in a variety of intensities: 4D6 S.D., 6D6 S.D., 1D4x10 S.D., 1D6x10 S.D., and 1D4 M.D. Not meant for use as a weapon. Upon initial contact, the acid will continue burning at full strength for 1D4 melee rounds, doing additional damage each round unless washed off with water or a soothing solution. Cost: 150-300 credits.
- Blinding Chemical Agents: Much like mace, temporarily blinds its victim for 3D4 melees. The victim is -10 to strike, parry, dodge, and disarm. Speed is reduced by 30%, and any skill requiring sight is an impossible task. Protective goggles/visor or gas mask will block this spray attack. Duration: 3D4 melee rounds. Cost: 100-200 credits per dose.
- Burning Vapor: Releases a mild acid, causing burning skin, eye irritation, and sudden nausea. Damage: 1D6 S.D. Penalties: Victims are also -4 to strike, parry, and dodge for 1D4 melee rounds. Cost: 50 credits per dose.
- CO2 Foam: A concentrated spray used to put out fires. Cost: 100 credits per dose.
- Tear Gas: Causes impairment of vision (unless gas mask is worn), difficulty breathing, and skin irritation. Victims are -10 to strike, parry, dodge, and disarm, -3 to initiative, speed is reduced by 30%, and victims lose one melee action. Duration: 1D6+1 melee rounds. Cost: 150-300 credits per dose.
- Tranquilizer/Sleep Spray: Causes its victim to fall asleep within 1D4 melees and remain asleep for 2D4 minutes. Cost: 100-200 credits per dose.
- Smoke: Gas only (each counts as two doses). Creates a smoke cloud roughly 20 feet (6.1 m) in diameter. Seeing into and through the smoke cloud is impossible except with thermo-imaging optics. Duration: Smoke cloud lasts for 1D4+3 melee rounds. Cost: 75 credits per dose.

Direct Feed Weapon Energy Link: Human-sized robots outfitted with nuclear or micro-fusion power sources can support an energy weapons link — a plug-in cable concealed in the mechanical body, allowing them to power weapons off their own internal energy sources. This gives an energy rifle or pistol effectively an unlimited payload; all other weapon stats like damage, range and rate of fire are unchanged.

Limitations & Penalties:

- The connecting cord only has 5 M.D.C., and if severed, the energy connection is broken, the power going to the cable is shut off, and an E-Clip must be inserted into the weapon to use it (takes three melee actions to grab a remove the severed connector clip, grab and new E-clip, and slap it in). The cable is a small, difficult target to hit from long-range, so shooters must make a Called Shot and are -5 to strike. It is much more vulnerable in close combat where it can be severed by Vibro-Blades, M.D. claws, and M.D./supernatural strength. The player must announce that the cable is the target of his character's attack and roll to strike as normal. A 12 or higher will hit and do damage unless the robot can parry or dodge.
- After about 10 minutes of melee combat where the weapon has been in frequent use, the effects of the power drain become apparent. Reduce speed by 20%, no initiative bonuses apply (unmodified die roll only or -2 if the character normally has no initiative bonus), -1 to parry and dodge, and physical combat damage (punch, kick, etc.) is reduced by half. The robot returns to full speed and ability 15 minutes after the weapon link has been disconnected.
- This energy link can also be made to small, one- and two-man vehicles designed to accept an E-Pack, but the 'Bot immediately suffers the diminished capacity described above. If the vehicle is not designed for optional use of an E-Pack, an Operator can jury-rig a connection in about 1D4 hours.

Cost: 120,000 credits.

Frame Reconfiguration System (left forearm/hand to Particle Beam Cannon): The frame reconfiguration system (or FRS) is an extensive series of modular systems that allows a robot to change from one frame style, such as a vehicle, to another, like a humanoid robot. One FRS needs to be purchased for each additional frame the robot can shift to. A humanoid robot that can change to a motorcycle and a small boat would require two FRS's.

Less extensive FRS systems allow hands to change to tools (torches, wrenches, spotlights, screwdrivers, etc.) or extremities to shift into weapons. This way, hands, shoulder plates, innocuous domes, or plain cylinders can change into weapons or missile launchers; however, weapons that change form as part of an FRS will cost twice as much as normal in addition to the FRS cost (due to the precision needed in aligning the reconfigured components). A reinforced frame must be purchased for FRS's to be installed.

Cost: For an entire robot to shift forms, each system costs 1,000,000 credits for human-sized robots (up to eight feet tall/2.4 m) and 2,000,000 credits for giant-sized robots.

For a single system (arm, hand, weapon) to shift its configuration, the cost is 75,000 credits for non-offensive changes and 150,000 for changes into weaponry (double for giant-sized). Each change requires one melee action/attack, although more than one change (such as changing frames and changing weapon systems simultaneously) can be initiated at one time on a successful piloting roll. The M.D.C. and any other traits rated by frame type use the smaller of the multiple frames for the ratings (in the above robot/motorcycle/boat example, the base and maximum M.D.C. would be based on the humanoid robot, giving it 120 M.D.C. to start

and limiting it to 200 M.D.C. maximum, without reinforcements). On the other hand, the weight is determined by the heaviest of the multiple frames.

Range: 300 ft.

Damage: 5D6 M.D. per single blast, and 1D6x10 M.D. per dual simultaneous blast.

Payload: Connected to robot's power supply; effectively unlimited. However, firing more than 20 blasts within one hour causes substantial energy drain and may affect other systems, especially if the character is performing additional energy-intensive activities.

Cost: 214,000 credits.

Particle Beam Blaster (right arm/hand): Mega-Damage: 6D6+6. Rate of Fire: Each blast counts as one melee attack/action. Range: 1,000 feet (305 m). Payload: 10 blasts per e-clip (an e-clip port can be part of the basic system). Unlimited if tied to the 'Bot's power supply. Cost: 80,000 credits.

Retractable Knuckle Blades (both hands): A metal blade/spike protrudes from the knuckle of each hand. Adds 1D6 S.D./M.D. to punch and backhand strikes. Also enables the 'Bot to parry blade weapons, including Vibro-Blades, provided the spikes are M.D.C. material. Each knuckle blade/spike has 5 M.D.C. Cost: 3,000 credits per knuckle for robots. Add 600 to make them silver-plated.