

THE INVENTOR'S HANDBOOK 2

KREDITS

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Section 1

While the first *Inventor's Handbook* had to deal with introducing the groundwork for the new rules systems found therein, *The Inventor's Handbook 2* expands upon all the introduced concepts manyfold. A high priority has been placed on giving ways to integrate the Tech sphere into as many game and setting types imaginable. Expanded rules for crafting, setting frameworks, and equipment are just some of the ways *The Inventor's Handbook 2* gives more ways to make the Tech sphere fit into your game. And of course, the usual gamut of talents to add depth to the spheres use.



NAVIGATING THIS BOOK

Section 2 - Basic Talents

This section introduces many new Tech sphere talents, including a new type of *gadget* type that deals with software, as well as rules for Technomancy sphere integration.

Section 3 - Legendary Talents

More legendary Tech sphere options are provided, many of which greatly alter the default assumptions of most settings.

Section 4 - Player Options

New martial traditions and feats for players, including many new drawbacks that can be used to customize the type of technology the player uses.

Section 5 - Technological Options

Optional rules for expanded crafting rules, technological procedures, and rules for artificial intelligence, can greatly expand the scope of the Tech sphere on your game.

Section 6 - GM's Toolkit

This grants guidelines for ways the gamemaster can customize the Tech sphere to fit their campaign setting better.

Section 7 - Technology Revised

This section clarifies and refines previous Tech sphere materials.

Section 2 TEKH SPHERE

Expanded Information

Moddable and Accessory Expanded: Accessories as a talent designator has been expanded. In addition to accessories for weapons, there are now accessories for armor and shields as well.

ROUTINES

Some (gadget) talents are also designated as (routine) talents; these *gadgets* consist mainly of software as opposed to a physical tool. You cannot select a (routine) talent as your first Tech sphere (gadget) talent.

A (routine) talent does not necessarily represent software as we imagine it today. They can be advanced punch card systems for clockwork engines, a series of mystical runes for a stone magitech slab, or a carefully arranged nutrient drip for an organic supercomputer.

When you gain your first (routine) talent you learn how to make storage devices for routines. This uses the same method as creating a *gadget* regularly, except storage devices do not count towards the maximum number of *gadgets* you may maintain at once. Each storage device can store one routine. When you create a routine, it begins inside of a storage device you have created that is also in your possession.

This storage device can be attached to an appropriate *gadget* (or technological item when applicable) you created in your possession as a swift action. Once the storage device is attached you may upload/download the routine into or out of the *gadget* as a part of that swift action, at

which point it becomes safe to remove the storage device without damaging the routine. *Gadgets* can store any number of storage devices as well as house any number of routines.

You can activate or deactivate a routine inside of a *gadget* the same way you activate a normal *gadget*, and you can transfer routines to and from a remote control to any other *gadget* within its signal range as part of their activation. If you successfully hack a foreign *gadget* using the Remote Hacking feat, you may instead transfer a routine into it instead of trying to control it. Deactivating a *gadget* will deactivate any routine inside it.

TECH SPHERE BASIC TALENTS

AKKESSORY SUIT (GADGET, MODDABLE)

This *gadget* is an airtight bodysuit designed to integrate with other technological options.

The bodysuit can be sealed as a free action to protect the user from harmful atmospheric effects such as vacuum or airborne hazards (such as inhalation poisons), but does not provide its user with oxygen otherwise (additional air generating equipment can be worn without compromising its seal). This bodysuit counts as light armor and uses the same statistics as leather armor. While donned, the armor is treated as an additional body slot for augments. In place of separate piece of armor, this bodysuit may be integrated into a pre-existing piece of armor (this requires a minute of time), granting it the extra body slot, its airtight quality, and the moddable quality.

Technomancy, Sprites, Routines, and Hacking

The Arcforge Campaign Setting: Spheres of Influence by Legendary Games introduced the Technomancy sphere. The sphere creates magical sprites to infest, control or boost technological items. The sphere was not designed with routines or Tech sphere gadgets in mind, so the following clarifies their interactions, as well as other interactions that deal with routines and hacking:

Effects that affect routines also affect sprites, and vice versa

Use your ranks in Craft (mechanical) in place of your magic skill bonus, and use your ranks in Craft (mechanical) + 11 in place of your magic skill defense for effects that require it.

If a *drone* possess a routine as an innate *gadget* it cannot be targeted by effects that target routines.

If an AI would be installed in a *drone* or construct (granting it an aggregate template), it cannot be targeted by effects that target routines (but is targeted as a construct instead).

A sprite's creator counts as its source of origin.

If a sprite is required to attempt a saving throw, it uses its casters saving throw modifier.

If an effect would destroy a Beta AI or stronger (such as a Gamma or Delta AI), with a single save or check (such as the Consume Sprite (program)), the effect instead deals 1d4 Charisma damage to the AI, + 1d4 damage for every 5 caster levels or ranks in Craft (mechanical) the effect possess. If an AI takes too much ability damage it is destroyed as normal.

ANTIVIRUS APPLICATION (GADGET, ROUTINE)

When activated, and part of a *gadget*, this routine protects the *gadget* from outside interference.

Whenever the *gadget* is subject to technological-based effects with negative repercussions (such as Remote Hacking or the Technomancy sphere sprites), the application will grant your *gadget* a bonus to the saving throw or your magic skill defense equal to 2 + 1 for every 5 ranks in Craft (mechanical) you possess. In addition once per round if your *gadget* would be successfully influenced, the routine can be set to spend an additional charge from the installed *gadget's* charge pool to force the foreign force to either attempt another check or grant the *gadget* another save to prevent the effect (even if it would not normally be allowed an additional save or check otherwise).

You may select this talent a second time to grant your routine the ability to detect unseen threats, as well as to trace and destroy enemy influences. You can set the routine to detect enemy threats inside of the *gadget* (such as undetected routines or sprites), forcing them to attempt another check at the beginning of your turn to remain concealed. The frequency of this check depends on the rate of power consumed. An additional check will be required every hour if no additional charges are consumed, every minute if an additional charge is consumed every hour, or every round if an additional charge is consumed every ten minutes.

Once the application detects a foreign routine, at the beginning of your turn it will make you aware of the threat, try to determine its origin and then attempt to purge the routine completely. The routine must attempt a Will save opposed by its Tech sphere DC. On a failed save, the origin of the effect is successfully determined and alerted to you (this counts as knowing the origin signal of the effect), and the foreign routine is destroyed. It will repeat this process for every foreign routine it detects.

ARTIFICIAL INTELLIGENCE (DRONE, GADGET, ROUTINE)

You can create Alpha AI and install them into your gadgets.

Running an Alpha AI consumes an additional charge from the *gadget* running it for every 8 hours of use, and is considered a rote action for a *drone*.

An AI may be simply run inside of a *drone* or be installed as its main control unit (granting it the aggregate template). If a *drone* possesses an AI as an innate *gadget*, that AI is hard-wired into the *drone* (granting it the aggregate template) and cannot be removed.

Similarly to *drones*, AI do not count against your maximum number of *gadgets* prepared. You may have a total number of AI activated at any one time whose combined level does not exceed your ranks in Craft (mechanical).

This talent counts as a (drone) talent for the purposes of determining the maximum number of Hit Dice worth of *drones* you may have at once (you must still possess the (drone) talent in order to create them as normal). AI count their level as Hit Dice towards the maximum number of *drone* Hit Dice you may have active at once, and can substitute for *drones* for the purposes of determining the maximum amount of AI levels you may have active at once.

You may take this talent in combination with the (drone) talent up to 4 times, increasing the amount of Hit Dice and Levels of *drones* and AI you may have active in tandem. If you possess either Drone or Artificial Intelligence 4 times, you may retrain one of these talents immediately for a talent of the other category.

See the Technological Options chapter for for additional rules on creating AI.

AUTOMATOR (GADGET)

An automator is a catch all type of *gadget* that exists to automate basic actions. Such as opening doors or lighting a gaslamp. Automators do not possess much agility, but are still capable of doing basic functions.

Consider the automator a I Hit Die construct with average hit points and hardness for a *gadget*, size of Tiny or small (chosen at the time of the creation), no ability scores except a Strength and Dexterity score of 10, an AC equal to 10 + 1/2 your ranks in Craft (mechanical), a bonus to saves equal to +0, movement speed of 0, and a base attack bonus of 0. It possesses no senses or auditory functions. Automators possess no magic item or augment slots. Automators cannot perform any action that requires an attack roll or combat action, but may perform ability and skill checks (this is left ultimately to the GM's discretion).

The exact shape of an automator is determined at the time of creation. An automator can possess up to 2 limbs

that must be inbuilt with whatever they wield or use. For instance an automator that can open or close a single door can take the form of a simple box with a pulley that attaches to a door. An automator may be created with only I limb in order to increase its movement speed to 5 feet. Automators can work in tandem to accomplish multiple smaller tasks that amount to a singular larger task.

You can create and maintain a number of automators equal to your practitioner modifier as one *gadget*.

Each charge allows an individual automator to function for 8 hours (which can be used in non-consecutive 1 hour increments).

<HAMELEON SUIT (GADGET, A<<ESSORY)</pre>

This *gadget* is attached to any kind of armor, and when activated with 1 or more charges, grants the user a circumstance bonus to Stealth checks equal to your ranks in Craft (mechanical). This does not stack with similar abilities such as *invisibility* or the Light sphere Chameleon talent. This requires 1 charge for every 10 minutes in use. In addition as a swift action (or as a free action by expending martial focus), the user may activate the suit's deep stealth function. Deep stealth function grants the wearer concealment (20% miss chance), but also consumes an additional charge per minute in use, plus an additional charge for every round the user moves more than half their movement speed in a round.

A long distance fuel pack *gadget* can be used to power the chameleon suit, allowing it to function for 1 hour per charge, and for 10 minutes in deep stealth for every additional charge (moving more than half speed a round consumes an extra charge as normal).

<LAMP BOOTS (AUGMENT, DRONE, GADGET)

This gadget takes the form of advanced boots that allow a user to climb on walls and vertical ceilings without requiring the use of their hands. The boots grant a climb speed equal to the creatures base movement speed, and do not require the user to attempt Climb checks when traversing a vertical or horizontal surface (including ceilings). The boots require 1 charge for every minute in use. As an immediate action the wearer can have the boots clamp the wearer to their current location, granting a circumstance bonus to combat maneuver defense and saving throws to resist being forcibly moved from the spot (such as to resist bull rush attempts or telekinesis) equal to half your ranks in Craft (mechanical) (minimum 1). While clamped in place, the user cannot move from his current position until the boots unclamp from their current position as a free action. Clamp boots occupy the legs slot or can be combined with an extendo limb to allow it to plant itself on any surface (including ceilings). Failing a Reflex save against Remote Control allows the

controller to activate or deactivate the climb speed and clamp function against your will.

<ompact shield (gadget, moddable)</pre>

This expandable shield can be as large as is required for the situation. This *gadget* takes the form of a buckler, light shield, heavy shield, or a tower shield, and the user can switch between the types as a swift action (this still requires the user to have the appropriate limb to use the shield).

If you possess 4 ranks in Craft (mechanical), the user can use the shield to grant themselves cover as if it were a tower shield while it is in light shield or heavy shield form.

Additionally, the bearer may let go of his shield and leave it as a freestanding wall (using your Craft (mechanical) modifier +10 as its combat maneuver defense), which remains in place until a creature in the correct square spends a move action to pick it up and end this effect.

You may take this talent a second time. If you do, Compact Shield grants total cover for all creatures who are attacked through the shield, not only for the bearer, when using the tower shield ability (whether or not the shield is in tower shield form). The shield also counts as total cover in relation to targeted spells. The shield itself may still be targeted by effects.

If you possess 8 or more ranks in Craft (mechanical), the bearer may deploy the shield as freestanding wall as a move action instead of a standard action.

<ontrol Harness (A<<essory, Drone, Gadget, signal)

This *gadget* allows the user to use their full body to control construct-like *gadgets* (such as collapsible vehicles, turrets or *drones*). It takes the form of a handheld case that can be unfolded, as a swift action, into a harness of the size of its user. Each harness is created for a specific creature type, and collapses into a size two categories smaller than the creature for transport. Donning the harness when its unfolded is a full-round action which prevents the user from moving from the spot the harness was set up in.

Once inside, the wearer can control a single construct-like *gadget* within signal range (a set of automators counts as a single construct for this purpose) using the construct's movements and actions as if they themselves were the construct (moving the construct as a move action, attacking with a weapon it possesses as a standard action, etc.). If the construct possesses an appropriate weapon, the wearer may even make attacks of opportunity. The wearer may still perform actions not related to the construct (for example, throwing a formulae or activating another *gadget*), but doing so means the pilot cannot use that same action to control the construct. The wearer

can change the construct they are controlling as a swift action.

The harness can instead be made into an armor accessory, and once activated as a swift action allows the wearer to convey actions to a construct as normal without having to don a harness. However the wearer is considered flat-footed and battered during any turn that they used actions to control a construct remotely this way.

Drones with the harness as an innate gadget possess a pilot seat used to control the drone and only that drone.

While in the pilot seat, the pilot and the *drone* are essentially a single creature, using the *drone's* physical stats and the pilot's mental stats. The pilot cannot be targeted by weapons or by magic that behaves like a weapon (for example, effects that require an attack roll or allow a Reflex save) until the *drone* is reduced to o hit points, but otherwise is still susceptible to magical effects. A creature who successfully grapples the *drone* or climbs onto it using Scale Foe from the Athletics sphere may attack the pilot directly, or even move the pilot instead of the *drone* after a qualifying grapple check, removing the pilot from their seat. If the *drone* also possesses the Collapsible Vehicle talent as an innate *gadget*, the benefits of cover it grants to its passengers also applies to the pilot.

A control harness requires a charge for every 4 hours in use. This is considered a rote action.

DASH ENGINE (ACCESSORY, AUGMENT, DRONE, GADGET)

This *gadget* greatly increase the user's speed to a nearly uncontrollable extent.

When you first select this talent you must choose between gaining it as an accessory or augment. If you select this talent a second time you can make it as the other type.

Dash engines can be attached to armor or weapons as an accessory, and occupies either the legs, arms or body slot as an augment.

You may activate a dash engine as part of a charge, withdraw, or run action. This consumes a charge and increases the distance you can move (this can be applied to any movement speed mode you possess) by 10 feet for every rank you possess in Craft (mechanical). If done as part of a run action, increase this amount to 30 feet per rank instead. This increase counts as an increase to the creatures base land speed for effects that depend on it (such as racial bonuses to Acrobatics checks to jump).

The first creature that you hit with a melee weapon attack the round you moved (if the *gadget* is an accessory attached to a melee weapon, the attack must be with the weapon the *gadget* is attached to) suffers an additional 1d6 damage for every 6 ranks in Craft (mechanical) you possess. This extra damage is not increased on a critical hit. Failing a Reflex save against Remote Control allows the controller to activate the dash engine against your will on his turn and move you 10 feet for every rank you possess in Craft (mechanical) in a direction of their choice.

DISARMER (AKKESSORY, GADGET)

This accessory adds some way for weapons used to parry attacks to steal away weapons used on them, such as a magnet or an alchemical adhesive. This accessory can only be attached to melee weapons or weapons the wielder knows how to use in melee.

Whenever a target attacks the weapon's bearer with a melee weapon and misses him by a margin of 5 or more, they must succeed at a Reflex saving throw against your Tech sphere DC or be disarmed of their weapon, as it sticks to the modified weapon (this does not affect the wielded weapon's effectiveness in combat). This margin decreases by I for every 10 ranks you possess in Craft (mechanical). A creature may attempt a disarm attempt to retrieve the weapon from the accessorised weapon. The disarmer consumes I charge every time it successfully disarms a target.

EXTENDO APPENDAGE (AUGMENT, DRONE, GADGET)

This *gadget* creates a lithe, snakelike appendage that can extend an extreme distance. When activated with 1 or more charges, the wearer can use the extendo appendage to either move themselves or other creatures and objects within close range (25 feet + 5 feet per 2 ranks in Craft (mechanical)).

The extendo appendage is not dextrous enough to wield weapons or perform actions requiring finesse but is capable of making unarmed strikes (this does not grant extra attacks). An anatomical structure arm can be combined with an extendo appendage in order to grant it the dexterity of a normal hand and the ability to wield weapons, but still only occupies the slot that the extendo appendage occupies, and does not require additional charges for base functionality (but you may still spend extra charges to double maximum weight capacity).

If used to attack, the extendo limb may be used to perform melee attacks against targets within range (including combat maneuvers) or lift other objects (this does not increase your threatened area).

Once per turn as a free action, you can plant/detach one extendo appendage on/off a flat, stable, unoccupied surface within range. By suspending yourself from the planted appendage, you may move yourself anywhere within close range of the planted square as a movement action (including vertically and diagonally). If you have multiple extendo appendages planted, you must remain in range of each of them. If you possess the Combat Limbs legendary Tech sphere talent, you can substitute extendo appendage in place of a single anatomical structure arm.

You may make miniaturized versions of the extendo appendages. They are too small to make attacks or to suspend yourself but they can be used to hold and move objects at least 3 sizes smaller than your size category. A sensory set can be combined with the appendage in order to provide sensation to an area within close range (such as using an eyeball to peek behind a wall), and does not require a slot, and not require extra charges for base functionality (but you may still spend extra charges to use improvements as normal).

You can select this talent a second time if you have at least 10 ranks in Craft (mechanical) to increase the extendo limbs reach to medium range (100 feet + 10 feet per rank in Craft (mechanical)).

An extendo appendage can be attached to the body, arm, or leg slot, and mini extendo limbs do not require a slot, and can be attached to other augments. Extendo limbs use I charge per hour in use.

Failing a Will save against Remote Control allows the controller to maneuver you around with the limb, or attack with the limb on their turn using their own base attack bonus and your ability modifiers.

EXTRA GADGETS

The number of *gadgets* that you can have prepared at one time increases by 2, and increases your charge pool by 1. You may select this talent multiple times. Its effect stacks.

HOOKSHOT (A<<ESSORY, GADGET)

This accessory applies to ranged weapons, attaching auto-retracting cords to projectiles it fires.

Whenever the user makes an attack with the weapon during their turn, they can expend a charge from the *gadget* in order to connect the projectile to the weapon with a cord (or connect the user directly to a thrown weapon). This limits the maximum range of the weapon to close range (25 feet + 5 feet per 2 ranks in Craft (mechanical)).

If the attack misses its target, the cord simply automatically retracts itself (taking its fired or thrown projectile back with it if you so desire), but if the attack successfully hits its target, the projectile latches on, and links the weapon (or the attacker) and the target together. The attacker and the target cannot exceed the maximum distance of the cord unless:

- The attacker disconnects the cord from the ranged weapon (or themselves) as a free action.
- The attacker loses the ranged weapon.
- The cord is destroyed (it has the hit points and hardness of a *gadget* you can create and uses your Tech sphere DC as its Break DC).
- The cord's size limit is exceeded. The cord can vertically hold up a Medium-sized creature or object + I size category larger for every 4 ranks in Craft (mechanical). If the size limit is exceeded the cord breaks. Lighter or heavier objects can count as a size category smaller or larger. Multiple cords working at once can add their effective maximum size categories together to determine the maximum size of the object they hold up (I for Medium size, 2 for Large size, 4 for Huge size, etc.).
- The target succeeds on a Strength check against your Tech sphere DC as a standard action to disconnect the cable from themselves.

If the attacker chooses the cord to retract to a desired distance, at the end of their turn the cord makes a combat maneuver check using your Craft (mechanical) modifier as its combat maneuver bonus. This attack is compared against both the attacker's and target's combat maneuver defense. If the attack exceeds neither creature's combat maneuver defense, nothing happens. If the check exceeds at least one of the creatures defenses, the creature with the lower combat maneuver defense is moved 10 feet (including vertically if necessary) closer towards the other target for every point the check exceeds their combat maneuver defense, or until the cord has retracted the desired amount (this movement does not provoke an attack of opportunity and is halted if it would move them into a solid object or another creature). If both creatures have the same combat maneuver defense, an opposed Strength check determines who gets moved by the cord. For the purposes of this check, objects are considered to have a combat maneuver defense of 15 + their special size modifier. If an object or creature is larger then the cord's size limit, it cannot be moved by the cord regardless of the check result (which may result in the creature with the higher CMD to be moved by the cord). Creatures can also choose to be moved by the cord the full distance. If both creatures choose to be moved by the cord, the creature with the lower CMD is moved as normal. If used by the attacker to propel themselves a distance intentionally, this movement is considered both jumping and flying for the purposes of benefiting from the Athletics sphere. The attacker can choose fire the other end of the cable (ie the one they have connected to themselves or their weapon) against a target within close range of the first target. If the attack succeeds, then both targets are now considered to be connected to one another. If the attacker fires the other end of the cable during the same turn they fired the first part of the cable, the attacks are not limited to targets within close range, instead both targets must be within close range of one another. A creature can be affected by multiple cords at once, but cannot be successfully moved more than once per your turn. Instead the maximum size limit is increased. The accessory can generate multiple cords at the same time, each one requiring a charge to create.

If you select this talent a second time, the cord's maximum length is increased to medium range (100 feet + 10 feet per rank in Craft (mechanical)).

INTEGRATED ARMORY (ACCESSORY, GADGET)

This accessory is fitted between two weapons so that wielding the larger weapon counts as wielding the other weapon. If the weapons are the same size you can wield both at once in the same hand/hands. Shields (excluding bucklers) may be attached in place of weapons.

LOAD BEARER (AUGMENT, DRONE, GADGET)

When activated with 1 or more charges, the creature is treated as if they were one size category larger for the purposes of their carrying capacity and the size of weapons they may wield. This increases to two size categories larger at 7 ranks in Craft (mechanical), and to three size categories at 14 ranks in Craft (mechanical). Unless otherwise stated, this does not stack with other abilities that increase the maximum size of weapons you may wield, but does stack with other effects that increase effective carrying capacity. The load bearer occupies the body slot and uses up 1 charge per minute of use. Failing a Reflex save against Remote Control makes you staggered for 1 round.

MISFIRE MANAGER (A<<ESSORY, GADGET)

This accessory can only be attached to firearms. Whenever your firearm would misfire, you can spend a charge from the accessory as an immediate action to prevent the misfire from happening (as if your firearms misfire chance was o).

At 10 ranks in Craft (mechanical), you can activate the accessory as a free action even outside of your turn.

MOBILE ARMOR (A<<ESSORY, GADGET)

This *gadget* lines the inside of medium and heavy armors, allowing the wearers to move swiftly. Armor with this accessory has its movement penalty completely removed. This accessory consumes 1 charge per hour in use.

OVERDRIVE (GADGET, ROUTINE)

When activated as a swift action as part of a *gadget* that grants a competence or enhancement bonus, this *gadget* grants an additional +2 insight bonus of the same type the enhancement bonus was affecting (for example, a *gadget* enhancing a Constitution score would grant an additional insight bonus to Constitution), +1 for every 10 ranks you possess in Craft (mechanical), but you can choose to benefit from a smaller insight bonus instead.

The *gadget* consumes 2 times the granted insight bonus as additional charges for each round in use. Once the overdrive is deactivated, the *gadget* it has been installed into shuts down and becomes inoperable until 30 minutes have been spent making the *gadget* operational (15 minutes with an engineering kit).

PRESSURE MECHANISM (ACCESSORY, AUGMENT, GADGET)

This *gadget* greatly increase the user's impact with their attacks.

When you first select this *gadget* you can choose between gaining it as an accessory or augment. If you select this talent a second time you can make it as the other type.

Pressure mechanisms can be attached to weapons, and occupies either the legs or arms as an augment.

You may activate the pressure mechanism as a move action that expends 2 charges.

Beginning on the next round, on the first successful attack the wearer makes (if the *gadget* is an accessory the weapon must be the one *gadget* is attached to, if the *gadget* is an augment it must be made with a melee or thrown weapon wielded the limb the augment is attached to), the pressure is unleashed, dealing an amount of additional damage to the creature equal to 1d6, +1d6 per 2 ranks in Craft (mechanical) you possess, and the creature is pushed directly away from the attacker 5 feet for every rank in Craft (mechanical) you possess. If the creature would impact an object or other creature before they can complete this movement, they stop in place, and are knocked prone. This extra damage is not increased on a critical hit. The pressure is wasted and needs to be regained again if not used by the next round.

Failing a Will save against Remote Control allows the controller impart a -5 penalty to attack rolls made with that limb for 1 round.

RANGE AMPLIFIER (A<<ESSORY, GADGET)

This accessory can only be attached to ranged weapons. The weapon has its range increment doubled. You can select this talent an additional time for every 5 ranks in Craft (mechanical) you possess, increasing the multiplier by I each time (thus, if the talent is taken twice, the weapon's range would be multiplied by 3).

SENSORY SET (AUGMENT, GADGET)

You gain access to the following attachable *gadget* schematics meant to grant and enhance the existing sense types. If all the extremities created are in place of pre-existing extremities they do not occupy an augment slot (so a creature without a nose can wear a smell set without requiring an additional slot). When creating these sensors you may always choose to create less sensors than listed.

Creatures wearing a sensory set are supplied with information from routines uploaded into the *gadget* (noted in each routine individually).

When activated with 1 or more charges, the creature gains the use of the sensory set. Each charge allows these additional senses to function regularly for 24 hours.

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Hearing Set: This *gadget* takes the form of a pair of audio sensors that can hear as well as humans. A hearing set can occupy any slot excluding the brain. Failing a Fortitude save against remote control deafens you for 1 round.

Smell Set: This *gadget* takes the form of an olfactory sensor (usually a nose) that can smell as well as humans. A smell set can occupy any slot excluding the brain. Failing a Fortitude save against remote control nauseates you for 1 round.

Taste Set: This *gadget* takes the form of a taste sensor (usually a tongue) that can taste as well as humans. A taste set can occupy any slot excluding the brain. This could allow you to taste without ingesting or licking. Failing a Fortitude save against remote control nauseates you for 1 round.

Touch Set: This *gadget* takes the form of a pair of nerve sensors that can detect pressure, texture, and heat as well as humans. A touch set can occupy any slot, but if it occupies any slot except for the brain or body, the ability to sense applies to that limb only (so applying this augment to a leg would extend any abilities to only the ones done with the leg itself). Failing a Fortitude save against remote control exhausts you for 1 round.

Vision Set: This *gadget* takes the form of a pair of ocular sensors that can see as well as humans. A vision set can occupy any slot excluding the brain. Failing a Will save against remote control blinds you for I round.

In addition, when you select this talent, gain one of the following improvements (not every improvement applies to every sensory set). Some improvements are linked to a sense type, being denied that sense type denies you the improvement as well (blindsense linked to a hearing set is disabled if the wearer is deafened for instance) :

Blindsense: This improvement can be applied to and is linked with a hearing, smell, taste, or touch set. While wearing the set the user can spend a charge as a movement action to grant themselves the blindsense special ability with a range of 30 feet for I minute.

Extended: This improvement can be applied to and is linked with a hearing or vision set. As a free action during their turn the user can make their sense extended for I round. The user is flat-footed, but Perception check DCs linked to their sense increase by I per 30 feet of distance to the target rather than I per 10 feet. This increases by an additional 10 feet for every 5 ranks in Craft (mechanical) you possess.

Integrated: A single sensory set can grant two senses at once chosen at the time of its creation.

The number of senses a set can grant increases by t for every 4 ranks in Craft (mechanical) you possess. The sensory set must still still occupy an appropriate slot to function (so a set that grants vision and taste cannot occupy a brain slot), and only requires I charge to power its base functionality. In addition you may combine sensory sets with other augments allowing them to occupy the same slot.

Microvision: This improvement can be applied to and is linked with a vision set. As a free action during their turn the user spend a charge to make their vision microscopic for 1 hour.

The user cannot see further than 30 feet away, but gains a +1 insight bonus to Appraise checks made to determine an item's value, Craft checks made to create an item, all Disable Device checks, and Survival checks made to follow tracks. This bonus increases by +1 for every 3 ranks in Craft (mechanical) you possess.

Nightvision: This improvement can be applied to and is linked with a vision set. The user benefits from low-light vision and darkvision with a range of 60 feet. When entering magical darkness that limits vision that the user did not create, they can spend a charge as a free action to make the sensory set attempt a Will save with a +1 bonus for every 5 ranks you possess in Craft (mechanical), opposed by the effect's creator's magic skill defense to see in such darkness.

Scent: This improvement can be applied to and is linked with a smell or taste set. While wearing the set the user can spend a charge as a movement action to grant themselves the scent special ability with a range of 30 feet for 1 hour.

Shielded: You can gain a +4 circumstance bonus on saves vs. effects that would disable a sense type that your wearing an active sense set for, increased by +1 for every 5 ranks in Craft (mechanical) you possess as a free action by spending an extra charge (for instance being blinded while wearing a vision set).

Thermal: This improvement can be applied to and is linked with a touch or vision set.

As a movement action the user can spend a charge to amplify their ability to detect heat for 1 minute. The user ignores the miss chance for concealment (including total concealment) from creatures that radiate body heat or are exceptionally cold for their environment (like ice elementals in a jungle), though masking their body can bypass this effect (such as covering yourself in cold mud).

Tremorsense: This improvement can be applied to and is linked with a touch set. While wearing the set the user can spend a charge as a movement action to grant themselves the tremorsense special ability with a range of 60 feet for 10 minutes.

X-Ray: This improvement can be applied to and is linked with a vision set. As a standard action during their turn the user spend three charges to make their vision x-ray vision for 1 round. The user is flat-footed, but can see up to 10 feet as though looking at objects in normal light even when there is no light source. This vision can see through up to 3 feet of wood or dirt, up to 1 foot of stone, or 1 inch of common metal. Thicker substances or a thin sheet of lead blocks the vision. The distance the vision can see increases by 5 feet for every 5 ranks of Craft (mechanical) you possess.

You may select this talent multiple times, each time you do, select another improvement the *gadget* can grant.

SIGNAL (ABLE (GADGET)

This *gadget* is a cable of medium length (100 feet + 10 feet per rank in Craft (mechanical)). As a swift action, you can link one end of the cable to either another end of a separate cable within reach or to a *gadget* of your creation (un-linking the cable is another swift action). *Gadgets* (including cables) can have any number of other cables linked.

Taking a linked *gadget* beyond medium range of another *gadget* requires a Strength check opposed by your Tech sphere DC. Success un-links the cables, failure means you cannot take the *gadget* farther than this distance.

Gadgets linked by this cable are considered to be within signal distance of each other regardless of their actual distance and intervening materials, or jammed signals, even if they do not normally possess a signal otherwise. Whenever a *gadget* would consume a charge, it can instead consume a charge from a separate *gadget* linked to it by signal cable.

You can create a number of signal cables equal to your practitioner modifier as one *gadget*, and they count as one *gadget* for the purpose of the amount of *gadgets* you may maintain at once.

SNIPER SCOPE (ACCESSORY, AUGMENT, GADGET)

This accessory can only be attached to ranged weapons. As a move action, the wielder may use the scope to aid in aiming, reducing range penalties by half for their next attack made before the end of their turn. If you possess 4 ranks in Craft (mechanical), the scope also provides a +4 bonus to attack rolls made when aiming this way. If created as an augment it occupies the eyes slot and requires I charge per 8 hours, but grants the user its ability to any ranged weapon wielded.

Failing a Will save against Remote Control allows the controller to blind the user.

SPEED LEVER (A<<ESSORY, GADGET)

This accessory can only be attached to ranged weapons, decreasing their reload time. The time required to reload the weapon is reduced by one step (i.e., full-round action becomes a standard action, move action becomes a free action).

At 5 ranks in Craft (mechanical), the accessory reduces the reload time by an additional step (to a minimum reload time of a free action).

This modification stacks with existing abilities (such as the Expert Reload talent) that reduce reload time.

STANDARDIZED DRONES

You can create standardized *drones*. Standardized *drones* benefit from standardized bonus hit points, natural armor bonus, and base ability scores in place of those granted by their size. Standardized *drones* have bonus hit points equal to 3 times their base attack bonus, and a natural armor bonus equal to half their base attack bonus. In addition standardized *drones* possess a base Strength and Dexterity score of 12 and increase their Strength or Dexterity by 1 for every Hit Die they possess (chosen for each Hit Die they gain). *Drones* created this way all have the same material cost of the largest size category you would normally be able to make regardless of their actual size.

SUPERIOR JOINTS (GADGET, ACCESSORY)

This *gadget* integrates with armor to make it less cumbersome and more efficient. The armor's maximum Dexterity bonus is increased by 1, and the armor's armor check penalty is reduced by 3. These bonuses increase by 1 for every 6 ranks in Craft (mechanical) you possess. This accessory consumes 1 charge per hour in use.

TARGETING APPLICATION (GADGET, ROUTINE)

When activated, either as part of a *gadget* that makes attacks (either making the attack itself or wielding weapons and making attack rolls with them) or uploaded into the user's Sensory Set augment, attacks made by the user gain a +1 enhancement bonus to attack and damage rolls, and count as magic for the purposes of bypassing damage reduction. This bonus increases by 1 for every 4 ranks in Craft (mechanical) possessed, to a maximum of +5 at 16 ranks.

TRACKER CHIP (GADGET, SIGNAL)

If you take tracker chip twice, tracker chips that attach themselves to *gadgets* can function as that device's signal even if the *gadget* is not yours and the device already possesses its own signal (in which case both signals are valid for transmitting information).

TUTOR (DRONE, GADGET, ROUTINE)

You create a routine can be used to enhance a user's understanding of a subject chosen at the time of the routine's creation. When crafting this *gadget*, pick a skill from the list:

Appraise, Bluff, Diplomacy, Disguise, Handle Animal, Heal, Intimidate, Knowledge (any), Linguistics, Perform, Profession (any), Sense Motive, Survival or Spellcraft.

When activated as part of a *gadget* that can transmit information to its user (such as the Sensory Set augment), the user gains a +2 competence bonus to that skill and can use that skill untrained. Using the *gadget* this way consumes I extra charge from the *gadget* the routine has been installed into per 8 hours of use as a rote function. You can also spend an additional charge to have the tool instead grant a competence bonus to one specific use of that skill equal to 3 + 1/2 your ranks in Craft (mechanical). If a *drone* possesses a tutor as an innate *gadget*, that *gadget* is hard-wired into the *drone* and cannot be removed.

VIRUS (GADGET, ROUTINE)

When activated, this routine begins to cause malfunction to the *gadget* it is uploaded to. A virus will automatically activate if the *gadget* it is uploaded into is activated. You select the kind of virus this routine is when you first create it from the list below:

Bricker: When activated, every round on your turn the bricker will make the *gadget* attempt a Will saving throw opposed by its Tech sphere DC. On a failed saving throw the bricker will increase the amount of charges required to operate the *gadget* every round by 1 (even if it normally does not require charges to operate). This effect stacks with itself. This number can be reset back to 0 after spending 30 minutes (15 minutes with an engineering kit) fixing the deactivated *gadget*.

Devourer: When activated, every round on your turn the devourer will make an activated routine installed in the *gadget* attempt a Will saving throw opposed by its Tech sphere DC. On a failed saving throw the devourer will destroy the activated routine inside the *gadget*. A devourer must destroy any active antivirus routines first. Each time an antivirus routine would be destroyed by a devourer it instead takes a -5 penalty to its Craft (mechanical) DC. If this penalty becomes equal to or lower than its Craft (mechanical) modifier, it is destroyed as normal. **Slicer:** When activated, every round on your turn the slicer will make an activated routine installed in the *gadget* attempt a Will saving throw opposed by its Tech sphere DC. On a failed saving throw the slicer will treat the *gadget* as if it was successfully hacked using the Remote Hacking feat, and grant control to a pre-programmed remote control *gadget* within signal range of the hacked *gadget* for I round.

WEAPON UPGRADE (ACCESSORY, GADGET)

This accessory can only be granted to melee weapons. The weapon gains one of the following weapon special features: Blocking, brace, deadly, disarm, distracting, reach, sunder, trip. This accessory can be attached multiple times. Each time it is attached, the weapon gains a different special feature. This accessory cannot grant a weapon a special feature it already possesses.



Section 3 LEGENDARY TECH TALENTS

ALCHEMICAL DRONE

Prerequisites: Tech sphere (Drone).

Whenever you create a *drone*, you may grant it the alchemical subtype by adding the following properties (a *drone* cannot possess more than one subtype):

Alchemy: All natural attacks made by the alchemical construct deal an additional 1d6 acid damage.

Broken Containers: Any strike on an alchemical construct with a melee weapon deals I point of acid damage to the attacker. This amount increases to Id6 points of damage if the attack is a critical hit. Alchemical constructs are not immune to bleed damage, and if subject to a critical hit, they suffer Id6 bleed damage in addition to other effects. It is possible to provide first aid to stop bleeding as if the construct were a living creature.

Vulnerable to Fire: Alchemical constructs take 150% as much damage as normal from fire attacks, unless they are immune to fire via other special defenses.

Difficult to Create: Increase the time and gp cost required to create an alchemical construct by 50% over normal for a construct.

KIOKKMORK DRONE

Prerequisites: Tech sphere (Drone).

Whenever you create a *drone*, you may grant it the clockwork subtype by adding the following properties (a *drone* cannot possess more than one subtype):

Winding: The construct must be wound with a special key in order to function. As a general rule, a fully wound clockwork can remain active for I day per Hit Die, but shorter or longer durations are possible.

Vulnerable to Electricity: Clockwork constructs take 150% as much damage as is normal from electricity attacks.

Swift Reactions: Clockwork constructs generally react much more swiftly than other constructs. They gain Improved Initiative and Lightning Reflexes as bonus feats, and gain a +2 dodge bonus to AC.

Difficult to Create: Increase the time and gp cost required to create a clockwork construct by 50% over normal for a construct.

<ompactor (a<<essory, gadget)</pre>

Prerequisite: Tech sphere.

This *gadget* can allow a tool or object to be compressed to a significantly reduced size and weight. This *gadget* is only considered an accessory *gadget* if its applied to a weapon.

The compactor may condense an object up to three size categories smaller as a swift action, or as a free action by spending a charge, which renders the object unusable and will deactivate any *gadgets*. For each size category the item is reduced, reduce its weight by a factor of 8. The maximum compaction increases by an additional size category for every 4 ranks you possess in Craft (mechanical). Applying a compactor to an object requires a minute of work. Compactors cannot have other compactors attached to them.

KOMPUTER (GADGET)

Prerequisites: Tech sphere (Remote Control).

You can create a remote control that does more than just send out commands to your *gadgets*.

It has a large storage capacity, and for all intents and purposes is capable of either storing 100,000 high quality photos from the camera, or 1,000 hours of high quality video recording, or a mix in-between, and can be used to transmit information to its user. A computer also does not require line-of sight to *gadgets* that it activates. The user still needs a way to receive input from the area in order to make accurate judgements, such as cameras, or *drones*. This can be combined with other methods of control such as the control harness to control targets without line of sight.

DRAWBAKK ALLEVIATOR (GADGET)

Prerequisite: Tech sphere.

This *gadget* removes drawbacks from itself and the *gadgets* it's attached too. Each drawback alleviator must be created for a specific *gadget* and drawback from the Tech sphere. When attached to said *gadget* and activated, both this *gadget* and the *gadget* it is attached to do not suffer from the drawback. The drawback alleviator consumes I charge per minute.

GENERATOR (DRONE, GADGET)

Prerequisite: Tech sphere.

You create a *gadget* that does not store power, but outputs it. Creating a generator requires a gathering of raw materials, weight and construction time similar to that of a *drone*, and you can make a generator with a size equivalent to the maximum/minimum of a *drone* you can create except you cannot create a generator with a size smaller than Small. Setting up a generator requires it to remain on a stable flat surface for the duration of its activation (difficult terrain counts as an unstable surface). Activating a generator requires I minute multiplied by two for every size category larger than Small the generator is. Generators cannot be reduced in size, reduced in weight, or placed in extradimensional storage (such as *bags of holding*) without deactivating.

Once activated generators output power at a rate of 1 charge a round + 1 charge per every 5 ranks you possess in Craft (mechanical). For every size category larger than Small multiply this output by 3 (times three at Medium, times six at Large, etc.). Charges stored in non-battery gadgets from the generator still count against your maximum charge pool (excluding permanent gadgets).

You can attach/detach any number of *gadgets* to a generator as a swift action and split the charges it outputs between any number of them. Attached *gadgets* cannot be moved further than 5 feet away from the generator without detaching.

Drones may possess generators as innate gadgets that are at least 2 sizes smaller than themselves. They may use the generator to power their own functions or to supply power to outside gadgets. If the drone with the innate generator suffers a critical hit, the generator is destroyed in the process.

A generator built into a *drone* is considered to always be on a stable surface for this purpose, however if the *drone* it is built into is reduced in size or weight (such as through , magical effects), or stored in an extradimensional manner the generator still stops functioning.

If a generator is made to self destruct, such as through the Self Destruct talent, treat it as possessing a number of charges equal to the number it can output in a round. If you select this talent twice, the generator becomes more stable. The generator can be reduced in size, reduced in weight, or placed in extradimensional storage (such as *bags of holding*) without deactivating, and *drones* with innate generators do not have their generators destroyed on a critical hit.

GREATER ARTIFICIAL INTELLIGENCE (DRONE, GADGET, ROUTINE)

Prerequisites: Tech sphere (Artificial Intelligence, Improved Artificial Intelligence).

You can create a Gamma AI and install it into your gadgets normally as you would with other AI. Running a Gamma AI consumes an extra three charges from the gadget running it for every 8 hours of use. Unlike an Alpha AI, running a Gamma AI is not a rote action for a drone. The GM is the ultimate arbiter of which feats the Gamma AI may possess.

IMPROVED ARTIFICIAL INTELLIGENCE (DRONE, GADGET, ROUTINE)

Prerequisites: Tech sphere (Artificial Intelligence).

You can create a Beta AI and install it into your *gadgets* normally as you would with Alpha AI. Running a Beta AI consumes two additional charges from the *gadget* running it for every 8 hours of use. Unlike an Alpha AI, running a Beta AI is not a rote action for a *drone*.

RETURN TO SENDER

Prerequisites: Tech sphere (Antivirus Software x2).

When your antivirus routine would successfully destroy a foreign routine, it instead can reprogram it to target its original sender with its original effect, and uploads it to its origin point (no check required as the routine is not detected as foreign). If the source of origin would be a creature (such as if a sprite uploaded by a technomancer is reprogrammed), instead of the routine's normal effect, the creature takes 1d8 damage per rank in Craft (mechanical) you possess (Will half).

ROBOT DRONE

Prerequisites: Tech sphere (Drone).

Whenever you create a *drone*, you may grant it the robot subtype by adding the following properties (a *drone* cannot possess more than one subtype):

Intelligent: Robots are intelligent, and thus have skills and feats as appropriate for their Hit Dice. Unless otherwise indicated for a specific robot, all robots have Intelligence scores of 10. The following are class skills for robots: Climb, Disable Device, Fly, Knowledge (all), Linguistics, Perception, and Sense Motive.

Note: Intelligent *drones* still cannot act on their own. When piloting a *drone* with its own feats, the pilot may choose on any given round to use his own feats or the construct's, but not both. An installed AI can choose to use the robot's Intelligence score in place of its own.

Vulnerable to Critical Hits: Whenever a robot takes extra damage from a critical hit, it must attempt a DC 15 Fortitude save to avoid being stunned for 1 round. If it succeeds at the saving throw, it is instead staggered for 1 round.

Vulnerable to Electricity: Robots take 150% as much damage as normal from electricity attacks, unless they are immune to electricity via other special defenses.

Difficult to Create: Increase the time and gp cost required to create a robot construct by 50% over normal for a construct.

STEAMPOWERED DRONE

Prerequisites: Tech sphere (Drone).

Whenever you create a *drone*, you may grant it the steampowered subtype by adding the following properties (a *drone* cannot possess more than one subtype):

Refill: A steampowered construct can only function for I day per Hit Die before needing to be refilled with water. A Medium construct must be refilled with 8 gallons of water. This is multiplied by 4 for each size category over Medium, or divided by 4 for every size category below Medium.

Hydraulic Force: Steampowered constructs gain a +2 bonus to Strength. This bonus increases by +2 for every size category above Medium they possess.

Note: If a steampowered *drone* is also created using the standardized talent, it is treated as the largest size category you can create for the purposes of benefiting from the hydraulic force ability. **Vulnerable to Cold:** Steampowered constructs take 150% as much damage as normal from cold attacks, unless they are immune to cold via other special defenses.

Difficult to Create: Increase the time and gp cost required to create a steampowered construct by 50% over normal for a construct.

STRENGTH OF A MILLION AND SEVENTY

Prerequisites: Craft (mechanical) 5 ranks, Tech sphere (Load Bearer).

Load bearer augments that you create also add five times your ranks in Craft (mechanical) to your Strength score for the purposes of their carrying capacity and increase your effective size category by one more for the purposes of calculating your carrying capacity (this is in addition to the regular benefits of the Load Bearer talent).

VIGOROUS GADGETS

Prerequisite: Tech sphere.

Your *gadgets* and *drones* can receive healing from either negative energy or positive energy. Once this choice is made it cannot be changed.

WIRELESS < HARGE

Prerequisite: Tech sphere.

Your *gadget's* signals are capable of transmitting charges. Whenever a *gadget* would consume a charge, it can instead consume a charge from a separate *gadget* you created within its signal range.

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Section 4 PLAYER OPTIONS

MARTIAL DRAWBAKKS

Many new drawbacks have been added to the game to increase setting immersion. But it is important to stress that the GM is the ultimate arbiter of created martial traditions. If a character possesses a drawback, it should be a significant factor during gameplay, not something easily overcome.

ALCHEMY SPHERE DRAWBACKS

ALTERNATIVE-BREW

Whenever this sphere uses or grants ranks in Craft (alchemy) or calls for a Craft (alchemy) check, you instead gain ranks in a Craft or Profession or attempt a Craft or Profession check. The particular skill used is determined by the GM when you first gain this drawback. You use your ranks in the chosen skill instead of Craft (alchemy) when determining saving throws and Alchemy sphere effects. It is also substituted for all checks made to craft the items in question. This drawback does not grant a bonus talent; removing this drawback does not require spending a talent, but requires GM permission. You use ranks in the chosen skill in place of Craft (alchemy) for prerequisites for feats and talents that require the Alchemy sphere.

EXPENSIVE <HEMI<ALS

The materials gathered over the day and the alchemy kit are not enough to produce your formulae and poisons. Each poison or formulae you make requires a cost of I silver piece per rank in Craft (alchemy) used to produce it. They still go inert as normal and count towards the maximum you may maintain at once.

MANA <HEMISTRY

Your formulae and poisons use magical elements as part of their designs. This makes the effects your formulae and poisons create magical in nature and subject to spell resistance. In addition their effects may be dispelled by *dispel magic* (and other such similar effects) and your formulae and poisons are treated as magic items for the purposes of dispelling effects.

TRAP SPHERE DRAWBAKKS

ALTERNATIVE-TRAP

Whenever this sphere uses or grants ranks in Craft (traps) or calls for a Craft (traps) check, you instead gain ranks in a Craft or Profession or attempt a Craft or Profession check. The particular skill used is determined by the GM when you first gain this drawback. You use your ranks in the chosen skill instead of Craft (traps) when determining saving throws and Trap sphere effects. It is also substituted for all checks made to craft the items in question. This drawback does not grant a bonus talent; removing this drawback does not require spending a talent, but requires GM permission. You use ranks in the chosen skill in place of Craft (traps) for prerequisites for feats and talents that require the Trap sphere.

EXPENSIVE TRAPS

The materials gathered over the day and the trap bag are not enough to create your traps. Each trap you make requires a cost of 1 silver piece per rank in Craft (traps) used to produce it. They still degrade naturally as normal.

MANA TRAPS

Your traps use magical elements as part of their designs. This makes the effects your traps create magical in nature and subject to spell resistance. In addition their effects may be dispelled by *dispel magic* and other such similar effects and your traps are treated as magic items for the purposes of dispelling effects.

TECH SPHERE DRAWBACKS

ALTERNATIVE-KRAFT

Whenever this sphere uses or grants ranks in Craft (mechanical) or calls for a Craft (mechanical) check, you instead gain ranks in a Craft or Profession or attempt a Craft or Profession check. It is also substituted for all checks made to craft the items in question. The particular skill used is determined by the GM when you first gain this drawback. You use your ranks in the chosen skill instead of Craft (mechanical) when determining saving throws and Tech sphere effects. This drawback does not grant a bonus talent; removing this drawback does not require spending a talent, but requires GM permission. You use ranks in the chosen skill in place of Craft (mechanical) for prerequisites for feats and talents that require the Tech sphere.

ENVIRONMENTAL FUEL SOURCE

You cannot create charges without some outside source determined by the GM, such as requiring a moving river to push a wheel, or tapping into a magical leyline.

EXPENSIVE FUEL SOURCE

You cannot create charges from nothing and require specific material as determined by the GM (such as miniature batteries or refined oil). Whatever the exact nature of the fuel source it should cost I silver piece per charge at a minimum. While this means you could carry around more of your fuel source at once, it still must be processed into charges using the normal recharge time.

EXPENSIVE GADGETS

The materials gathered over the day and the engineering kit are not enough to produce your inventions. Each gadget you make requires a cost of 1 sp per rank in Craft (mechanical) used to produce it, and if a gadget requires the gathering of expensive material components (such as *drones*) you do not have the option to spend time to gather the materials and must spend the cost in full to create them.

EXPLOSIVE GADGETS

Your creations use an explosive fuel source as their source of energy. Gain the Self Destructive Device talent with this drawback. Whenever any of your *gadgets* are damaged they must attempt a check using your Craft (mechanical) modifier with a DC equal to the damage taken. On a failure the *gadget* explodes as if instructed to self destruct. A *gadget* will automatically fail this check if it is destroyed.

EXTENDED < HARGE

Adding charges to your charge pool requires 2 hours of work, or 1 hour if you have access to an engineering kit.

Incompatible: Generated Power

GENERATED POWER

Gain the Generator legendary talent from this drawback. You lose the ability to innately add charges to your charge pool and can only charge *gadgets* using generators.

Incompatible: Extended Charge

IMBUED GADGETS

With this drawback you gain the Vigorous Gadgets legendary talent. Your *drones* and *gadgets* are harmed by the energy type you did not select.

IN<OMPLETE KNOWLEDGE

You do not automatically succeed on activation checks for *gadgets* you create and must succeed on a Craft (mechanical) check as normal.

MANA ENGINEERING

Your *gadgets* use magical elements as part of their designs. This makes the effects your *gadgets* create magical in nature and subject to spell resistance. In addition their effects may be dispelled by *dispel magic* and other such similar effects and your *gadgets* and *drones* are treated as magic items for the purposes of dispelling effects (drones with their magical properties suppressed are stunned, ignoring any immunities).

OBVIOUS ACTIVATION

Your *gadgets* generate a tell-tale sign when activated; for example, they make a loud noise, spew smoke, or generate loud singing noises. An activated *gadget* automatically breaks stealth, and whenever you activate a *gadget* all creatures within 60 feet who are observing you know which *gadget* you used, and qualities it possesses.

SPECIFIC DRONE

When you first gain the Tech sphere, you must choose the (drone) talent as your starting *gadget*. You gain the Alchemical Drone, Clockwork Drone, Robot Drone or Steampowered Drone legendary talent with this drawback. All the *drones* you create must be of that type.

UNINSULATED

Your creations are vulnerable to certain environments. Choose one of the following conditions or speak with your GM about finding another appropriate one: being doused in water, being exposed to magnets, being exposed to sand particles. Whenever your *gadgets* are exposed to such an environment they must succeed at a Fortitude save against your Tech sphere DC or become nonfunctional and immediately deactivate. A *gadget* can be made functional after 30 minutes of cleaning up the exposed part (15 minutes with an engineering kit).

UNSEXURED

Your creations are sloppily designed making them vulnerable to being controlled. You must select the Remote Control talent as your first (gadget) talent.

Your gadgets (including drones) receive a -2 penalty to all saves to oppose any effects that explicitly control or effect technology (such as Technomancy sphere sprites). In place of a bonus talent, you gain the Remote Hacking feat as a bonus feat. You cannot gain the Improved User Interface talent while you possess this drawback.

WIRED GADGETS

Gain the Signal Cable talent with this drawback. Your *gadgets* lose their innate signal and require a signal cable to connect to one another.

FEATS

SACRIFICIAL AUGMENT (COMBAT)

Prerequisite: Guardian sphere.

Benefit: When your delayed damage pool empties, you may as an immediate action redirect the damage you would take to augment or implant on your person or an innate *gadget*. The damage redirected this way is treated as untyped lethal damage, bypassing any damage reduction or hardness the augment or implant would possess otherwise.

Special: This overrides the normal rules for the delayed damage pool which states that you cannot further redirect damage from the delayed damage pool.

UNDETECTABLE HACKING

Prerequisites: Tech sphere (Remote Control), Remote Hacking.

When you attempt to control a foreign *gadget*, whether it succeeds or fails on its Will save it must immediately succeed at a second Will save. If it fails this second save, it does not realize it it was subject to a hack attempt (including knowing if any routines were transferred).

TRADITIONS

MARTIAL TRADITIONS

FIELD MEDIK

While not as often to get the glory of the kill as the soldier, the field medic is as or even more important to the health and safety of his comrades.

Bonus Talents:

- Equipment: Fast Draw
- Alchemy sphere ((formulae) package): Salve
- Scout sphere
- **Variable:** The Field Medic gains one additional talent of their choice from either the Alchemy sphere or Scout sphere.

Drawbacks: Alternative-Brew

Special: The Field Medic uses the Heal skill as the skill used for Alternative-Brew.

HAKKER

The hacker fulfills a very underhanded, but vital role in controlling their enemies technology.

Bonus Talents:

- Equipment: Techmaniac, Toolkit Training
- Tech sphere: Remote Control
- Bonus Feat: Remote Hacking
- Variable: Hackers gain a talent from the Tech sphere, or the Trap sphere as a bonus talent.

Drawbacks: Unsecured

Section 5 TEKHNOLOGIKAL OPTIONS

ARTIFICIAL INTELLIGENCE

The following are structured rules for running Artificial Intelligence (or AI for short) in your games. AIs are both creatures (in that they take actions and decisions) and routines (a being of software and not hardware). AI need to be uploaded into a *gadget* to have enough processing power to "think". An AI stored in a storage device is too compressed to function properly.

Once installed, an AI can take actions as normal, but is limited to what the *gadget* it inhabits can do.

An artificial intelligence if installed in a *gadget* grants it control of a *gadget* as if it is being wielded by its creator. Activating the *gadget* against the will of the AI requires an activation check with a -5 penalty. AI installed in augments are treated as if controlling them through remote controls.

<REATING AN ARTIFICIAL INTELLIGENCE</pre>

An artificial intelligence's stat block is similar to that of an intelligent magic item. Note that these statistics reflect only the artificial intelligence itself, not the host. Building an AI stat block requires the following statistics. *Note: This kind of artificial intelligence is considered a Gamma* AI.

Level: An artificial intelligence's level sets its ability scores, saves, and skill checks. An AI's CR is equal to its level. The maximum level of AI you can create is equal to your ranks in Craft (mechanical).

Alignment and Type: An AI can be any alignment. Its type is "artificial intelligence," and it counts as a construct for all effects that target creature type.

Initiative: The installed AI modifies its initiative check with its Intelligence modifier, not its Dexterity modifier.

Senses: An AI needs access to a *drone*, cameras, microphones, or other mechanical sensory tools in order to be able to notice things in the outside world. These senses should be listed in the appropriate encounter areas, not in the AI's stats, since it is likely that an AI will have access to a variety of sensory devices over a large area.

Defenses: An AI does not have AC, hit points, or other statistics related to a physical form; it relies on its host or structure for those scores. An AI uses its own saving throws only against attacks that target its mind - in most cases, this means it primarily uses its Will save. An AI uses its CR as its effective Hit Dice for determining its base saves — it has good Will saves and poor Fortitude and Reflex saves.

Base Attack Bonus: An AI possess a base attack bonus equal to its level.

Ability Scores: An AI's base ability scores are 14, 12, and 10 (AI possess no innate physical ability scores). Arrange them in any order desired. For every 2 levels it possesses, it gains a + 2 bonus to an ability score. An AI is immune to ability damage but is not immune to ability drain and can be targeted through the *gadget* it is installed inside of. **Skills:** An AI has skill points equal to 6 + its Intelligence modifier per level. An AI has a number of class skills equal to its Charisma modifier. These may be any skill, though the most common class skills for AIs are: Bluff, Diplomacy, Intimidate, Knowledge (all), Linguistics, Perception, and Sense Motive. **Feats:** An AI has a number of feats equal to half its level (minimum 1). An AI must meet all prerequisites of its feats.

Languages: AIs speak one language chosen at the time of their creation. An AI knows a number of additional languages equal to its Intelligence modifier.

Special Abilities: Some AI possess additional abilities.

VARIANTS

Not all AI are built the same. The type of AI listed above is called a Gamma AI. One of the apex types of AI with intelligence on par or surpassing of most humanoid creatures. However other kinds exist:

Alpha AI: Possessing the intelligence comparable to that of an insect, alpha AI are the most basic AI there are and used for basic utilities. Alpha AI have the following differences from Gamma AI:

- An Alpha AI's level counts as 1/4 a Gamma AIs level (minimum 1) for the purposes of determining the maximum number of AI or *drones* you may have active at once.
- Alpha AI are mindless, possessing no Intelligence score and immunity to all mind-affecting effects (charms, compulsions, morale effects, patterns, and phantasms). Mindless creatures have no feats or skills.
- Alpha AI have starting ability scores of Wisdom 6, and Charisma 6.
- Alpha AI have an initiative modifier of +0 regardless of the Intelligence score.
- Alpha AI have a true neutral alignment.
- Alpha AI can communicate and understand basic information in one language that you speak.
- Alpha AI lack a sense of decision making. They cannot execute actions unless they know those actions as commands (see sidebar).
- Alpha AI are created with simple weapon proficiency and I combat sphere talent of your choice (excluding any sphere ability that allows it to craft items or gain companion creatures). Alpha AI use Charisma as their practitioner modifier.
- Alpha AI have a CR modification of +0 when applied as an aggregate template.

Beta AI: Possessing the intelligence comparable to that of an animal, they are the most commonly used AI for day to day duties. Beta AI have the following differences from Gamma AI:

• An Beta AI's level counts as 1/2 a Gamma AIs level (minimum 1) for the purposes of determining the maximum number of AI or *drones* you may , have active at once.

- Beta AI possess starting ability scores of Intelligence 2, Wisdom 10, and Charisma 8.
- Beta AI can communicate and understand basic information in one language that you speak.
- Beta AI lack a sense of decision making. They cannot execute actions unless they know those actions as commands (see sidebar).
- Beta AI take no penalties to initiative from having a low Intelligence score, but can still gain benefits from having a high Intelligence score.
- Beta AI gain 4 skill points per level (reduced to 1 for having low Intelligence score), and possess up to 10 class skills selected from the list of class skills its creator possessed. An AI can only assign skill ranks to its class skills, unless it possesses an Intelligence of 3 or higher.
- Beta AI must select combat talents (excluding any sphere ability that allows it to craft items or gain companion creatures) by taking the Extra Combat Talent feat, using Charisma as their practitioner modifier.

Delta AI: Surpassing even a Gamma AI in skills and abilities, Delta AI are almost never created from scratch and instead come from the minds of uploaded creatures or develop organically as if they were children. Full rules detailing Delta AI will be provided in future supplements.

Omega AI: When an AI passes the point of singularity it develops into an Omega AI. While the power of these godlike beings may span into infinity, the point they surpass their nature as a constructed intelligence is the point they are classified as gods and not machines.



Commands

A command determines what less developed AI know how to do. Commands use similar rules to animal tricks. You can tell an AI to execute a command if you are in a position to activate or deactivate its routine. This means that you can request the same command from multiple AI at once if you possess a remote control.

You can program an AI to understand a specific command with 8 hours of work against an indicated DC using Craft (mechanical). Alpha AI can know 5 maximum commands while a Beta AI can know a number of commands equal to 2 plus Intelligence score multiplied by 3 (minimum 5).

You can "push" a Beta AI to execute a command it does not know as a standard action against a Craft (mechanical) DC of 25 but you cannot push an Alpha AI to execute a command it does not know.

An AI can execute the following animal tricks as commands (using Craft (mechanical) in place of Handle Animal). The AI must be housed in a *gadget* (usually a *drone*) that can execute those commands if asked:

Aid, attack, bombard, build simple structure, bury, come, defend, deliver, demolish, detect, down, exclusive, fetch, flank, flee, guard, guide, heel, maneuver, pose as scenery (as inert *gadget*), receive spell, rescue, seek, serve, stay, subdue, work.

In addition the following are AI exclusively commands:

Communicate (DC 20): The AI can communicate very simple concepts through speech, primitive body movements or displaying text on a screen. The AIs vocabulary is very limited, usually knowing about 200 words (about as much as a toddler). The AI is not very capable of creating organic dialogue and sticks to responding with pre-scripted questions or replies.

Operate Gadget (DC 15): The AI learns how to operate a number of *gadgets* equal to your practitioner modifier. An AI does not need to attempt activation checks for *gadgets* created by you. An AI counts a *drone* and all its innate *gadgets* as 1 *gadget* for the purposes of this command. This command can be taught multiple times, each time increasing the amount of *gadgets* it can operate by your practitioner modifier.

Sort (DC 10): The AI can sort basic information into a multitude of ways. This information is usually pure data in digital form, but even physical objects can be interacted with in this way if the AI possesses a way to manipulate and sense them.

Transfer (DC 10): The AI transfers itself and any number of other routines (that you created) and knows

how to use on the same *gadget* to another *gadget* within signal range.

Trigger (DC 10): The AI attempts to execute any amount of other commands it knows when a specific circumstance is met. Such as if its alerted by a routine of an enemy *gadgets* signal, to upload a virus to its location. This command can be taught multiple times, each time granting another set of triggering circumstances and things to do when they are met.

INSTALLING AI IN CONSTRUCTS AND DRONES

Artificial intelligence can be integrated as parts of *drones*, or installed in willing or helpless mindless constructs with the GMs permission. The GM determines the type of construct the AI is compatible with.

This grants the construct the Aggregate Template: CR: Same as the base construct + 1. When a base AI is housed entirely in an aggregate, defeating the construct is considered the same as defeating the AI — at the GM's discretion this may replace the normal XP award for an AI on its own. Treat *drones* as having a CR equal to their Hit Dice -2 for this calculation.

Alignment: The aggregates alignment changes to match the base Al's alignment.

Initiative: The aggregate modifies initiative with the base AI Intelligence modifier instead of the base construct's Dexterity. This stacks with any other modifiers the base construct possesses.

Senses: An aggregate retains all of the base construct's senses.

Saves: An aggregate uses the base construct's saves, though adjust its Will save to account for its new Wisdom score.

Defensive Abilities: An aggregate retains all of the base construct's defensive abilities and gains those possessed by the base AI, if any.

Attacks: An aggregate uses the base construct's base attack bonus and retains all of the base construct's natural attacks. If the construct does not possess a base attack bonus use the AI's base attack bonus. If neither the AI nor the construct posesses a base attack bonus the GM can determine that the construct gains a base attack bonus progression of poor.

Special Attacks: An aggregate retains all of its special attacks and gains those possessed by the base AI.

Abilities: An aggregate uses the base Al's Intelligence, Wisdom, and Charisma scores.

Skills: An aggregate retains all the base construct's skills (recalculated as appropriate for its new Intelligence, Wisdom, and Charisma scores), and gains all of the base Al's skill ranks as bonus skill ranks. These bonus skill ranks do not stack with skill ranks the base construct already has; use the higher of the two for each skill.

Feats: An aggregate retains its feats, and gains all of the base Al's feats as bonus feats.

Talents: An aggregate retains its talents, and gains all of the base Al's talents as bonus talents.

Languages: An aggregate retains all of the base construct's languages, and gains any additional languages known by the base AI as bonus languages.

TE<HNOLOGICAL PROCEDURES

Technological procedures are experimental means of getting an effect, or a technology that require some prep. While most *gadgets* are generally stable once created and usually require no cost, procedures require extended periods of time to execute.

Procedures function as rituals (from *Spheres of Power*), replicating the effects of spells except created through technological means instead of magical ones, for a GM that wants to introduce the same kind of utility that spells and rituals provide a tech-focused game.

Procedures are not assumed to be magical effects (and as such not subject to counterspells or spell resistance) but the GM may rule otherwise. Procedures use Craft (mechanical) in place of Spellcraft checks, use your ranks in Craft (mechanical) in place of your caster level, and use your practitioner modifier in place of your casting ability modifier.

Using a Procedure: Similarly to rituals the practitioner must possess a written copy of the procedure, and must have deciphered it beforehand, which functions like deciphering a ritual book, and pay an associated material component cost. There is no procedure equivalent to ritual scrolls. They also possess an associated base sphere as normal. A practitioner counts as having a number of base spheres equal to 3 + 1 for every 4 ranks of Craft (mechanical) they possess when they first receive their first Tech sphere talent. Procedures may be researched like rituals if the practitioner possesses the Develop Procedures item creation feat.

The GM is free to put additional limitations on procedures as he sees fit to enable the worldbuilding, such as requiring them to be conducted in specialized facilities (with different facilities enabling different schools of magic) that may limit the highest possible level of proce^{*} dure to be conducted.

Procedures and Blueprints: To expand the potential of gadget- and formulae-based item creation further, a GM may allow the use of blueprints in their game. Blueprints are procedures that pertain to a Tech sphere talent that can be substituted for talent requirements when crafting permanent gadgets or formulae. Blueprints are created with a spell level just like regular procedures but as gadgets and formulae do not possess a spell level, a blueprint's spell level determines the maximum amount of ranks a gadget or formulae can be created with that uses the blueprint as a talent prerequisite. The maximum ranks a blueprint can be substituted for is equal to 1 + its level, multiplied by two. Blueprints possess no base sphere requirement to use or research. Blueprints may be crafted by creatures with the Develop Procedures item creation feat.

Incantations: Incantations can also be easily adapted to come from a technological source and not a magical. All it requires is a few Craft (mechanical) rolls and the right thematic setup, such as having the expensive material component be a geothermal lab, and not a glowing crystal skull.

DEVELOP PROCEDURES (ITEM CREATION)

Prerequisites: Tech sphere.

Benefit: You may research procedures similarly to how one could research a ritual.

PROCEDURAL SCIENTIST (RITUAL)

Prerequisites: Tech sphere.

Benefit: You may use a procedure, even if you do not possess that procedures's base sphere. If you also possess the Develop Procedures item creation feat, you still cannot research a ritual unless you meet all of its prerequisites.

SAMPLE PROCEDURES

BEGINNER JETS

Gadget Jet-boosters; Blueprint Level 2

Description This blueprint can be substituted for item creation purposes.

PORTAL TO HELL

Sphere Warp; Procedure Level 9

Preparation Time: 2 days

Components A 9th level technological facility

Description This functions as the *gate* spell, except it can only function as a means of interdimensional travel, and cannot be used to call creatures.

UNIVERSAL TRANSLATOR

Sphere Divination; Procedure Level 3

Preparation Time 30 minutes

Components Requires a tiny portable device to house a base translator unit worth 25 gp.

Description This functions as the *tongues* spell.

EXPANDED <RAFTING RULES

Some games that use *The Inventor's Handbook* may want to expand the role it has for options for treasure and for more worldbuilding options, making technological items more versatile in type similarly to magical items. The following feats would require the GM's permission to use, as they change the nature of the gameplay and worldbuilding significantly, and would take the place of the Craft Permanent Gadget item creation feat, as well as the Craft Augment Graft item creation feat.

KREATING TECHNICAL ITEMS

To create a technical item, a creator must possess the appropriate item creation feat, and ranks in Craft with that sphere equal to or greater than the ranks in Craft of the item. Temporary increases in ranks in Craft, such as a prodigy's adaptation being used to grant it the Craftsman Equipment sphere talent, do not count towards a creator's maximum ranks in Craft for the purpose of crafting technical items. A creature cannot create a technical item dependent on an ability they cannot use due to a martial tradition or setting framework drawback.

Additionally, the crafter must supply materials whose cost is equal to 1/2 the base cost of the item to be created. When creating an item that requires an existing object, the object must be supplied separately.

Finally, the crafter needs a fairly quiet, comfortable, and well-lit place in which to create a technical item. The crafter must spend 8 hours (1 day) per 1,000 gp in the item's base cost crafting the technical item. Formulae, poisons, widgets and gizmos, only take 2 hours to craft if their base cost is 250 gp or lower, but all other items require a minimum of 8 hours to create. The crafter spends the materials required to create the item at the beginning of the crafting process, and cannot create more than one item per day. A creature cannot spend more than 8 hours per day crafting. The days spend crafting need not be consecutive.

Crafting must be done in 4 hour blocks at a minimum. If a crafter is working in an area that is distracting or dangerous (such as in the back of a wagon or in an area that is not quiet), they net only half benefit from time spent crafting. A creator can attempt to work on crafting a technical item throughout a day of adventuring (spending time during meals or their shift during watch to do what work they can), but the combination of distracting environments and lack of time mean they only net 2 hours of crafting per day spent in this fashion.

At the end of the crafting period, the creator must attempt a single skill check (determined by the nature of the item in question) to determine if the item was created correctly. Failing this check means that the item does not function correctly and the materials and time are wasted.

When creating a technical item, the crafter must possess the base sphere associated with the item created, either on their own or through an ally, or blueprint. If the item requires a talent the crafter does not have access to either on their own or through another creator willing to help (other than the base sphere), they may attempt to create the item anyway, increasing the Craft DC by +5 for each missing talent.

<00PERATIVE <RAFTING</pre>

If you need another character or a blueprint to supply one of an item's requirements, both you and the other character or blueprint must be present for the entire duration of the crafting process.

TALENT-BASED TECHNICAL ITEM CREATION

Technical items use the talent-based creation system, its base cost is determined by multiplying its ranks in Craft x its complexity x a base cost determined by the type of item being created, as detailed under the different technical item creation feats listed below. While the item's ranks in Craft determines its power just as it does for creators, the item's complexity is determined by the number and type of benefits it possesses.

All items created through the talent-based creation system must choose a base sphere and ability from the list presented below, and begin with a complexity of I. The crafter may increase or decrease the item's complexity through any of the following alterations, but an effect's complexity always has a minimum of I. When combining multiple talent-based effects, they all must be crafted with the same ranks in Craft, though each may have its own complexity. An item's ranks in Craft must be equal to or greater than its complexity (unless you possess the Versatile Crafter feat).

OTHER

Technical items use their creators skill, ability, and practitioner modifiers at time of creation when determining effect DCs, modifiers and other such effects (discounting temporary modifiers such as a temporary enhancement bonus to the practitioner modifier). Created *gadgets* possess an activation DC of 10 + their ranks in Craft (mechanical), or the activation DC of an equivalent *gadget* created by the creator, whichever is higher.

Gadgets are crafted fully charged with a maximum charge capacity equal to half their ranks in Craft (mechanical) (minimum 1). Unless otherwise stated, *gadgets* can be re-charged with the Tech sphere during the same 15/30 minute time period as a battery. Charges stored within crafted *gadgets* do not count towards the maximum charges you possess in your charge pool.

If a *gadget* possesses a costly material requirement to create (such as *drones*), this gets added on top of its base cost.

Gadgets are considered masterwork quality and may be permanently enhanced with the use of the Smith Magical Weapons And Armor (or similar feats or abilities), when applicable.

With the GM's permission the expanded *gadget* crafting feats could be used as substitute prerequisite feats for other kinds of technological items.

ITEM BASE (REATION

ALKHEMY

The DC of checks to create poisons is equal to 10 + the ranks in Craft (alchemy) of the item.

The DC of checks to create formulae is the DC used to create one normally or 10 + the ranks in Craft (alchemy) of the item (whichever is higher).

Formulae

Create a single *formulae* that you know of unmodified by other Alchemy sphere talents or abilities (including abilities the formulae may get from being selected multiple times), however it can benefit from having its creation DC increased. Creatures can be healed by created salves any number of times. *Formulae* have a base complexity of

I.

Poison

Create a single *poison* that you know of unmodified by other Alchemy sphere talents or abilities (including abilities the poison may get from being selected multiple times). *Poisons* have a base complexity of 1.

Complexity

Add Talent: You may add the effects of any talent from the item's base sphere at a cost of +1 complexity per talent.

TEKH

The DC of checks to create *gadgets* is equal to 10 + the ranks in Craft (mechanical) of the item.

Drone (requires Tech (Drone))

Create a *drone* with a number of Hit Dice equal to its ranks in Craft (mechanical). It does not possess any innate *gadgets*. *Drones* have a base complexity of I.

Gadget

Create a single *gadget* that you know how to create unmodified by other Tech sphere talents or abilities (including abilities the *gadget* may get from being selected multiple times). *Gadgets* have a base complexity of 1.

Complexity

Add Innate Gadget: Your drone gains an innate gadget at a cost of +1 complexity per innate gadget.

Add Talent: You may add the effects of any talent from the item's base sphere at a cost of +1 complexity per talent.

NEW <RAFTING FEATS

BREW STABLE FORMULAE (ITEM <REATION)

Prerequisites: Alchemy sphere (at least 1 Alchemy sphere (formulae) talent).

Benefit: You can create permanent formulae that do not count towards the maximum amount of formulae you may maintain. These formulae do not decompose over time, and maintain their value as normal items even though they are based off of alchemy sphere's formulae.

A formulae's cost of creation is 20 gp x the creator's ranks in Craft (alchemy) x the complexity.

A poison's cost of creation is 10 gp x the creator's ranks in Craft (alchemy) x the complexity.

<RAFT APPLIANCES AND CONTRAPTIONS (ITEM <REATION)</pre>

Prerequisites: Craft (mechanical) 3 ranks, Tech sphere. **Benefit:** A character who possesses this feat can create appliances and contraptions. Appliances and contraptions can both be recharged by any creature as if they possessed the Tech sphere and had access to an engineering kit.

Appliances do not require activation checks to use.

Contraptions require an activation check to use by anybody except their creator.

An appliance's cost of creation is 400 gp x the creator's ranks in Craft (mechanical) x the complexity.

A contraption's cost of creation is 200 gp x the creator's ranks in Craft (mechanical) x the complexity.

<RAFT AUGMENT GRAFT (ITEM <REATION)</pre>

Prerequisites: Craft (mechanical) 3 ranks, Tech sphere, Craft Appliances And Contraptions.

Benefit: You can create graft versions of your augments, and implant them into creatures. Augments created this way automatically double the duration of any of its effects that require spending charges (this also applies to any non-graft augment attached to a grafted modular augment slot). They also no longer occupy augment slots and instead occupy graft slots, allowing for additional augments to be worn over them. An augment graft can be made as a contraption, or an appliance. Creatures with grafts take a -5 penalty to saves against Remote Control.

<RAFT WIDGETS AND GIZMOS (ITEM <REATION)</pre>

Prerequisites: Tech sphere, Craft (mechanical) I ranks. **Benefit:** A character who possesses this feat can create widgets and gizmos. Widgets and gizmos cannot be recharged and become permanently inoperable once they run out of charges. If a *gadget* or gizmo does not use charges, it instead becomes useless after they are used a number of times equal to 1/4 the number of ranks used in their creation (minimum I use). If a *gadget* does not state how long an activation usually lasts, then an activation lasts for 4 hours.

Gizmos do not require activation checks to use.

Widgets require an activation check to use by anybody except their creator.

A gizmo's cost of creation is 20 gp x the creator's ranks in Craft (mechanical) x the complexity.

A widget's cost of creation is 10 gp x the creator's ranks in Craft (mechanical) x the complexity.

SAMPLE TECHNICAL ITEMS

DISPOSABLE JUMP-JET

Type Gadget Gizmo; Ranks 5; Slot Shoulders Item Slot;

Price 200 gp; Weight 20 lbs.

Description

A thruster and fuel tank are worn as part of an ergonomic backpack, allowing for short term flight, great for quick escapes. The jump-jet is receptive to body movement meaning no other controls are required to pilot it, and can be donned as a free action. Once activated as a swift action it grant a fly speed of 60 feet with poor maneuverability to the wearer for 2 rounds. The jump-jet can also be activated in overdrive mode giving the wearer a fly speed of 90 feet with clumsy maneuverability for 1 round instead. Once the jump-jet is activated it cannot be turned off, and after its use is finished, automatically crumbles off from the user's shoulders saving valuable time.

If the wearer successfully hovers near ground level, they obscure visibility as though they were Large size and had the Hover feat. The exhaust is not hot or concentrated enough to be used as a weapon.

Construction Requirements

Craft Widgets And Gizmos, Jet Boosters, Cost 100 gp

POWER ARMOR INLINING

Type Accessory Appliance; Ranks 6; Slot Armor;

Price 20,000 gp; Weight 15 lbs.

Description

This simple airtight full body jumpsuit that (includes sealable air holes), is made of an advanced spongy material, that is designed to function as inlining for any kind of armor. Once combined with the armor and powered on, it grants the user great mobility in it, as well as increased strength.

Inlining a suit of armor (or removing the inlining from a suit of armor) requires a minute of uninterrupted time. Once combined, the jumpsuit does not detract from wearing the armor in any way, and protects the wearer from harmful atmospheric effects such as vacuum or airborne hazards such as *cloudkill* (as long as the air holes are closed which requires a swift action).

However if powered on as a move action (and turned off as a free action), the suit hardens and enhances the user's skill with the armor. This removes any movement penalty the armor may possess, increases the armor's maximum Dexterity bonus by 2, reduces its armor check penalty by 4 and the wearer is treated as if they were one size category larger for the purposes of their carrying capacity and the size of weapons they may wield. This does not stack with other abilities that increase the maximum size of weapons the wearer may wield (but does stack with other effects that increase effective carrying capacity).

The jumpsuit has a maximum charge capacity of 3, and expends a charge for every 10 minutes in use.

Construction Requirements

Craft Appliances And Contraptions, Accessory Suit, Load Bearer, Mobile Armor, Superior Joints, **Cost** 10,000 gp

Section 6

SETTING FRAMEWORKS

Unlike magic, which exists as pure speculation, technology is a real and visible part of everyday life in the real world. Some groups may find that having advanced, non-magical robots, laser-swords, and miraculous medical marvels borne purely of chemistry breaks the established mold for their setting. To account for this, use setting frameworks as a guide for how best to integrate technology into your setting.

Setting frameworks are sets of drawbacks for the Alchemy, Tech, and Trap sphere, as well as a suggested list of what talents are more or less appropriate for that type of setting (as these drawbacks would be based upon the settings limitations and not the characters, they could not be bought off with talents). Setting framework drawbacks would also be applied to any crafted technical items if that optional ruleset is being used.

These frameworks are written with the idea that technology is different in every setting, more or less advanced, or perhaps nonexistent! Maybe your "technology" is really just small constructs powered by woodland critters, or merely a different subset of magical abilities. Regardless, use setting frameworks as a guideline when determining how best to integrate Alchemy, Tech, and Trap spheres' mechanics into your setting.

A GM can have a setting have multiple frameworks at once, and create any they feel is appropriate. Here are some sample setting frameworks:

ANAKHRONIST

In this setting technology exists anachronistically and generally developed separately from general society and only introduced recently. Perhaps a cache from a fallen civilization was discovered. Or is scavenged from a crashed ship. Regardless, this technology is often unreliable and irreproducible.

Framework Drawbacks: Environmental Fuel Source (existing power grids), Expensive Gadgets, Incomplete Knowledge, Specific Drone (robot)

STEAMPUNK

Often seen in Victorian or wild west settings, technology takes a different path, and develops years ahead of its time creating technological marvels with an early industrial aesthetic.

Framework Drawbacks: Alternative Craft (Knowledge (engineering)), Expensive Fuel Source (coal), Obvious Activation, Specific Drone (steampowered drone), Uninsulated (water), Wired Gadgets

STRANGER MAGIK

This setting has well-understood, widespread magic, and technology and chemistry as presented in the Alchemy, Tech, and Trap spheres are simply an alternate practice of magic.

Framework Drawbacks: Mana Chemistry, Mana Engineering, Mana Trap

Section 7 TEKHNOLOGY REVISED

This section is dedicated to elaborating on and revising existing material from The Inventors Handbook, pre-v.1.5.

GADGET DEFENSES

Unless otherwise stated, a *gadget* has a bonus to saving throws equal to half your ranks in Craft (mechanical) plus your practitioner modifier.

MISSING TAGS

The Alternate Element Pack, Homing Pack, and Laser Pack talents possess the (gadget) tag.

AMMO SPITTER TALENT (PAGE 9)

In the first paragraph of the talent replace the following text:

It can expend additional charges to apply accessories to the created ammunition or weapons (as if the ammunition or weapons were *gadgets* with the moddable quality) each additional accessory requiring an additional charge. With this text:

If you use an appropriate accessory *gadget* as part of the raw materials used for the creation of the ammunition, the accessory is subsumed and applied into all of the individual pieces of ammunition (as if they were *gadgets* with the moddable quality), but still only count as I accessory for the purpose of how many accessory talents you can maintain at once. Treat ammunition created this way as a single set. A set shares all charges that the accessory uses, and an individual piece of ammunition cannot be split from its set for more than I round without becoming inert.

COLLAPSIBLE VEHICLE TALENT (PAGE 11)

Collapsible Vehicles should possess average hit points, hardness as well as saving throws for a *gadget*.

DERMAL PLATING TALENT (PAGE 12)

The Dermal Plating natural armor bonus is an enhancement bonus. Creatures without a natural armor bonus treat their natural armor as +0 for the purposes of this talent.

DIGA DRILL TALENT (PAGE 12)

Drones with Diga Drills as innate *gadgets* do not require hands to wield the Drill.

EXTERNAL HEALTH MODULATOR TALENT (PAGE 14)

Creatures without Constitution scores wearing this active augment instead gain 1 temporary hit point per Hit Dice, plus an additional hit point per Hit Dice per 7 ranks in Craft (mechanical).

IMPROVED USER INTERFACE TALENT (PAGE 16)

Gadgets benefiting from a lock also gain a +1 bonus to Will saves to resist hacking attempts (such as through Remote Hacking). This bonus increases to +2 if this talent is taken a second time.

JET-BOOSTERS TALENT (PAGE 16)

Replace the talent's fourth paragraph with the following text:

As a standard action, jet-booster canisters may be attached to an unwilling creature with a successful melee touch attack, and activated as part of the same action. At the end of each of your turns, the active jet-boosters will consume a charge and forcefully move the creature 30 feet in a direction of your choice (which can be changed as a movement action by Remote Control). This movement does not provoke attacks of opportunity. Creatures with attached jet-boosters can remove them from themselves by spending a standard action on their turn.

Add the following text to the fifth paragraph:

Aquatic jet-boosters used on slow burn are not limited to being only 30 feet above ground.

TURRET TALENT (PAGE 21)

Turrets possess average hit points, hardness as well as saving throws for a *gadget*. A turret can only ever make I attack per round.

LONG DISTANCE FUEL PACK LEGENDARY TALENT (PAGE 24)

The prerequisites for the talent has been changed to the following:

Prerequisites: Craft (mechanical) 6 ranks, Tech sphere.

REMOTE HAKKING FEAT (PAGE 28)

The prerequisites for the feat has been changed to the following:.

Prerequisites: Tech sphere (Remote Control).

In place of an activation check or Craft (mechanical) check, each time you spend an action to control

a foreign *gadget*, it gets to attempt a Will saving throw . opposed by your Tech sphere DC.

TE<HNI<AL <OMPATIBILITY FEAT (PAGE 28)

Your independent inventions can be activated or deactivated as if they where *drones*.

BUILDING YOUR TECH SPHERE DRONE (PAGE 34)

If a controller makes an attack action with a *drone*, they use their own base attack bonus and the *drones* Strength or Dexterity scores to calculate the attacks.

In the third paragraph of the section remove the following text:

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