

INTERFACE

HACKING 2.0 ZERO



**GUN
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OFFICIAL
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LICENSED PRODUCT

Richard A. Knafl

HACKING 2.0; BETA TEST

In 2088, the Tendril Access Processor connects people to the hyper-real world around them like never before. Peeps don't just scan at the MEDIAweb on an archaic 'puter—they download it into their brain and see it hover in front of them as a digital overlay of the world. But for all the convenience and connectivity the Tendril Access Processor provides, there are drawbacks, like getting your brain hacked and turned into a pulsing blob of grey jelly.

That's right, omae. One wrong turn, one misstep in a hack and you could end up a quivering lump of brain dead flesh and bone. If you want to avoid that, you need this Mediafile. You Need Hacking 2.0.

Hacking 2.0 brings a much needed update to the Interface Zero game setting, streamlining the old system, taking it in directions never seen before in the cyberpunk milieu! Herein you'll find quick-easy rules for hacking any system you can imagine. We also introduce a new component to the game; the hyper glove.

So what are ya waiting for? Grab your hyper glove, dive into the Deep, and go raid that corp!

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INTRODUCTION

It's been nearly two and a half years since Interface Zero was first released for the *Savage Worlds* game system. During that time, I've had the opportunity to talk with many fans of the game setting and get their opinions of the game and the setting rules. While the feedback I've received about the setting has been overwhelmingly positive, one source of frustration that comes up time and time again is the complex nature of the Deep—the world-wide computer network as it exists in 2088.

I've been told over and over again certain aspects of the game world, while interesting and cool, become very muddled in actual play, not so much because the core game mechanics are necessarily hard to grasp, but because of a blur between hyper reality and virtual reality. In an attempt to deliver something that was (and I believe still is) conceptually unique, we crossed a line and made it overly complicated, which in turn necessitated the creation of game rules which added more levels of granularity than were necessary or—for the most part—even wanted. I say for the most part because interestingly, while numerous people were saying that the hacking system needed to be streamlined, a number of fans have told me that it was too simple. In light of these comments, my growing conundrum on how to get the concepts of hyper and virtual reality across in a simple yet functional way became even more puzzling as I came to realize that, in attempting to address the needs of one group of people, I would be simultaneously alienating another.

So, what to do?

For starters, I have decided that it's time to look at the core concept of the Deep and streamline it, tossing out confusing and somewhat alien concepts in favor of a model inspired by various entertainment media as well as current (and emerging) technologies, while also retaining the old-school cyberpunk feel we all know and love. The main change is the additional of three modes of the Tendril Access Processor, and a new device used by hackers to penetrate systems and control objects; the Hyper glove.

Hyper gloves link a user's TAP with computer networks in 2088, allowing them to manipulate things like hyper objects or hack directly into computer networks. Put simply, tendril access processors are the eyes that allow a person to see hyper reality, and hyper gloves are the hands with which she manipulates it.

Like any piece of technology, hyper gloves can be modified and upgraded to suit the users' preferences, adding a level of depth which keeps things interesting without becoming overly complex. If you've ever played the *Mass Effect* video games, or watched *Iron Man* (specifically the scenes when Tony Stark is using special gloves to manipulate holograms in his work shop), or if you've watched *Minority Report*, you've seen hyper gloves in action.

In terms of the actual game mechanics, we created two systems, a basic system, and an advanced system, The basic system plays very fast, which is sure to appeal to the average *Sav-*

age Worlds Deluxe fan who doesn't want a ton of new rules, yet at the same time provides a level of flexibility and detail fans of hacking can appreciate. Keep in mind, however, that any game system is always going to have some degree of abstraction, regardless of how accurate a designer intends it to be. In truth, it's best to think of the basic system as "*hacking lite*," or "*cinematic hacking*" rather than a realistic model of the subject.

The core of the basic system is a very simple use of the Hacking skill roll compared to a target number. The target number varies depending on the type of system being hacked; more difficult systems have higher penalties, and easy systems lower penalties. This approach provides a level of versatility which should please GMs who don't want to learn a ton of new rules or constantly flip through a book during a game session just to find a specific number for a certain computer system. The flexible penalties act like a dial, allowing you to determine the difficulty for any given computer network on the fly.

Failure on a Hacking roll means not only does she not succeed in her task, but something potentially nasty happens as well. She might simply get locked out of the system or, in the case of really deadly computer networks (Like Military Access Networks), she might get brain fried and end up a vegetable for the rest of her life. The consequences are determined by making a simple roll on a failure chart for each system. Obviously this introduction is an oversimplification of the basic rules and setting tweaks you'll find in this document, but in general, things aren't much more complex.

The main book will introduce advanced hacking concepts which augment the Basic rule set; brain hacking, weapon hacking, and vehicle hacking. Additionally, we'll introduce a comprehensive system for playing entire games in The Deep.

In closing, I want to thank everyone who has been involved with this project up to this point. You all have been very helpful with your feedback and suggestions for this new incarnation of the rules, and I can't fully express how grateful I am that you were a part of the process.

—David Jarvis,
President, Gun Metal Games

BASIC RULE CHANGES

Below you'll find the rule changes to the core I.Z. book for the Basic hacking rules.

SKILLS

Hacking (Smarts): As the name implies, the Hacking skill is used whenever a character wants to hack a computer network. Characters in Interface Zero no longer start with an automatic d4 in hacking. Additionally, characters who wish to use the Deep for everyday purposes such as research or finding news pertaining to the Deep do so with their existing Investigation and Streetwise skills.

Knowledge (Programming) (Smarts): This skill is no longer used.

CHANGES TO EXISTING EDGES

The following edges have been changed or removed.

ADVANCED PROGRAMMING (HACKING EDGE)

This edge is removed.

EXPERT HACKER (HACKING EDGE)

Requirements: Veteran, Hacker Professional Edge, Hacking D10+
You're a veteran of the Deep and know its darkest secrets. You gain +1 to all Hacking rolls. Your VR armor and Firewall ratings are increased by 1.

HACKER (PROFESSIONAL EDGE)

Requirements: Novice, Smarts D8+, Hacking D8+
Some people just play around in the Deep. You re-write it on a whim. Unlike other script kiddies who just wanna look cool, your Hyper glove is more than a fashion statement—it's the tool of your trade: Hacking. And let's face it, you're LEET, omae—a master of Hyper Reality, a glacial ice-pick, a neural gunslinger—the top of the digital food chain. You gain a +2 to Hacking rolls. Additionally, you gain a +1 to your VR armor rating.

PROGRAMMING 101 (HACKING EDGE)

This edge is removed.

VIRTUAL REACH (HACKING EDGE)

Virtual Reach and all of its related subsequent edges no longer exist.

NEW EDGES

COOL UNDER PRESSURE (HACKING EDGE)

Requirements: Heroic, Hacker Professional Edge, Expert Hacker, Hacking D10+

When things are at their worst, you are at your best. You ignore up to a -2 penalty applied to firewalls when a system goes on Active alert.

HARDENING (CYBER COMBAT EDGE)

Requirements: Novice, Vigor D6+

You've grown used to the biofeedback generated by IC (Intrusion Countermeasures) and hostile hackers. Raise your VR armor rating by +2.

IMPROVED COOL UNDER PRESSURE (HACKING EDGE)

Requirements: Legendary, Cool Under Pressure, Hacker Professional Edge, Expert Hacker, Hacking D12+

When things are at their worst, you are at your best. You ignore up to a -4 penalty applied to firewalls when a system goes on Active alert.

INTERFERENCE (BACKGROUND EDGE)

Requirements: Novice

Something about your electromagnetic signature makes you harder to hack. All attempts by opponents to hack you are made at a -1 penalty.

MODE SPECIALIST (HACKING EDGE)

Requirements: Novice, Hacking D6+

Choose one of the following Hyper glove mode settings (Control, Destruction, Edit; see the hyper glove for more information). Your character gains a +1 to all Hacking rolls when hacking in this mode. This edge may be taken once for each mode type.

MODE EXPERT (HACKING EDGE)

Requirements: Veteran, Mode Specialist, Hacking D8+

Raise the bonus you received with the Mode Specialist edge from +1 to +2. This only applies to a single mode. To gain this bonus for an additional mode you must take this edge again and apply the bonus accordingly.

NEW HINDRANCES

The following Hindrances are meant to apply to hacker characters. GM's are in their full right to restrict players from taking these Hindrances if they feel they're being abused.

BAD FILTERS (MINOR/MAJOR)

Your spam filters are glitched. You're constantly being bombarded by spam, viruses and other malware. This steady barrage makes it more likely that eventually SOMETHING nasty will penetrate your firewall. Consequently, all rolls by others to Hack your TAP are made at a +1 bonus for the minor version of this hindrance, and a +2 bonus for the major version.

MODE DEFICIENCY (MINOR/MAJOR)

You have a hard time grasping the fundamentals of hacking in one of the 3 basic mode types (control, edit, destruction). You suffer a -1 penalty to all Hacking rolls when hacking in this mode. With the major version of this edge, the penalty is increased to -2.

SENSITIVE NEURONS (MAJOR)

Your synaptic system doesn't handle biofeedback very well. Your toughness is considered 1 lower for when taking VR damage.

HACKING FOR NOOBS

So ya think ya got what it takes to play with the big boys, péngyou? We'll see about that.

First things first.

I don't know you for squat. I don't speak your street slang, I don't hang with your pals, we don't dress the same, and we certainly don't swap spit, so we're going to go over a few common terms just so you and I know we're scannin' the same data feed, míngbáile ma? Yeah, I know I could have just said "understand?," but hey, this is 2088. Ya better get a few different languages under your belt if you want to communicate effectively in this brave new world.

Just sayin'.

Anyways, back to this hacking dealio.

Now, the way I scan it, you need to know the basics—gotta learn to walk before you run and all that crap... I know, it's a cliché' but it's no less true. See, I'm not only doing YOU a favor, priyatel', I'm also watching the backs of my friends out there. While you and I may never work together, the odds are better than even that at some point in your career you might be responsible for someone I know, and I don't want to find out that a pal died just because you couldn't loop a security feed or suppress an alarm system. So do me a favor—pay attention to this goupì, omae; it might save your life (and a friend of mine's) some day.

HYPER REALITY

Like I said before, we're going over the basics, and that means all of them. If you know what hyper reality is, just skip ahead; it's no sweat off my wrinklies. If you're knowledge is a bit fuzzy, then here are the Cliff's Notes.

Hyper reality is a digital overlay of the world around us. It's information presented in countless ways, most of which are so commonplace that you don't even think about them. If you have a TAP (Tendrill Access Processor), then you see it every day, because the TAP is the piece of cyberware which allows you— and nearly 9 billion other people— to view the hyper world of 2088.

Hyper reality is there when you drive your car or walk down the streets. It's there when you're working, and even when you're relaxing at home. Every time you see, oh, a holographic advertisement, a digital street sign, or a computerized kiosk in a mall (just to name a few examples); you're looking at the hyper-real world. For most people, that's all hyper reality is; information viewed across a wide

range of mediums depending on its purpose. But for people like you and I, hyper reality is the means by which we hack system networks. In order to hack hyper reality however, we have to use an interface called the Hyper glove.

THE HYPER GLOVE

Back in the day, engineers, scientists and programmers of all stripes spent hours and hours slaving over computer terminals, using complicated fabrication machines or peering into various scientific doo-dads to analyze compounds, microorganisms and such. Nowadays, we can do all of that stuff using hyper gloves. Hyper gloves make it possible to manipulate and even create digital representations of objects (like vehicle schematics, security cameras, floor plans, DNA, cellular organisms, locks on doors, etc.). While hyper gloves were originally designed for legitimate uses, they can also be used to hack, because hacking makes use of the same fundamental principles. Simply put; What they can do legally, we can do illegally.

It's sorta like a 'dark side/light side of the force kinda thing— ¿sabes?

DESIGN THEORY

So you're probably wondering how this little gadget works, neh? Well, without getting TOO detailed, the hyper glove acts as an interface between your TAP and a hyper object (you can use the glove to do other things besides hacking, but I'll get to them later on in this data feed). The glove translates the neural signals in your brain into commands which are keyed by hand gestures, like typing, or holding something— only instead of grabbing something solid (like a coffee cup), you're manipulating wireless signals which the transmit blocks of code that are the framework of the hyper object. In other words, the hyper glove allows you to take hold of a digital object and manipulate it in some way.

When you hack those signals, you are replacing the existing code blocks with ones you create. So, using the above coffee cup example, when you hack the code block that creates the digital coffee cup, you can do things like change the color of the cup, make it taller, shorter, etc. Back in the old days, people would spend hours, even days hacking into secure computer systems. But now, thanks to hyper reality and Incredibly Dense Self Modifying Code— IDSMC for short— the process is faster by several orders of magnitude and infinitely more intuitive.

Indeed, programming has evolved to the point where people who design code modules (see below) no longer use alpha numeric -based language for the user-interface. The underlying code is still based on the old programming

languages, but in practical, every-day use, it's all about symbols omae. Today blocks of code resemble icons that represent universally accepted concepts.

For example, if you're driving down the road and you see a red octagon (or a red light), you know that means you need to stop. Similarly, if you see a red cross on an object, you know that object has a medical function of some sort. Signs with golden arches or a red-haired girl in pig tails tell you you're approaching popular fast food restaurants. These symbols and multitudes of others are so deeply ingrained in your psyche that you don't even need to think about what they mean. This is what makes their use as code blocks so effective. You're not spending hours writing a language, you're arranging icons based on the intended function. When they are arranged in the correct patterns, the symbols form blocks of code that tell an object what it needs to do. If you know how to alter those icons, you can hack that object; it's that simple.

HYPER GLOVE TRAITS

Now, let's get into the nuts and bolts of the hyper glove. Just like any piece of tech, the hyper glove has a number of components that allow it to do the things it does. We call them traits. There are four important traits which make up every hyper glove; Hacking Bonus, VR Armor, Damage, and Range.

HACKING BONUS

All hyper gloves give hackers a certain degree of control over the objects they are manipulating. This translates into a bonus to their Hacking rolls. This hacking bonus will vary depending on the quality of a hyper glove.

VR ARMOR

One of the security features of a hyper glove is its ability to generate a dampening field that protects against harmful bio-feedback signals generated by IC (Intrusion Countermeasures) and attacks by other hackers. This dampening field is the character's base Virtual Armor rating. The VR armor rating is added to the character's base Toughness score to determine the modified Toughness attribute.

DAMAGE

When a hacker gets into combat, she can do damage to other hackers, intrusion countermeasures and even devices if her glove is set to destruction mode (see below).

RANGE

With a hyper glove, characters can hack hyper objects that aren't close to them. This trait determines the maximum distance in game inches an object can be and still be hacked. Each range increment imposes a penalty to the Hacker as if they were making a ranged attack as per the *Savage Worlds* Deluxe Edition rules.

A Basic Hyper glove has the following statistics:

TABLE I:A: HYPER GLOVE STATS

HACKING BONUS	VR ARMOR	DAMAGE	RANGE	COST
+0	+1	206	6/12/18	10,000

MODULAR DESIGN

Hyper gloves are designed to be modular and easily upgradeable. Hackers tend to upgrade their own hyper gloves to make them more powerful tools for hacking. Each above the afore-mentioned traits may be individually upgraded to a maximum value, as indicated in the charts below. The price per trait raise is also noted.

Hacking Bonus: +10,000 Credits per Level to a Maximum of +4.

TABLE I:B: HACKING BONUS

HACKING BONUS	TOTAL ADDITIONAL COST
+1	10,000 Credits
+2	20,000 Credits
+3	30,000 Credits
+4	40,000 Credits

VR Armor Increase: +3,000 Credits per Level to a Maximum of +6.

TABLE I:C: VR ARMOR BONUS

VR ARMOR	TOTAL ADDITIONAL COST
+2	3,000 Credits
+3	6,000 Credits
+4	9,000 Credits
+5	12,000 Credits
+6	15,000 Credits

Damage Increase: +5,000 Credits per Die Step to a Maximum of 2d12.

TABLE I:D: DAMAGE INCREASE	
DAMAGE DICE	TOTAL ADDITIONAL COST
2d8	5,000 Credits
2d10	10,000 Credits
2d12	15,000 Credits

Range Increase: +3,000 Credits per 6" Base increase to a Maximum of 30/60/90.

TABLE I:E: RANGE INCREASE	
RANGE	TOTAL ADDITIONAL COST
12/24/36	3,000 Credits
18/36/54	6,000 Credits
24/48/72	9,000 Credits
30/60/90	12,000 Credits

HYPER GLOVE MODES

Every hyper glove comes with three modes— control mode, edit mode and destruction mode. Switching from one mode to another is a free action.

CONTROL MODE

Control mode allows a hacker to directly control an item she has hacked. In this mode, hackers can take control of things like video cameras, gun turrets, vehicles, elevators, etc. If a hacker takes control of a device that is normally operated by use of a skill (like Piloting for a plane or Shooting for a gun turret) she must have that skill to use the device.

EDIT MODE

The most versatile of the three default modes of a hyper glove, edit mode allows the character to change the existing functions of a specific item or system. While in edit mode, hackers can do countless things. They can rewrite, upload, or copy files on a database, loop camera feeds to mask the passage of her team, change the timing of street lights, alter the flight path of a satellite, modify the "friend/Foe" designations for gun turrets etc.

DESTRUCTION MODE

Sometimes, a hacker doesn't want to take control of an object or manipulate data. Sometimes, the goal of a hack



is to wreak as much havoc as possible or prevent objects from being used against other members of the party. This is where destruction mode comes into play. When in destruction mode, a character can destroy an object by inserting malicious programming into its circuitry that corrupts the original programming of the device, rendering it unusable.

Success on a Hacking roll incapacitates simple items (cameras, vending machines, street lights, etc). These items can be fixed with a successful Repair roll. If the hacker gets a raise on the initial Hacking roll the item is completely destroyed and must be replaced.

Objects such as Drones, Auto-Turrets, and other devices capable of inflicting harm on the hacker and their allies are rendered shaken with a successful Hacking roll. A raise inflicts the damage rating of the hacker's hyper glove on the object, ignoring physical armor only. If the vehicle has any VR armor, it still adds to its Toughness. This mode is also useful when attempting to affect an environment. In destruction mode, hackers can alter the physical world by destroying controls for things like piping systems, containment fields, lights, etc.

EXAMPLE OF THE THREE HYPER GLOVE MODES IN ACTION

[For the purposes of this example, we're not worried about things like initiative, actions, target numbers and modifiers. The goal is to illustrate the possible uses of a hyper glove.]

Neon_Bright and her team have penetrated deep into the research and development wing in the basement of AGI Tech in search of samples of a weaponized strain of ebola7. They've just entered the hallway leading to the containment facility and testing labs when they trip a pressure activated alarm system. Loud, blaring screeches pierce their ears and a gun turret drops from the ceiling at the end of the hallway.

"Shut that turret down and kill the alarm before it wakes up everyone in the city!" The team leader yells.

Neon_Bright makes a quick scan of the gun turret (Notice roll) and locates the hyper panel (visible because her Tendril Access Processor recognizes the digital signature and displays it in her field of vision) hovering just to the left of the weapon—a green rectangular digital display with a list of functions on the screen. Luckily, the turret is within range of Neon_Bright's hyper glove, or she'd have to move closer to hack it; which means putting herself directly in the sights of the menacing weapon spraying the hallway with armor piercing rounds—not fun omae.

Neon_Bright makes a grabbing gesture and a glowing yellow logon screen appears in front of her with a prompt for a username and passcode. Neon_Bright shifts her glove to edit mode, wiggling her fingers as she types fake passcodes into the hyper panel (Neon_Bright makes a Hacking roll and succeeds). The yellow screen shifts to green and the other digital panel with the list of commands flashes back to the foreground. Since she's in edit mode, Neon_Bright has access to a variety of functions. She doesn't have time to play with the gun, however, so Neon_Bright simply turns it off (Since she's already hacked her way into the controls, she doesn't need to make another Hacking roll). The sentry gun shuts down with a whirring noise and rises up into the ceiling.

Neon_Bright turns her attention to the blaring alarms. The alarm was activated by a pressure sensor in the floor, so she quickly scans the floor (another Notice roll) and finds a digital line leading from the pressure sensor to a hyper panel on the wall. With another flick of the wrist, Neon_Bright pulls up the panel and hacks the digital login screen (a successful Hacking roll). Still in edit mode, Neon_Bright shuts the alarm system down, but the damage has already been done. Midway down the hall, a door opens and three heavily armed security guards rush out, guns blazing.

Two guards bravely (or perhaps stupidly) stand in the center of the hallway, wildly firing their SMGs at the team. The third security guard takes cover in an alcove behind a receptionist's desk. As her pals return fire, Neon_Bright decides she can help the team and maybe wreak a little havoc at the same time by over-pressurizing the steam lines running through the hallway.

She shifts her hyper glove to destruction mode, targets a steam pipe running along the wall (a Notice roll) and hacks the hyper object controlling the pressure regulator valve (Another Hacking roll). Neon_Bright overwrites the valve's programming with a virus, crashing the regulator controls and sending the pressure skyrocketing. The pipe bursts in a number of places, floods a section of the hallway with super-heated steam, and sends the guards running for cover. Unfortunately, the steam makes it difficult for her team members to see the security guards.

Next, Neon_Bright decides to take control of the gun turret at the end of the hallway and bring it to bear on the security guards. She shifts back to edit mode, pulls up the hyper panel for the turret, and turns it back on (Neon_Bright doesn't need to make another Hacking roll since she's already hacked it once.).

Neon_Bright quickly shifts to control mode and targets the security guards, sending a burst of armor piercing rounds into their backs (Neon_Bright needs to make a Shooting roll to actually fire the gun. This is handled like any regular Shooting roll).

MODE MODULES

Mode modules— or MODS— are add-ons that expand on the utility of the hyper glove. Conceptually, mode modules are very similar to applications (commonly known as Apps) for the smart phones which were so popular at the turn of the century. While some mode modules (such as the lethal MOD) add new tools to the hacker’s repertoire, others allow characters who don’t hack to do some pretty neat things.

For instance, the Medical Expert MOD diagnoses wounds and lists proper procedures for treatment, which translates to a +2 bonus to Healing rolls. The NAVbuddy MOD provides a +2 bonus to Investigation (or Streetwise) rolls when attempting to find a specific location in the sprawl.

Note: If you use a MOD for skill rolls, you can’t benefit from co-op rolls from other players.

TABLE 1F: COST FOR EACH ADDITIONAL MOD	
Cost	8,000 Credits

APPRAISAL MOD

Used by authenticators and art thieves the world over, the appraisal mod provides a database of valuables, antiquities, precious commodities, and other valuables, listing various scientific data such as the weight of a diamond, the material composition of a rare Ming dynasty vase, the amount of carbon molecules that have escaped from the paint on a renaissance piece, etc. Micro material analyzers within the glove compare the item to the database and calculate the authenticity and monetary value of the item. The appraisal mod provides a +2 to all rolls to authenticate, price and forge an item.

FIELD SURVIVAL MOD

With a built in database of plant life and animal life, this mode module allows you to analyze food items to see if they’re safe to eat. It also teaches you basic ways to find and construct shelter, build fires with little more than a rock and sticks, how to purify water, and all sorts of additional information you need to survive in the wild. The field survival mod gives +2 to all survival rolls.

FORENSIC MOD

This mod installs a series of micro-analyzers within the fingertips of the glove. These analyzers— sensitive enough to read DNA samples— scan evidence and compare it to an onboard database of various samples ranging from bullet casings and fabrics to hair follicles and fingerprints. The Forensic mode gives a +2 to all rolls involving the analysis of potential forensic clues. This bonus also applies to appropriate Notice rolls, and Knowledge: Biology rolls.

LETHAL MOD

This MOD is rather limited in scope, but its effects cannot be understated. A lethal mode module allows the user to generate enough bio-feedback to inflict lethal damage against other hackers in Virtual combat. VR armor still shields against this bio-feedback, but all damage taken is lethal.

MEDICAL EXPERT MOD

Used by *Doctors Without Borders* and combat medics the world over, the medical expert mod comes with built-in SMARTknowledge™ medical files, portable X-ray devices, fluid analyzers, and various sensors that identify a patient's wounds and provide instructions for proper treatments. The Medical Expert mod gives a +2 to all Healing rolls.

NAVBUDDY MOD

Used by professional wheelmen and drivers everywhere, the NAVbuddy mod is an essential tool for navigating megasprawls all over the globe. The NAVbuddy MOD provides a +2 bonus to Investigation (or Streetwise) rolls when attempting to find a specific location in the sprawl.

TOOL EXPERT MOD

This mod installs thousands of blueprint read outs, 3D mapping tools, adjustable microlights, and other minor modifications useful to those who work with machines. The Tool expert will analyze a machine and display a 3D hyper-reality image of the items needing to be repaired while guiding the user through a step-by-step tutorial. The user gains +2 to all repair rolls.

VR OVERLAY MOD

A wildly popular mode module, the VR overlay mod syncs up with your TAP and generates a reality filter which renders the world around you into a theme of your choosing. Typical VR overlays include Fantasy simulations, or space-opera-themed overlays. When running this mod, it is easier to identify hyper objects. Users gain a +2 to Notice rolls when looking for hyper objects.

HACKING THE SYSTEM

Okay *priyatel'*, now that we're up to speed on hyper reality and the hyper glove, let's get into the meat of this data feed—hacking.

HACKING IN HYPER REALITY

The majority of all hacking takes place in the "meat" world when a character hacks a hyper object— that is, she gets within range of the thing she wishes to hack, pulls up the hyper object's virtual command screen and interfaces with it via the hyper glove. Remember, if the character does not have a TAP (Tendrill Access Processor) installed, she won't be able to see Hyper Reality and cannot interact with it.

When you hack anything (a gun turret, a computer network, a vending machine, etc.) in hyper reality, you need to break through its primary line of defense; the firewall. Once you've done that, the hyper object is yours to command omae.

Some hyper objects have stronger defenses than others. Vicious intrusion countermeasures capable of frying your brain or nova-hot security hackers watching for any unauthorized intrusion into the network are all possible defenses a hacker must contend with. These defenses translate to a penalty to the Hacking roll your character must make before she can access the object's controls. Once an object has been hacked, however, it stays hacked for the duration of the scene and can be used again and again until the GM decides the scene has ended.

SUCCEEDING ON THE HACKING ROLL

The Base target number of every Firewall is 4 modified by the difficulty of the system type (See the System Designation Codes at the end of this section for appropriate modifiers). Should the hacker succeed on the roll, the hack is a success and the character accomplishes what she set out to do. Making a Hacking roll is a regular action.

Generally, characters may only attempt to hack one object per round. That said, if a character is wearing two hyper gloves and wishes to attempt to hack multiple objects simultaneously, she suffers a -2 penalty to Hacking rolls for each object she is attempting to hack. She may not hack the same object twice in a single round (See Using Multiple Hyper gloves on page 12).

Example 1: Hacking a single object

Neon_Bright is attempting to hack into a security panel and open blast doors so her team can enter the containment room where the ebola7 virus is

RANGE AND HACKING

A character can attempt to penetrate any system within the range of her hyper glove (see the range trait for the hyper glove for more information). Keep in mind; she must also be able to see the object.

For example, while the security camera on the other side of that locked door is technically within the hacker's range, she can't hack it because it isn't visible to her.

held. The controls for the blast door are protected by a Corporate Access Network (CAN) which has a variable penalty to Hacking rolls ranging from -3 to -5. The Game Master decides that the blast doors are more heavily protected than other areas in the installation, but not as much as others, and imposes a -3 penalty to the roll.

Neon_Bright's Kensei Cyberstorm Hyper glove is set to control mode. The glove provides a +2 bonus to Hacking rolls. Neon_Bright also has the Hacker Professional edge, which gives her +2 to Hacking rolls. The combined bonuses cancel out the penalties imposed on Neon_Bright's Hacking rolls by the Corporate Access Network and gives her a net +1 bonus to her Hacking rolls, so all she needs to do is succeed on a Hacking roll at a modified TN of 3. Neon_Bright rolls her Hacking skill dice (D8) and a wild die (D6) and gets a 5 and a 3, respectively—Success! The Blast doors open with a loud hiss and the team moves into the room beyond.

Example 2: Hacking multiple objects simultaneously

As the team moves into the room, Neon_Bright makes a Notice roll to see if there are any Hyper Objects in the room she might need to hack. She gets a success with one raise, and the Game Master informs her that she sees two hyper panels in the ceiling that look to control sentry guns, a hyper panel controlling a robotic arm, and a few other hyper panels controlling various functions such as lights, air conditioning, fire extinguishers and decontamination systems.

Knowing that time is of the essence and wanting to avoid a repeat of the situation in the hallway (See the hyper glove modes example), Neon_Bright decides to hack both gun turrets at the same time, which imposes a -2 penalty to her Hacking rolls. The turrets are milspec hardware and have a MAN (Military Access Network) rating with variable penalties

ranging from -6 to -8. The GM decides to apply a -6 penalty in this case for a total penalty of -8 to Neon_Bright's Hacking rolls. As before, Neon_Bright's hyper glove gives her a +2 bonus to Hacking rolls and her Hacking Professional Edge gives a +2 bonus, cancelling out 4 points worth of penalties to make the final modifier to her Hacking Roll a -4. Since the base TN to hack anything is 4, Neon_Bright will need to score 8's or better to hack the gun turrets.

Neon_Bright rolls her Hacking dice(D8) and a Wild Die(D6) twice. For the first gun, she scores a 4, but her Wild Die aces twice and she ends up with a 15, easily hacking the first gun. On the second roll however, she scores a 2 and a 3, failing miserably. Neon_Bright decides not to spend a Bennie, as she might need those later, and the Game Master rolls on the Failure Chart for a Military Access Network(See Failing the Hacking Roll for more information).

FAILING THE HACKING ROLL

If the character fails her Hacking roll, she trips the system's security measures and suffers some sort of effect. The Game Master makes a 1D12 roll on the appropriate chart (See System Designation Codes) and applies the effect, if any. If the result of the D12 roll does not dump the hacker from the system, she can keep trying to hack it. Subsequent failures add a cumulative +1 modifier to the D12 roll, ensuring an eventual system shut down, however.

Example of consequences of a Failed Hack

Neon_Bright has failed to hack into one of the gun turrets in the above example, and the Game Master rolls 1D12 on the MAN failure chart (See System Designation Codes below) to see how the Military Access Network responds to the threat. The GM scores an 11 on the roll and informs Neon_Bright that the system responds to her failed attempt to hack the gun turret with a nasty surge of lethal bio-feedback energy. He rolls 3d10 to determine damage. Since this is a Military Access Network, any damage Neon_Bright might take is lethal. The GM scores a 2, 4, and 8 for a total of 14. Neon_Bright has a Toughness of 6 (Vigor D6[3] +2 +1[VR armor bonus]), so she is Shaken and takes one Wound as the bio-feedback signal shoots through her hyper glove and fries her brain.

Interface Zero uses Gritty Damage rules (see the Interface Zero setting book, page 32 for more information), so it's quite possible that Neon_Bright will take further injuries as a result of her failure to hack the gun turret, but for the purposes of this example

we won't get that detailed. Suffice it to say that the gun turret's Intrusion Countermeasures just gave Neon_Bright a really bad day.

SYSTEM DESIGNATION CODES

Below you will find the firewall rating ranges for every type of access network, as well as a system response chart. Should the Hacker fail a hack, a roll on the response chart will determine what happens. GM's should feel free to choose what happens from the charts below, or even create their own charts based on the examples provided.

PUBLIC ACCESS NETWORKS: -0 TO -2 FIREWALL MODIFIER.

Public Access Networks, also known as PANs, are the most common types of computer networks. Found in most public places, PANs provide a basic level of security against unwanted intrusion.

Roll: 1D12. For each additional event that happens beyond the first failure add +1. If you roll an event which has already happened, replace it with the next highest "shock" effect.

- 1: Nothing happens
- 2: Nothing happens
- 3: Shock! Hacker takes 1D6 non-lethal VR damage.
- 4-5: VR Alert, Firewall Modifier increases by 1.
- 6: Shock! Hacker takes 1D8 non-lethal VR damage.
- 7: Shock! Hacker takes 1D8+2 non-lethal VR damage.
- 8: Authorities informed of suspicious activity, Security contractors if any, may also be tasked to investigate.
- 9: Shock! Hacker takes 1D10+2 non-lethal VR damage.
- 10: Active Alert, alarms go off within the building. Firewall modifiers increase by 1 and physical security teams respond.
- 11: Shock! Hacker Takes 1D12+2 non-lethal VR damage.
- 12: System shut down, Hacker must succeed in an extended test against the Firewall rating of the network. Failure results in an active Alert, Authorities and security personal being alerted, all security functions in the area being triggered, the Hacker taking 1D12+2 non-lethal VR damage, and everything in the building turning off and locking until authorities arrive.

HOME ACCESS NETWORKS: -2 TO -4 FIREWALL MODIFIER.

Home Access Networks are generally found in any place where people live. Some coffin motels also have them. More expensive hotel chains tend to use Corporate Access Networks for security.

Roll: 1D12. For each additional event that happens beyond the first failure add +1. If you roll an event which has already happened, replace it with the next highest "shock" effect.

1. Nothing Happens
2. Shock! Hacker takes 2D6 non-lethal VR damage.
3. Shock! Hacker takes 2D6+2 non-lethal VR Damage.
4. VR alert, Firewall Modifier increases by 1.
5. Security Contractors alerted to suspicious activity, will come to area to investigate.
6. Psychotropic ICE attack, Hacker must make a successful spirit roll or gain a phobia of the system for one day.
7. Shock! Hacker takes 3D6 non-lethal VR Damage.
8. Security Hacker investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the Hackers position.
9. Shock! Hacker takes 2D6 Lethal VR damage.
10. Active Alert, alarms go off in the building, physical security features activate.
11. Shock! Hacker takes 2D6+2 Lethal VR damage.
12. System shut down, Hacker must succeed in an extended test against the Firewall rating of the network. Failure results in an active Alert, Authorities and security personal being alerted, all security functions in the area being triggered, the Hacker taking 2D6+2 lethal VR damage, and everything in the building turning off and locking until authorities arrive.

CORPORATE ACCESS NETWORKS: -3 TO -5 FIREWALL MODIFIER.

As the designation implies, Corporate Access Networks are found in corporate buildings all over the world. Characters who attempt to hack a Corporate Access Network can expect to encounter stiff resistance to their efforts. Many brainers have died trying to penetrate Corporate Access networks.

Roll: 1D12. For each additional event that happens beyond the first failure add +1. If you roll an event which has already happened, replace it with the next highest "shock" effect.

1. Shock! Hacker takes 2D6+2 non-lethal VR damage.
2. Shock! Hacker takes 3D6 non-lethal VR Damage.
3. VR alert, Firewall Modifier increases by 1.
4. Security Contractors alerted to suspicious activity, will come to area to investigate.
5. Psychotropic ICE attack, Hacker must make a successful spirit roll at -2 or gain a phobia of the system for one week, and the "loyalty" Hindrance toward products created by the Corporation in question.

6. Shock! Hacker takes 2D6 lethal VR Damage.

7. Security Hacker investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the Hackers position.

8. Wildcard Security Hacker investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the Hackers position.

9. Shock! Hacker takes 3D6 Lethal VR damage.

10. Active Alert, alarms go off in the building, physical security features activate.

11. Shock! Hacker takes 3D6+2 Lethal VR damage.

12. System shut down, Hacker must succeed in an extended test against the Firewall rating of the network. Failure results in an active Alert, Authorities and security personal being alerted, all security functions in the area being triggered, the Hacker taking 2D6+2 lethal VR damage, and everything in the building turning off and locking until authorities arrive.

GOVERNMENT ACCESS NETWORKS: -5 TO -7 FIREWALL MODIFIER

Government Access Networks protect the secrets of the Nations of the world. Security is hard core and the penalty for failure is such that only the most skilled hacker even attempts to penetrate these systems.

Roll: 1D12. For each additional event that happens beyond the first failure add +1. If you roll an event which has already happened, replace it with the next highest "shock" effect.

1. Shock! Hacker takes 3D6 non-lethal VR damage.

2. Shock! Hacker takes 3D6+2 non-lethal VR damage.

3. Psychotropic ICE attack, Hacker must make a successful spirit roll at -2 or gain a phobia of the system for one week, and the "loyalty" Hindrance toward the country in question.

4. VR alert, Firewall Modifier increases by 1, and Hacker takes Shock! Damage of 3D6 Lethal.

5. Security Contractors alerted to suspicious activity, will come to area to investigate.

6. Psychotropic ICE attack, Hacker must make a successful spirit roll at -4 or gain a phobia of the system for one week, and the "loyalty" Hindrance toward the country in question.

7. Shock! Hacker takes 3D6 lethal VR Damage.

8. Security Hacker investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the Hackers position.

9. Wildcard Security Hacker with Lethal mode mod, investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the

hackers position.

10. Active Alert, alarms go off in the building, physical security features activate.

11. Shock! Hacker takes 3D8 Lethal VR damage.

12. System shut down, Hacker must succeed in an extended test against the Firewall rating of the network. Failure results in an active Alert, Authorities and security personal being alerted, all security functions in the area being triggered, the Hacker taking 3D8+2 lethal VR damage, and everything in the building turning off and locking until authorities arrive.

MILITARY ACCESS NETWORKS: -6 TO -8 FIREWALL MODIFIER

Often referred to as "Ghost Networks," or "Black Zones" Military Access Networks are ultra secure systems designed to fry the brains of any brainer suicidal enough to attempt hacking them. MANs protect anything even remotely related to the military including advanced weapons systems, satellite networks, military bases, etc. It's even speculated that Government officials have their TAPS protected by military-grade networks.

Roll: 1D12. For each additional event that happens beyond the first failure add +1. If you roll an event which has already happened, replace it with the next highest "shock" effect.

1. Shock! Hacker takes 3D6 lethal VR damage.
2. Shock! Hacker takes 3D6+2 lethal VR damage.
3. Psychotropic ICE attack, Hacker must make a successful spirit roll at -3 or gain a phobia of the system for one week, a Phobia of Hacking in general for one week, and the "loyalty" Hindrance toward the country in question.
4. VR alert, Firewall Modifier increases by 1, and Hacker takes Shock! Damage of 3D6+2 Lethal.
5. Security Contractors alerted to activity, will come to area to investigate.
6. Psychotropic ICE attack, Hacker must make a successful spirit roll at -4 or gain a phobia of the system for one week, Phobia of Hacking for one week, and the "loyalty" Hindrance toward the country in question.
7. Shock! Hacker takes 3D8 lethal VR Damage.
8. Security Hacker with Lethal mode mod, investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the Hackers position.
9. A Wildcard Security Hacker with maxed out Hyper glove values, Lethal mode mod, and a Hacking skill of at least D10, investigates and initiates VR combat. If the Hacker loses or "Jacks out" before defeating the Hacker, a System Shutdown goes into effect, and security is alerted to the Hackers position.
10. Active Alert, alarms go off in the building, physical security features activate.

11. Shock! Hacker takes 3D10 Lethal VR damage.

12. System shut down, Hacker must succeed in an extended test against the Firewall rating of the network. Failure results in an active Alert, Authorities and security personal being alerted, all security functions in the area being triggered, the Hacker taking 3D10+2 lethal VR damage, and everything in the building turning off and locking until authorities arrive.

HYPER GLOVES AND PHYSICAL COMBAT

Hyper gloves aren't meant to be used in physical combat like boxing gloves or medieval gauntlets. That said, you never know when you have to punch someone in the face, neh? With that in mind, here is a general guideline to figure out what happens if you punch someone or something while wearing a hyper glove.

Hyper gloves have a base Toughness of 4. Whenever a character punches someone while wearing one, the glove automatically takes 1d4+1 damage. If the damage roll exceeds the glove's toughness, the glove is broken and must be repaired before it can be used again.

MULTIPLE ACTIONS

Characters who own two hyper gloves may use both to take two separate hacking actions or may use a single glove and a weapon in the other hand. Normal offhand and multi-action penalties apply.