CYBERSTORM 2™

CORPORATE WARS

Herc Commander's Guide Level 2

Dynamix®
A SIERRA COMPANY

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Prologue

It's been several decades since the demise of the alien Cybrids, the ruthless techno-demons that once appeared destined to succeed in their campaign of human genocide. But slowly, painfully, and with staggering losses, the forces of mankind prevailed, the true destiny being that of good over evil. But somehow the bacteria of success – pride, power, and greed – multiplied in the minds of the people who came together in the aftermath, creating an enmity that was even stronger than before.

The result of this new separation is the eight Corporations that now form the economic basis for the entire Typhoeus System. Armed with more advanced technology than the days of battling Cybrids, the Corporations war among themselves for territorial rights and resources, and ultimately for rights to the jumpgate that allows passage to the other side of the galaxy.

Each corporation has its advantages and disadvantages – better information, fewer defenses, greater wealth – but nothing can escape the fact that this is now a personal dispute. The humans have turned on themselves once again.

A new era in the destruction of the human race has begun. Welcome to *Cyberstorm 2*. Welcome to *Corporate Wars*.

Corporate Induction Procedures

System Requirements

The following software and hardware is required to run *Cyberstorm 2*.

Minimum

An IBM-compatible Pentium-133 computer
Windows® 95
4X CD-ROM Drive
24 MB RAM
1 MB Local Bus Video Card
A hard disk with 40 MB free (minimum installation)
An SVGA graphics card and SVGA color monitor.
A mouse.

Preferred

Pentium 166 or better
8x CD-ROM Drive
32 MB RAM
A hard disk with 55 MB free (typical installation)
PCI Video Card
Supports
Win95 Compatible Joysticks

To connect to the *Cyberstorm 2* Web site, a 9600-baud (or faster) modem with a Web browser and an Internet connection is required. For multiplayer play, a 14,400-baud (or faster) modem is recommended.

Installation

1. Start Windows 95.
2. Insert the *Cyberstorm 2* Installation CD into your CD-ROM drive.
3. The *Cyberstorm 2* introductory video will play, then the Autoplay screen will appear in 5-10 seconds. Click Install. (To skip the video, click anywhere on the screen while it is playing.)
4. When the *Cyberstorm 2* setup screen appears, follow the on-screen instructions.

There are three installation options: Small (40 MB), Normal (55 MB), and Large (430 MB). The Small and Normal installations require the CD in order to play *Cyberstorm 2*.

These instructions assume that you are using CD drive D:. If not, please substitute the appropriate drive letter for D:.

To manually install *Cyberstorm 2*:

1. Start Windows 95.
2. Insert the *Cyberstorm 2* Installation CD into your CD-ROM drive.
3. Select Run from the Windows Start menu.
4. In the File text box, type D:\SETUP.EXE. Click OK.
5. Follow the on-screen instructions.

Post Installation Notes

When you install *Cyberstorm 2*, a Sierra Utilities icon appears at the top of your Windows Start menu. This utility allows you to easily register or uninstall any Sierra programs that are detected on your computer. You may also access the Readme file for any program that this utility detects. The Support option is an online Setup Help file that provides answers to hardware questions, troubleshooting issues, and explains how to create a Windows boot disk.

If, for any reason, you would like to remove this icon, go to the Start menu and select Settings >Taskbar. Select the Start Menu Programs tab and click the Remove button. Scroll to the bottom of the programs list where you should see the Sierra Utilities icon listed. Highlight it and click Remove.

Also upon installation, a you are given the option of having a Mindspring icon placed on your desktop. This is an Internet shortcut to an online service provider. If you'd like to remove this icon, simply drag it into the Recycle bin.

Running *Cyberstorm 2*

1. Start Windows 95.
2. Insert the *Cyberstorm 2* Installation CD into your CD-ROM drive.
3. The *Cyberstorm 2* Autoplay screen will appear in 5-10 seconds. Click Play to start *Cyberstorm 2*.
4. Click Reinstall to install *Cyberstorm 2* under a different configuration.
5. Click Web Page to access the *Cyberstorm 2* Web site on the Internet.

To manually start *Cyberstorm*:

1. Start Windows 95.
2. Insert the *Cyberstorm 2* Installation CD into your CD-ROM drive.
3. Select *Programs > Sierra > Cyberstorm 2* from the Windows *Start* menu.
4. Click Play to start *Cyberstorm 2*.

Saving a Game

You may save a game at any time during single player play. To do so, position the cursor at the top of the screen and left-click once to reveal the menu, then select Save Game (Ctrl-S). The Save Game dialog will appear. Choose the folder where you want to save the file, then type the name of the file in the textbox provided and click Save.

Multiplayer games cannot be saved.

Loading a Saved Game

To resume a saved game when starting *Cyberstorm 2*, select Load Career from the introductory menu. Navigate to the folder where the file was saved, select it, then click OK. You may also load a game at any time while running another game. To do so, position the cursor at the top of the screen and left-click once to reveal the menu. Under the Game menu, select Load Game (Ctrl-L). The Load Game dialog will appear. Locate the folder where you saved the file, left-click once on the filename, then click OK.

Quickstart

This is a method of quickly jumping into a mission with a minimal amount of setup. Quickstart games are non-career oriented, one-time-only games. Quickstart is a good way to get a feel for the more difficult missions in *Cyberstorm 2* without sacrificing fleet resources in your career.

Select Quickstart from the introductory menu. A mission parameters screen appears with a description of the options you can select. Start by selecting the type of mission: Training, Standard, or Special. All of the missions available under these three categories are described in the section, *Mission Selection*, on page 33. Then select the enemy presence level, your force level, the terrain, and your corporate affiliation. You can experiment by pitting a well-equipped, large fleet against a minimal enemy attack. Or truly test your skills by intentionally outnumbering

your forces with overwhelming enemy forces. For the quickest encounter, click Random. This sets all parameters randomly. Click Random repeatedly for various configurations.

Once you have selected all parameters, click Accept to depart for the mission. The *Mission Scenarios* section on page 35 describes all of the commands and operations necessary for conducting a mission.

Quickstart games can be played in real-time, simultaneous turn-based, or turn-based mode (see the next section, *Playing Modes*, for details). The default mode is real time. This can be changed from the Preferences menu. All of the mission screen options and commands are explained later in this manual under the chapter called *Mission Scenarios*.

Figure 1 The Quickstart mission parameters screen.

Once the mission is completed, whether successfully or not, you will return to the mission parameters screen to select your next mission.

Note: To display a menu, move your cursor to the top of the screen at any time then left-click once. While anywhere within the Hercbase, you may also left-click once on your corporation's symbol in the lower right corner of the screen.

Playing Modes

Career Play

When you embark on a career in *Cyberstorm 2*, you are making a commitment to what has been quoted as "a direct path to either universal honor or instant annihilation." One thing for certain: it is a commitment. Those who succeed are quickly recognized and advance through the ranks as their achievements build. No one hangs back. No one takes a pass. Consider it "forced glory."

On the other hand, failure to advance only means you've sent a few too many of our resources home in salvage bins, if they've come home at all. Either that or you became the main course at an enemy barbecue out on Hell's Backporch.

Bottom line: take your career seriously. Essentially, it's you vs. the other seven corporations who want the same valuable territory, the same new technology, and the same head count you do all in the quest for the Jumpgate. If you succeed, you're Bioderms gain experience, you earn the right to additional Bioderms and vehicles in your fleet, and the brass on your shoulders gets bigger and shinier.

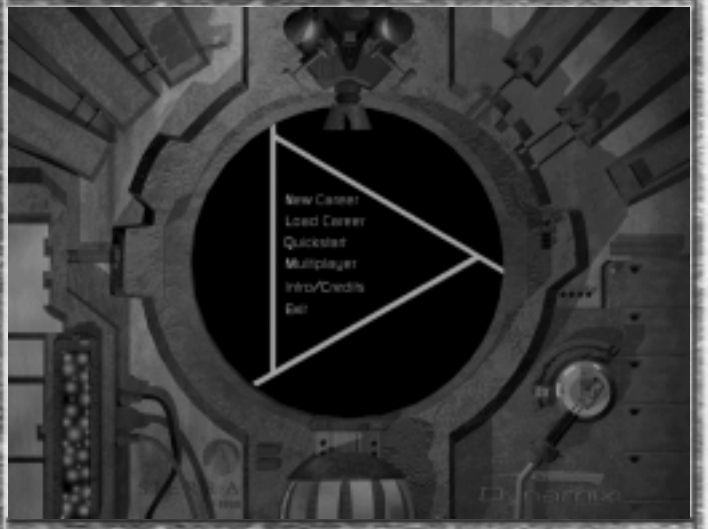


Figure 2 The Introductory Menu.

Career play is only possible in single player mode. Career play is not available in multiplayer games. Career games can, and should be, saved often. It's easy to get involved in a series of missions, advancing quickly through the first few ranks and building your fleet, only to lose it all before you remembered to save anything. And it's very easy to quickly go bankrupt when you suddenly find yourself overmatched in an ambush situation.

Turn-Based vs. Simultaneous Turn-Based vs. Real-Time Play

Select Turn-Based or Real-Time play from the first in the sequence of menus that appear after you select New Career from the introductory menu. Simultaneous Turn-Based play is an option you can select from the Preferences Menu (see page 44) later.

Turn-based play is akin to chess: first one player (or the computer) moves his vehicles and employs his weapons and other systems as necessary. When he has completed his "move", he clicks an End Turn button to indicate his turn is over. Each player subsequently makes his move, firing upon opponents or salvaging as the mission requires, while the other players observe. Enemy fire is returned as long as the enemy has the opportunity.

Simultaneous Turn-Based Play allows all players to make their moves at the same time and end their turns at the same time. It brings in the "urgency" of real-time play while allowing for strategic evaluation between turns.

Real-time play is more combat realistic with all vehicles firing and moving as they are commanded. Fire and return fire can occur simultaneously, with Hercs advancing and retreating in response to each player's instructions.

Note: Only turn-based play is available in multiplayer games.

Multiplayer

Starting a Multiplayer Game

Three options are available once you select Multiplayer: Quick Multiplayer, Load Group, and Generate Group.

Quick Multiplayer

This is the shortest route to joining or initiating a multiplayer game. Aside from getting connected, it only requires setup of the multiplayer options to start the game. No Hercbase options are available and all vehicles and Bioderms are pre-assigned. The multiplayer game options screen is shown in Figure 4 and is described on page 12.

You may exit a multiplayer game at any time, but once you exit, you will not be allowed to return.

Generate Group

This option allows you to create a group for Multiplayer play. A group is a set of vehicles and Bioderms that you have customized to your specifications by going through the setup procedures inside the Hercbase. Hercbase procedures are explained beginning on page 15.

To generate a group:

1. Select a corporate affiliation.
2. A screen appears that describes the corporation in detail. Click Accept to accept the selected corporation, or click Back to return to the corporation selection screen and select a different affiliation.
3. Once you've accepted a corporate affiliation, you can set the Force Level of the group being generated. Click the left arrow button at the top of the screen to decrease the Force Level, or the right arrow button to increase the Force Level. The Force Level range is 1 to 10.
4. Click Accept to accept the Force Level, or click Back to return to the corporation selection screen and select a different affiliation.
5. Once you accept the Force Level you will be dropped into the Hercbase to set up your group. After all procedures are complete at the Hercbase, click the corporation symbol at the bottom right of the screen to open the menu.
6. Click Save Game to save the group you've created. You can load this group at any time later from the Load Group option on the initial multiplayer screen.
7. Click on the launch pad, after all Hercbase procedures are completed, to begin the multiplayer connection process. This is explained beginning with the section, *Select A Connection Type*.

Load Group

This option allows you to load a previously-generated group for multiplayer play. After doing so, you'll be prompted to select a connection type as described next.

Once you select any of the multiplayer options and, if necessary, create your group, you will be prompted to enter your name. Then you must select a connection type.

Select A Connection Type

Cyberstorm 2 may be played in multiplayer mode through one of the following setups:

World Opponent Network (WON) - Up to eight people can join a game on WON.NET, although the number of games running at any time can be unlimited.

After you select this option, your computer will automatically open your browser and attempt a dialup. You will be prompted to create a WON.NET account by following the on-screen instructions (or select an existing account). When the WON.NET opens, you can create or join a game room.

IPX Connection for DirectPlay - This allows play over an IPX network with all players on the same network hub or node.

Modem Connection for DirectPlay - Two people can play head to head via modem. A minimum 14,400-baud modem is required by both players. Two players with varying modem speeds will not adversely affect the play balance.

You will be prompted to either enter a number to be dialed if you are creating a game, or to wait for your modem number to be dialed if you are joining a game.

Serial Connection for DirectPlay - Two people can play head to head via a direct serial connection. You will be prompted to configure or confirm your serial port settings. Both computers must have the same settings.

After a connection type is selected, you will be prompted to enter a player name.

Multiplayer Game Options

All multiplayer games allow you the option of either creating a game or joining one as a participant. As a game creator, you will set all of the game's parameters on the multiplayer game options screen (see Figure 4). Game participants may only select their Corporate Affiliation and color, and send chat messages. When participants are ready, they click on the OK column that corresponds to their corporation name. Once all players are ready, the creator clicks Launch Mission to start the game.

As a game creator, you set almost all of the options on this screen. The only options that participants select are their Corporate Affiliation and color, and the OK column.

Figure 3 The World Opponent Network setup screen.

OK – click this column when you are ready to join a game. All players must have this box checked before the game can begin.

№ – this is your team's slot position (determined by the order in which each team makes connection). Remember these numbers for creating alliances and communications. Once all slots are full, no more players will be allowed to join.

Lgo – this is your corporation's logo which will appear next to each vehicle on the battlefield if the creator selects this option. It is useful to know logos especially if you create an alliance with another team (see *Creating Alliances* on page 13). The logo is determined by the Corporate Affiliation selected.

Clr – this is your team's color, which helps distinguish among vehicles in a crowded battlefield. Multiple click-thrus will toggle these variables.

Type – four variables can appear here: the name each human participant entered; Computer for a computer-controlled player; Empty if the slot is available; and Closed if you wish to limit the number of players entering the game. Multiple click-thrus will toggle these variables.

Value – this is the force value of each group in credits. Value is determined by the Corporate Affiliation and Force Level selected.

Lvl – This is the technology level of all weapons, vehicles, and devices in the group. If the game creator has selected the option for all groups to use the creator force, then this option cannot be changed. Otherwise, the lowest level is 1 and the highest is 10.

Corp Aff – participant controlled. This is your Corporate Affiliation. Corporations differ in their strengths and weaknesses.

F-Type – force type, Random or Custom, is the kind of units you will bring to the game. A Custom group must be created through the Generate Group process. To load a Custom group, click Random and load the saved group file.

Figure 4 Multiplayer Game Options screen.

Units – this is the number of linked Bioderms and vehicles in your group.

Creator Options

Mission Type

Free for All – each player is out to eliminate all others. This is a classic multiplayer scenario.

Race – each player must race around the map and reach all race points to win.

Recovery Mission – the object is to get your hands on a unique object placed centrally on the map, then to run off the edge of the map with it in your possession.

Destroy Base – this is a cooperative mission. All players gang up against a super-well defended base run by computer AI. To win, simply take out the base.

Tag – this is a semi-cooperative mission. One player is designated "IT" and is placed on one end of the map, while all other players are placed on the opposite end. The player with the highest force value is "IT". Whoever is "IT" tries to make it across the map while all the others try to stop him. Which side would you rather be on?

Capture the Flag – each player starts out near their flag. To win, you must capture all the other opponents' flags and without losing your own.

Map Size – Choose from one of four map sizes. Generally speaking though, the bigger the map, the greater the difficulty.

Fog of War – Sets the atmospheric mood. Fog of war covers cells outside of your sensor's perimeter so enemies are not visible. There are six settings here.

Hide Force Description – This toggles the corporation logo that accompanies each vehicle.

Use Creator Force? – This determines whether participant-selected values or creator-selected values are used.

Max Number of Units – This sets the maximum number of units allowed into battle.

Computer – Sets whether the computer forces are Independent or Allied against you.

Time – Sets the length of each turn.

Creating Alliances

You can create teams, or strategic alliances, during a multiplayer mission, which will allow you to field even greater forces. Alliances can form to defend and attack a base. It's a good way to make the mission a little more interesting. Alliances are set after a mission is launched.

Click your corporation symbol in the lower right corner of the screen to open the mission menu. Select *Communications›Alliance* (or Ctrl+A). You can then click any of the other players to alliance with. The player numbers correspond to the slot numbers assigned in the multiplayer options screen. To deselect a player for an alliance, click the slot number a second time.

During communications, you can elect to send messages only to allied players. See *Multiplayer Communications* for more information.

Multiplayer Communications

You can start sending messages to other players at the multiplayer options screen. Click once in the chat textbox and type your message. Press Enter to send the message. You will see it displayed in the chat window above the textbox. The same chat area exists on the mission screen. On a mission, the communications menu can be displayed by pressing Ctrl+C to display the following options:

Who Send To (Ctrl+W) – send messages to all players, only allies, only enemies, or an individual player or players.

Ignore (Ctrl+I) – ignore all messages, all taunts, or only messages from specific players.

Alliance (Ctrl+A) – ally with any other player or players.

Taunt (Ctrl+T) – taunt any other player or players. Taunts are entered under the Multiplayer tab on the Preferences menu (see page 47) for details.

Starting a Career

Choose New Career from the introductory menu, or Load Career if you have previously saved a career game.

Choosing a Corporate Affiliation

The first step in career play is to choose a Corporate Affiliation. Each Corporation is unique, with its own set of advantages and disadvantages. Choose a Corporation that you feel will best match your combat objectives, as well as your strategic and tactical style.

Choose a Corporate Affiliation by clicking on its logo in the Corporation selection screen. A new screen will appear with a description of the Corporation. The text in the Corporation descriptions can be scrolled up and down by clicking the top and bottom of the scroll bar to the right of the text (see Figure 6).

You may accept your new Corporation at this time or return to the screen shown in Figure 5 by clicking Back to select a different one.

Corporation Descriptions

Eight Corporations vie for territory and resources in *Cyberstorm 2*. Their characteristics, strengths, and weaknesses are outlined on screen after their respective logo is selected. The eight corporations are:

StellarWave, Ltd.

Unitech Corporation

Yamaguchi, Inc.

Celestine Ultra-Cryo, Inc. (CUC)

Interstellar Strategic Initiative (ISI)

TekWerks

HyperSonic Industries

Sentinel Defense, Inc.

Some corporations start out with fewer credits than others, but they make up for that in the number of units considered or in the technology

Figure 5 Choose a Corporate Affiliation by clicking on its logo.

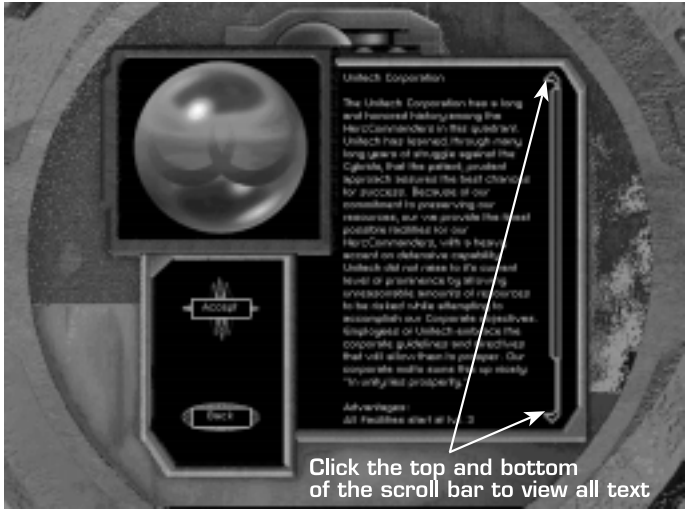


Figure 6 Scroll bars appear to the right of long text.

advance rate. Consult *Corporate Data* in the *Data and Specifications* section on page 48 for details.

Choosing a Hercbase Site

All of your operations will be conducted out of the Hercbase. During the new career setup process, you must select a planet on which to locate your Hercbase. All of the planets of the Typhoeus System, where all operations will occur, appear on screen after you select a Corporate Affiliation. Pass your cursor over a planet to see a description of its composition and economic sustainability. Click on a planet to see the Base site options, listed to the right of the screen by terrain type. Pass your cursor over any of the Base site options to see a detailed description at the top of the screen.

Note: Some planets may not have any Base sites available at the beginning of a career because other Corporations have already based their operations there, or because the environment is not hospitable enough to sustain a base.

When you have settled on a site, click Accept. The site becomes your official outpost for mission operations. You will then jump to the Hercbase for final staging operations prior to mission commencement.

Hercbase Overview

The Hercbase is home to your Corporation's forces. The accommodations include a Bioderm Facility, a Vehicle Facility, a Command Center, a Launch Pad, and the defensive elements necessary to protect it all. Pass the cursor over a facility to see its description in the message window (lower right-hand corner). You can jump to a facility by clicking its image on the Hercbase screen or by clicking on the facility name in the lower left-hand corner of the screen.

You can also display a list of shortcuts within the Herbase by pressing [J], or by clicking your corporation symbol in the lower right corner of the screen. Select Hercbase Jumps from the menu.

The Bioderm Facility

The Bioderm Facility is where you manufacture and engineer the biogenetically-linked pilots of your force's vehicles. Bioderms are similar to clones. The DNA sample they are cloned from is incorporated into protoplasm to form a base genetic matrix (BGM). The DNA samples often come from former human heroes.

Protoplasm is used because it grows faster than a "conventional" clone and it maximizes the potential of the DNA. Protoplasm is unstable, however, and one of the major ratings a Bioderm has is its genetic stability. Stress and overuse of Jackup, a Bioderm combat drug, cause the Bioderm to lose cohesion, making it degenerate into the veiny blue protoplasm from which it was created. Protoplasm also has the interesting side effect of magnifying the electromagnetic field inherent in living beings. Polarizing this field reestablishes genetic stability. Certain Bioderms are created with Command potential, which enhances their own electromagnetic field exponentially. It also allows them to stabilize an unstable Bioderm by moving near it (within three cells).

Bioderms have limited life spans, giving them insufficient time to develop their skills through conventional training. Therefore, Bioderms are given Genetic Computer Strand Implants, or "Gussies", during their initial creation. These DNA Supercomputers benefit the Bioderm in two ways: they retrieve the genetic memories of those skills practiced by the initial BGM donor, and they act as receptors for bioelectric sequence coding to further enhance skills. Bioelectric sequences for specific skills were recorded from the original Herc Pilots during the last Great War, and the best of these became the skill enhancement program codes. Bioelectric sequence coding is combined with a cerebral-direct imaging device to imprint the Bioderm as quickly as possible with additional skills.

Figure 7 The Hercbase.

Manufacturing and Engineering Bioderms

As a leader in your Corporation, you must not only select the best vehicles for your missions, but the best pilots for those vehicles. Bioderms are your pilots, so create and maintain them wisely.

You will notice that two areas highlight as the cursor passes over them in the Bioderm Facility: the Biovat and the Medvat (see *Healing, Rejuvenating, and Recycling Bioderms* on page 20). The text descriptions of these areas appear in the message window as they highlight. The Biovat is where Bioderm creation takes place. To manufacture a Bioderm, click on the Biovat.

Note: Click anywhere on screen to circumvent the transitional animations that occur when moving between and within facilities.

The display appears as shown in Figure 8. The vital statistics and skill ratings of the Bioderm appear to the right. When manufacturing a Bioderm, these numbers cannot be altered.

To manufacture a stock Bioderm, first select the desired Bioderm unit by toggling through the available stock with the left and right arrow indicators that appear below the image of the Bioderm. You can also view a name list of all stock Bioderms by clicking the name under the Bioderm image. Then click the name you want from the list. You can rename the Bioderm by clicking directly on its image and typing in a new name when prompted. Then simply click Manufacture and, assuming you have enough credits, the Bioderm will be added to your roster after confirmation.

Note: The list of stock Bioderms vary by Corporation. Some Corporations have invested more research and funding into developing this technology, the result being a better pool of pilots to choose from.

Engineering a Bioderm for the first time costs twice as much as manufacturing one because it is a two-step process. To engineer a Bioderm to your exact specifications, click Engineer. The display changes as shown in Figure 9. Click on the image of the protoplasmic mass to name the new Bioderm. Then click on and move the slider bars for any of the vital stats or skill ratings to adjust them to your specifications. As you do so, the number to the right of the Engineer indicator is adjusted to reflect the cost in credits for each value enhancement. If you want to automatically set all of the skill ratings and stats to their maximum values, click Max. Values. You must have a sufficient number of credits to engineer a Bioderm, especially for a maximum values setting.

Once all values are set, click Engineer. The engineering cost will be deducted from your budget. You must then manufacture the Bioderm, again at the engineering cost. To do so, click Yes when prompted to manufacture and add the new Bioderm to your distinguished roster.

Once a Bioderm is engineered, it stays on the list of stock Bioderms.

Exit the Biovat by clicking the Back indicator near the message display, or by clicking on the Medvat.

Bioderm Characteristics

Health

All Bioderms start completely healthy upon creation although some will have a higher health potential than others will. For example, the maximum health value of a Bioderm that was encoded with inferior DNA will be 50, where another's may be 70. Health deteriorates as a Bioderm's vehicle takes hits during battle. It will also deteriorate once toxin levels are maximized. Health can be restored, at a cost, with the Heal option in the Medvat (see *Healing, Rejuvenating, and Recycling Bioderms* on page 20).

Figure 8 The Bioderm manufacturing display.

Stability

All Bioderms start 100% stable upon creation. Again, some Bioderms have a higher stability potential than others. Stability deteriorates as a Bioderm's vehicle takes hits during battle or as Jackup is administered. Once Stability reaches half of its maximum, skill ratings begin to drop. Genetic Stability can be restored with the Heal option in the Medvat.

Toxin

This is the maximum amount of toxin a Bioderm can sustain. All Bioderms start with zero toxins upon creation – some can withstand more than others can. Toxins increase as a Bioderm is infused with Jackup while out on missions. Health is affected once the toxin level is maximized. They can be removed with the Heal option in the Medvat.

Lifespan

Lifespan is set in the engineering process – it appears as Age in the Bioderm's statistics display. When engineering a Bioderm, you can set its maximum age before it dies. Age and life span are measured in longevity units.

Bioderms with longer life spans are generally more expensive and have higher overall ratings. All Bioderms start at age zero when they are created. Bioderms that are created, but not linked to a vehicle, are

Figure 9 The display for engineering Bioderms.

cryogenically frozen and do not age between missions.

Age is important because every mission requires a longevity unit. After each mission, you will see the remaining life expectancy of each Bioderm that you have linked during the mission debriefing. Make sure they all have enough time left for the next mission. Bioderms can be rejuvenated in the Medvat, where longevity units are removed from their lifespan total.

Learning

A higher rating in this statistic will allow the Bioderm to gain skills more readily from battlefield experience (thus more rank).

Discipline

More disciplined Bioderms will obey commands more readily and will have a tendency to remain focused under fire. Less disciplined Bioderms may act erratically under stressful situations.

Command

Command Bioderms have leadership ability. Only certain Bioderms are created with it. Command can only be increased during the engineering phase. On the field, a Command Bioderm can boost the faltering stability of lesser Bioderms by moving near them. Command Bioderms bolster stability of others within three cells of them by either 10, 20, 30, or 40 points, depending on a Command Bioderm's Command rating. This decreases by one point for each additional cell distance. The boost effect is cumulative – if two Command Bioderms stand near an unstable Bioderm, both will increase stability.

Command ratings vary from 10 to 40 – the higher the rating, the higher the boost to other ailing Bioderms.

Rank

Pilots advance in rank as they gain experience. Higher ranking brings increased ratings at all skills and in all vital statistics.

Piloting

The terrain of the Cyberstorm System is varied and treacherous and requires skilled piloting to successfully maneuver. The better skilled a Bioderm is at this, the less reactor energy that is required for Herc movement. Also, higher piloting skills translate to lower chance for opponents to hit.

Ballistic

Cannon weapons hit fast and hard enough to penetrate most armor, however, they are ineffective against shields. In addition, they are short range, limited by the amount of ammunition carried, and only moderately effective against modern targets, but they're reliable and use almost no power.

Energy

Energy weapons use a variety of radiated and directed energy effects to do damage against enemy systems. Energy weapons do a great deal to damage enemy shields.

Missile

Missiles deliver a huge punch, but can be disrupted by electronic countermeasures and shields which cause them to explode prematurely and dissipate much of their effect.

Plasma

Plasma weapons fire spheres of energetic plasma contained in a stable electromagnetic shell. The shell and plasma energy massively disrupt the target's shields, and the plasma itself does lesser damage to armor through thermal effects.

Electron Flux

The ELF creates a conduit of charged electromagnetic flux that is very effective at passing through shields to strike an enemy's armor.

Particle

These weapons fire charged particles.

Advanced Technology

Other weapons which fall outside of traditional skill classifications.

A complete list of the weapons by category can be found in the *Data and Specifications* section starting on page 47. Also, when you are configuring your vehicles in the Vehicle Facility you can view descriptions of every weapon and every system by right-clicking on the component name.

Healing, Rejuvenating, and Recycling Bioderms

As mentioned before, Bioderms are your pilots and you must maintain them wisely and on a regular schedule. It's a good idea to visit the Medvat after every mission for healing and rejuvenation (unless you're addicted to pansy patrols in uninhabited areas).

The Medvat is the other area of the Bioderm Facility (besides the Biovat) that highlights when your cursor passes over it. To heal, rejuvenate, or recycle a Bioderm, click on the Medvat.

Note: Click anywhere on screen to circumvent the transitional animations that occur when moving between and within facilities. Animations can also be turned off from the Preferences menu (Ctrl + P).

The display appears as shown in Figure 10. The vital statistics and skill ratings of the Bioderm appear to the right. Only the vital statistics – Health, Stability, and Toxin – require healing. The numbers for these stats are displayed as current level and potential level. For instance, if your Bioderm's Toxin potential is 70 and it currently has no toxins, the figures will be displayed as 0/70. If any of these values are below 100%, a number will appear to the right of the Heal indicator that shows the credit cost to heal the Bioderm and return those values to their maximum levels. Click Heal, assuming you have a sufficient number of credits to restore the Bioderm to full health.

Figure 10 The Medvat where Bioderms are healed, rejuvenated, and recycled.

The only value that is not affected in this manner is the Bioderm's age. A Bioderm's age can be reduced by one unit at the cost indicated by Rejuvenate. Click Rejuvenate to smooth away those unsightly wrinkles and add life to your Bioderm. As Bioderm's age, they gain proficiency in various skill areas. For this reason, it is usually a good idea to rejuvenate them instead of recycling them for newer models. By the way, recycling a Bioderm is just a pretty phrase for dumping it back into the protoplasmic pool. It's kind of like putting your dog to sleep, only this dog put its "life" on the line for you. But if you want to recycle, go ahead. The Bioderm's original cost will be credited to your budget if it is undamaged. Hope you feel good spending it.

Note: The Skill ratings – Piloting, Ballistic, Plasma, etc... - cannot be affected in the Medvat. They are only "improved" over time and with experience. Also note that holding the Shift key down while selecting the Heal or Rejuvinate buttons applies the effect to all your Bioderms.

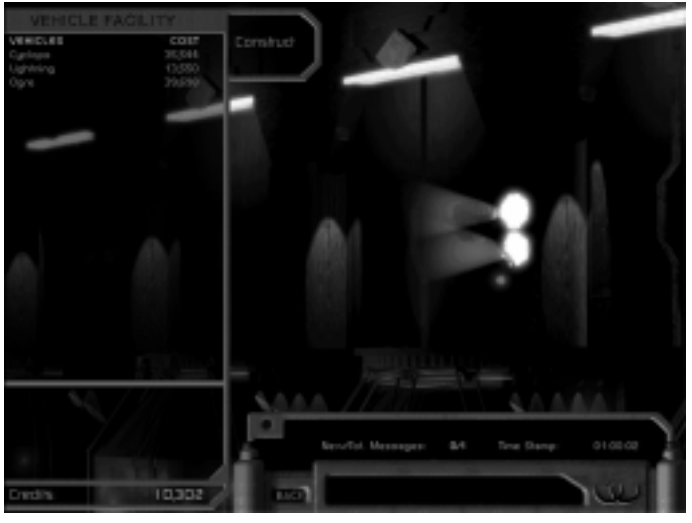


Figure 11 Inside the Vehicle Facility.

The Vehicle Facility

You construct, purchase, sell, and repair Hercs and other vehicles inside the Vehicle Facility. For simplicity, Hercs, Traction Vehicles, and Gravity Vehicles will all be referred to only as vehicles throughout this section. You begin your operations on the Hercbase with a predetermined number of credits. You may spend them any way you like to expand and improve upon your fleet.

Constructing Vehicles

From the stock-vehicle list inside the Vehicle Facility, you can click on Construct to build a new vehicle. A list of stock vehicles is displayed. As you create vehicles you can add them to this list (more on that coming up). First, find the vehicle you would like to construct. Pass your cursor over any name in the list to preview the vehicle as shown in Figure 12. You can sort all vehicles by several categories to make the selection process easier. See *Sorting Vehicles* on page 22 for details.

Click on the name of the vehicle you would like to construct to display a rotating image of it along with a list of its installed components. The vehicle cost appears in the lower left area of this display. Up and down arrow keys beside the Construct command allow you to change the number of this type of vehicle to construct (assuming you've got the cash). If duplicate vehicles are selected, the cost to construct is adjusted accordingly.

When you are ready, click Construct again to add the vehicle(s) to your fleet. The display then returns to the stock-vehicle list and your credit total is adjusted. When you have finished constructing your vehicles, you may return to the component upgrade area to make revisions to your new purchase.

Sorting Vehicles for Construction

There is a Sort option on the stock-vehicle list display. Click it to

Figure 12 Preview vehicles by passing your cursor over the names in the list.

display the sorting categories. Click a sorting category, then click Sort again to see the sorted list. You can sort the stock vehicles by the following categories:

Cost: Least to Most – sort all vehicles by ascending cost.

Cost: Most to Least – sort all vehicles by descending cost.

Cost: Minimum – sort all vehicles that meet a minimum cost. You are prompted to enter the minimum amount.

Cost: Maximum – sort all vehicles that meet a maximum cost. You are prompted to enter the maximum amount.

Vehicle: Light – sort only light vehicles.

Vehicle: Medium – sort only medium vehicles.

Vehicle: Heavy – sort only heavy vehicles.

Type: Herc – sort only Hercs.

Type: Trac – sort only Traction vehicles.

Type : Grav – sort only Gravity vehicles.

As you click on a sorting category, a number indicating the sort priority appears to the right of the category name. You can combine sort categories to define the sort even further. For instance, selecting Vehicle: Light, Type: Gravity, and Cost: Least to Most, in that order, will display only Light Gravity vehicles in ascending cost order. You can change the sort order anytime by clicking Reset Sort Order at the top of the category list.

Selling, Saving, and Removing Vehicles

Buying and configuring a vehicle to your exacting specifications is a several-step process. It can also take several missions to build the credit total required for configuring a vehicle a certain way. Once you have a vehicle configuration that you'd like to save for a future purchase, click on its name from the owned-vehicle list. Two options appear: Sell and Save. Sell decommissions the vehicle and returns it to the salvage pile. Save adds the vehicle to the stock-vehicle list. Once a vehicle has been added to

Figure 13 You can sort vehicles prior to selecting one for construction.

the stock vehicle list, it can be removed later. To do so, click the name of the vehicle from the stock vehicle list, then click Remove.

Naming an Owned Vehicle

From the owned-vehicle list, click on the name of the vehicle you want to rename. The current name of the vehicle appears above the component list (see Figure 14). Click on this name to open a textbox for renaming your vehicle.

Sorting Components

In the component upgrade area, you can sort the components in the list by the following categories:

Cost – sort in ascending order according to cost.

Type – sort by type of weapon (plasma, laser, ballistic, etc...)

Weight – sort in ascending order by weight.

Rating – sort in ascending order by offensive rating (see Component Specifications and Ratings on page 68).

Research Level – sort in ascending order by level of research required before weapon was added to the component list.

Components may be sorted by more than one category. Click on a sort category to select it. As each sort category is selected, a number indicating the sort priority appears to the right of the category name. To reset sort priorities, click Reset Sort Order at the top of the sort category list. When you are ready, click Sort to display the component list in the order you've determined.

Repairing Components

Your vehicles may incur damage while out on missions. If this is the case, when you return to the Vehicle Facility for the first time after a mission, you will be prompted to repair all of your vehicles provided you have sufficient credits. If you do not have enough credits to repair your entire fleet, you will not see this prompt, but this doesn't mean you

Figure 14 Click on the vehicle name above its component list to rename it.

can't repair individual vehicles or components.

To do so, click on the damaged vehicle from the owned-vehicle list. Operable components appear green in the wire-frame image of the vehicle. Damaged, but operable, components appear yellow, and inoperable components appear red. In its component list, you will see the cost for each component that requires repair. You will also see the condition of the component as a percentage. You repair a component much in the same way you upgrade one. Click on the component to repair to display a list of upgrade components. The currently-installed component appears with its cost to repair. Click it or a new component to install. Continue down the list of damaged components to repair them one at a time.

You can repair all components on a vehicle at once by clicking the Repair option once the vehicle's components are displayed (see Figure 16).

Reviewing Vehicles and Upgrading Components

To see the component list of a particular vehicle that you own, click on the vehicle name from the owned-vehicle list. The display shown in Figure 17 appears.

To the right of each component are its repair cost (in credits) and condition. Condition is shown as a percentage. Components fall into three categories: Systems, Hardpoints, and Internals. Pass your cursor over any component to display a category description below the component list.

For a detailed description of the individual component, click on it to display the component upgrade list (see Figure 18), then right-click on the installed component's name.

You can also upgrade a component in this area. The components that can replace the component you selected are listed at the top along with their upgrade cost. Use the scroll bar (if necessary) to view the entire

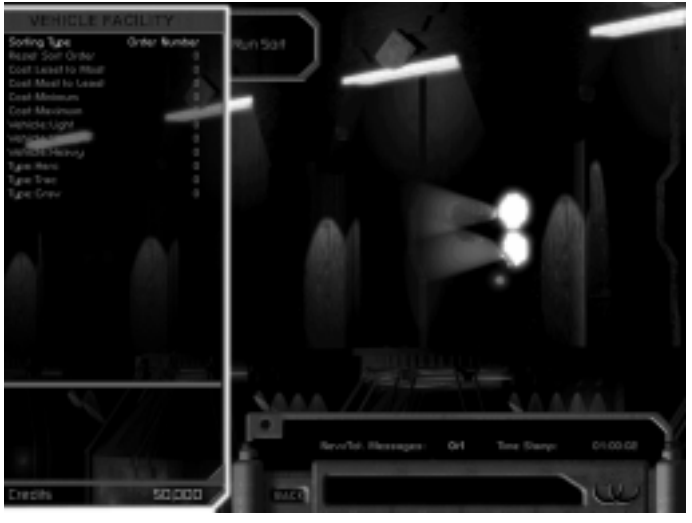


Figure 15 The Sort category display.

list. A negative cost means that the component is worth less than the component you already have installed. The installed component has a zero cost. On Hardpoint and Internal upgrade lists, you may also select Empty to leave that position on the vehicle open (perhaps as a weight consideration).

Note: Just because a weapon is less expensive doesn't mean it's less effective.

Component Specifications and Ratings

Pass your cursor over any component to display a spec list below the component list. You can also right-click on any component in the upgrade list to open a component description window. This window includes the component specs as well as its current condition, the considerations to take prior to purchasing, the component description, and general category information. A scroll bar along the right side of this window allows you to view text that extends beyond the window. All component description windows show System Weight and Technology Level specs of the component. Other specs vary depending on the component, as follows:

Armor

Armor protects all vehicle components. Damage to armor affects its ability to protect vehicle systems.

Damage Taken From – all seven weapon types are listed here to show how the armor protects against each one.

Drive

Drives convert energy into movement. Damage to drives reduces a vehicle's movement.

Vehicle Weight – shows the overall weight of the vehicle.

Reactor

Reactors provide power for all vehicle systems. Damage affects the reactor output.

Figure 16 You can repair components individually or all at once inside the Vehicle Facility.

Energy Provided – shows the amount of energy the reactor provides to the vehicle's systems. Don't overload your reactor or underpower your vehicle. Certain weapons or systems could become unavailable in combat, and/or you could affect the speed rating of your vehicle.

Power required by base systems – this is how much power is used by the required components.

Optimal power for all systems – this number should be less than or equal to the energy available number.

Note: The "power required" refers only to single shots fired by each weapon. If you have weapons mounted that have a high rate of fire, note that firing more than once may deplete the energy allocated to movement.

Shield

A Shield provides a protective barrier around the vehicle. Damage to the shield affects its rate of recharge.

Max. Shield Pool – the maximum shield strength when it is undamaged.

Recharge Rate – the amount of shield power restored to the Shield Level after each turn, assuming it is in perfect operating condition.

Refocus Rate – the rate at which a shield can re-solidify a downed shield side.

Shield Hardened? – hardened shields are designed to stop shield-penetrating weapons.

Shield EMP Resistant? – if a shield is EMP resistant, it uses layered shield technology to shunt the power of an EMP blast away from the primary shield.

Energy required per turn – the amount of reactor power that is automatically used to power the shields at full capacity.

Sensor

Sensors scan the general area around a vehicle for enemy presence. Damage to a sensor affects its range. A sensor's strength can be seen

in the number of cells that come into full view around the sensing vehicle.

Range Max. - the maximum number of cells of visibility a sensor offers.

Ability to sense over obstacles - the ability of a sensor to detect objects that are not in a direct line of sight. Specifically, this is the number of levels a sensor can "see" over.

Energy Required - the amount of reactor power that is required to power the sensor at full capacity.

Sensor Pod? - sensors equipped with sensor pods have a memory. In other words, any area previously covered, always remains in view whether it is within range or not.

Cloak Detection? - sensors with cloak detection allow the vehicle to detect cloaked units.

Computer

A targeting computer affects the vehicle's ability to target objects. Damage to the computer adversely affects the ability to target.

Targeting Bonus - this improves your chances of scoring a hit on a target.

Lock-On Bonus - this improves the effective line-of-sight percentage of a partially-obscured target.

Energy Required - the amount of reactor power that is required to power the targeting computer at full capacity.

Life Support

The life support system is designed to maintain optimal pilot condition at all times. Damage to this system affects its ability to heat the pilot or protect it from adverse planetary conditions.

Health per second - the number of Health points restored to the Bioderm per second.

Stability per second - the number of Stability points restored to the Bioderm per second.

Detox per second - the number of Toxin points deducted from the Bioderm per second.

Ejection? - some life support systems are equipped with ejection systems.

Shielded vs. Radiation? - some life support systems are especially shielded from radiation.

Energy Required - the amount of reactor power that is required to power the life support system at full capacity.

Hardpoints

Pay close attention to these specifications to help you build a smart vehicle package. Choose weapons that combine good shield and armor damage without overtaxing your reactor's or your pilot's capabilities. See *Data and Specifications*, beginning on page 47, for a detailed description of each weapon.

Figure 17 The list of components for an individual vehicle.

Offensive Rating – this is a ranking method for each weapon. The higher the offensive rating, the more potent the weapon.

Weapon Class – small, medium, large, and extra large.

Weapon Range – the total number of cells over which the weapon can fire.

Max. Ammo – the number of times the weapon can fire per turn.

Rate of Fire – the number of seconds per shot.

Damage vs. Shields – the damage a weapon inflicts on the facing shield side of a target. Some weapons spread damage around all eight facings of a target's shields.

Damage vs. Armor – the damage a weapon inflicts on a target's armor if allowed to strike the armor without first striking an obstructing shield.

Penetrating Damage – the amount of damage that can pass through an active shield face.

Skill Required – the Bioderm weapon skill category (e.g., Energy, Plasma, ELF) used in targeting and firing the weapon. Higher skill levels will increase the chance of hitting a target.

Energy Cost – the amount of reactor power that is required to power the weapon.

Area of Effect – some weapons will impact an area within a certain radius of the target.

Indirect Fire – weapons with indirect fire capabilities usually are self guided and automatically lock on to their targets.

Internals

Internal components range from mining and salvage equipment to shield and sensor amplifiers (plus a warehouse-load more). No statistics are displayed in the component upgrade area for internals, however the vehicle's upgrade ratings are displayed. See *Internal Device Specifications*, beginning on page 82, for a complete description of each internal component.

Figure 18 The component upgrade list.

Energy Cost – the amount of reactor power that is required to power the internal system.

Vehicle Ratings

Vehicle ratings appear in the lower left of most Vehicle Facility displays. When you pass your cursor over any owned-vehicle name, the vehicle's ratings are displayed. When you pass your cursor over any component while in the component upgrade area, the vehicle's potential ratings with that new component installed, as well as the vehicle's current ratings are displayed. Vehicle ratings are defined as follows:

Overall Percentage – this number only appears when you pass your cursor over the vehicle name in the owned-vehicle list. It is simply the current overall condition of your vehicle.

Speed Rating – this indicates how fast a vehicle is. The first number is the vehicle's current rating. The second number is the vehicle's potential rating. Each vehicle class has a different speed potential. Overdrive devices can modify speed ratings.

Offensive Rating – this indicates the vehicle's offensive capability – the ability to take out enemy targets. The rating will be higher with more powerful weapons locked into the vehicle's hardpoints.

Defensive Rating – this indicates the vehicle's defensive capability – the ability to protect itself. The rating will be higher with more powerful shield and armor, as well as shield amplifiers installed.

ECM Rating – this indicates the vehicle's Electronic Countermeasure capability. It is also a defensive rating. The rating will be higher with more powerful ECM internals installed.

Total Power – this indicates the vehicle's total power capability. It is basically a measurement of the installed reactor. The rating will be higher with a more powerful reactor installed.

Used Power – certain systems, weapons, and internal devices will draw energy from the reactor. This indicates the vehicle's draw on the

Figure 19 The Command Center - Main Menu.

available power. If Used Power is greater than Total Power, the vehicle will move more slowly.

Note: extra power is a smart tactic during turn-based play.

The Command Center

The Command Center is the operational focus for all of your missions. Several critical functions are performed inside the Command Center prior to and between missions. You will find frequent visits here to be beneficial to your fleet's performance and ultimate survival. Inside the Command Center you will:

Link - link Bioderms with vehicles. This is the only way a vehicle gets a pilot and is activated for missions.

Research - conduct weaponry and vehicle systems research in order to improve available components.

Mission Selection - select a mission.

Facility Management - upgrade your Hercbase facilities.

Corp Status Summary - this is to see how well you are faring in your campaign.

Linking Bioderms and Vehicles

Bioderms and vehicles are linked inside the Link area of the Command Center. Every vehicle needs a pilot in order to go into Active status and, subsequently, be mission ready. Pilots are listed in a column on the left; vehicles are listed in a column on the right. If there are more pilots or vehicles than can be displayed, a scroll bar appears that you can use to scroll either column. The Unit Status List in the center shows the Pilot-Vehicle pairings. Linked pairs can be Active or Reserve.

Figure 20 The Link area inside the Command Center.

You are allowed a certain number of active pairings depending on your rank, so you may see a Reserve status next to a pair that you want active. To change between Active and Reserve status, simply click on the Pilot-Vehicle pairing in the Unit Status List.

All unlinked pilots and vehicles have the text "Unlinked" under their images. To link an unlinked pilot and an unlinked vehicle, click on the pilot's image in the left column, then click on the vehicle's image in the right column. You will see the merger take place.

To link a pilot or vehicle that is already linked, you must first unlink them. Click on the pilot's or the vehicle's image to select the link. Then click Unlink in the bottom left of the display area.

Autolink

Autolink is the recommended linking method. It is an electronic matching system that pairs pilots with the vehicles to which they are best suited. A pilot with a high Ballistics rating will match to a vehicle equipped with ballistics weapons. A pilot with more experience or higher ranking will match to a more advanced vehicle.

Research

Research is the only way to discover new systems, weapons, and internal components to add to your component upgrade list. In the Research area, you must set a research budget that cannot exceed your Current Income (displayed in the lower left area). To adjust the budget for any system or weapon, click on the appropriate value and enter the new amount. The Research Budget appears just above the Current Income figure.

Individual component budgets can be set to Auto or Manual. An automatic setting means that your income will automatically be allocated to specified component research after each mission. A manual setting will allow you to allocate research funding from your credit total. Click on the Auto box to toggle between the two settings.

Figure 21 The Research area inside the Command Center.

Click Set All to set the research funding for all components to the same amount. You will be prompted enter the amount. Click Latest to see the latest research breakthroughs.

A description of weapons, systems and defense components is provided in the section called *Data and Specifications* on page 47.

Mission Selection

Click on Mission Selection inside the Command Center to set broad parameters for your next mission. The initial mission selection display lists General Missions along the left side. You can select a mission according to the corporation you wish to encounter, or according to the mission type: Mining, Exploration, or Patrol. Occasionally, a Special Mission will be available.

Selection By Mission Type

From the mission selection display, click on Mining, Exploration, or Patrol to conduct a specific mission type. (As missions are successfully completed, they are removed from the list.) You will be prompted to select a specific mission. Once you do, your options are to click Cancel to reject the mission and return to the mission selection display, or click Launch to head out.

Selection By Corporation

You will usually have two mission options when you select a corporation from the mission selection display: Scout or Attack Mining Site. Scouting missions are intended to determine the position of opposing forces. Attack missions need no description except to say that you'll be attacking a mining site and will most likely encounter mobile resistance. Once you complete a scouting mission, you will have access to advanced scouting missions and, eventually, attack missions.

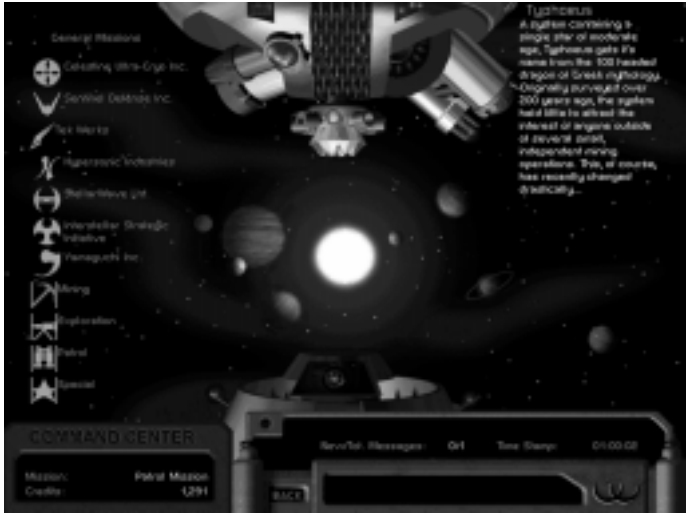


Figure 22 The Mission Selection display.

Mining

Mining missions are a good way to build a credit portfolio.

Exploration

These missions, when available, allow you to search for technological relics from an ancient civilization.

Patrol

Patrol missions are quick sorties outside of your base's perimeter to maintain an extended ring of security.

Special

Special is a good euphemism for dangerous. Special missions always involve combat, whether offensive or defensive. These are assigned randomly so you'd better be ready at any time. Turning one down doesn't make happy campers out of corporate brass.

Facility Management

Your Hercbase must be capable of self-defense in the event of an attack by an opposing corporation's forces. Your base is equipped with eight turret pads, the Bioderm Facility, the Vehicle Facility, the Command Center, and the Launch Pad. The higher the rating of each facility, the better it performs.

Maintaining your base facilities is easy -- all it takes is money. Click on Facility Management from inside the Command Center or click any of the turrets on the Hercbase screen. Building Type: Level X appears under the name of each facility. Select a facility to upgrade, then click on this text. You will either be prompted to approve the upgrade, or you'll face the humiliation of being told you can't afford it.

It's important to build turrets as soon as you have enough credits, especially if your corporation doesn't equip its bases with any at the beginning. Your base can come under attack at any time without warning. Be prepared!

Figure 23 The Mission Debriefing display.

Each facility type has a building type that ranges from None to 5. All can be upgraded if you're willing to lay down the credits.

Corporate Status Summary

You'll want to glimpse the strength of your corporation relative to the other seven. In this area of the Command Center, you can compare yourself by Net Worth, Income, Technology, and Strength and see how you rank. The rankings change as the missions evolve.

Using E-mail

The message area in the lower right section of most screens is how your corporation communicates with you. Check your messages often for information on upgrades to all components and all facilities.

New/Tot. Messages indicates whether you have unread/read mail. To check messages, click the small infrared port on the upper left area of the message display. A list of messages appears. Click on any one to read the contents of the message. Use the Delete, List, Prev(ious) and Next options at the top of the message display to manage your inbox.

Note: To empty all e-mail messages, hold the Shift key down while selecting the Delete option.

Mission Scenarios

Pre-Launch

You've constructed vehicles that are appropriate to the mission, manufactured Bioderms to pilot them, and linked them for active duty. You've implemented a budget that will research for more effective weapons and systems while you're away from the Hercbase. Now it's time to make your corporation proud. Once you confirm the launch proceeding you will find yourself immediately transported to hostile territory. Be prepared.

Figure 24 The Facility Management display.

The Mission Screen

Note: To display a menu, click the small tab that extends into the left lower edge of the mission display.

The mission screen is your mission control center. You will conduct all fleet maneuvers from this vantage point. These maneuvers include vehicle movement and enemy interactions, systems and weapons selection and firing, geological studies, and pilot maintenance.

Scrolling the Operations Display

A Mission Briefing in the message display gives you some idea of where to go – at least in the early missions. Later on, your instinct will guide you. For those directionally challenged individuals, North is always straight up. You can scroll the operations display in any direction by placing your cursor at any edge of the mission screen (not at the edges of the operations display). A quick way to reposition the operations display view is through the Mini-Map display.

Mini-Map Display

The Mini-Map at the upper left corner of the mission screen gives you up to a worldwide view of the operations display. The zoom buttons increase and decrease the number of cells that appear in the operations display. The area within view of the operations display is represented by the white rectangle inside the Mini-Map display. You can zoom out to include all of the world within the rectangular view boundary. This is useful for navigating over long distances or for tracking vehicles in different areas of the map. If you need to read the serial number off an enemy Herc's chassis, zoom in to include an area only four cells wide.

Click and drag the white rectangle around the Mini-Map to quickly scroll your view. The entire Mini-Map area will scroll if you hold the rectangle up against the edge of the Mini-Map area. Or click anywhere inside the Mini-Map area to "jump" your view to that area.

Figure 25 The mail message window.

Changing the Mini-Map Display

Use the Battle menu to change the zoom level of the Mini-Map display to one of three views.

View Cell Characteristics

On most missions, cells that have not been previously exposed by any of your vehicle's sensors will only appear black. On certain patrol missions, the geology of all cells in the world may be exposed at the start of the mission, although only your vehicle's sensors will reveal other critically important information.

Right-click on any exposed cell to reveal its geological makeup, the movement cost to enter that cell, the height of the cell, and other brief information regarding navigation into the cell. This information, along with the cell's coordinates, is displayed in the General Status Display area along the left edge of the mission screen. Movement Cost is listed for Hercs, Traction vehicles, and Gravity vehicles. This is the cost, as a percentage of available power, required by the vehicle's reactor to navigate into this cell.

Cell coordinates start at 0,0 for the upper leftmost (Northwest) corner cell. These coordinates provide a relative position to objects in the mission zone that may not yet be revealed by your vehicle's sensors.

Cells located at an advantage or disadvantage point will include offensive and defensive bonus and penalty information. If the cell would position your vehicle at a defensive disadvantage, a negative number appears as a bonus that enemies have to hit you. If the cell positions your vehicle at an offensive advantage, a positive number appears as a percentage increase for your chance to hit.

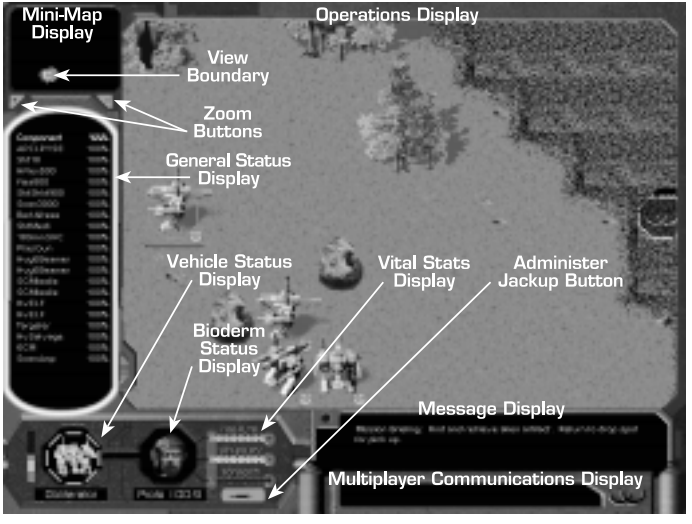


Figure 26 The Mission Screen.

Enemy Markers

Enemy marker cells should be avoided. They can only be detected if you have a vehicle that is equipped with a mine scanner. A colored border around the cell indicates markers, but sometimes they blend in with the terrain, so be careful. Most enemy-marked cells contain mines.

Note: A differently colored cell border indicates Friendly markers.

Operational Maneuvers

Selecting and Moving a Vehicle

To select a vehicle for maneuvering, position your cursor over it and, when the cursor changes to this ⇩ , left-click once. Use the › and ‹ keys to toggle through all of your vehicles. Hold down the Shift key and click on multiple vehicles to select more than one at a time, or click and hold (the mouse button) on the first vehicle, then drag the cursor to capture other vehicles on the screen. A green octagon appears around a selected vehicle. A color-coded status bar appears just below a selected vehicle. A green status bar means all systems are functional; a yellow status bar indicates that some components are only partially functional; a red status bar indicates that certain components are inoperable and the vehicle is in danger of total destruction.

To move a vehicle, simply left-click on the destination cell. If multiple vehicles are selected, they will attempt to maneuver as close to the single destination cell as possible. Vehicles attempt to avoid one another when their paths cross. When this happens, the trailing vehicle will stop to allow the lead vehicle to pass.

Vehicle Formations

Intelligent operational tactics involve organized forces. You may gain this intelligence with experience, however some preset formations are at your fingertips for quick alignment. The preset formations are de-

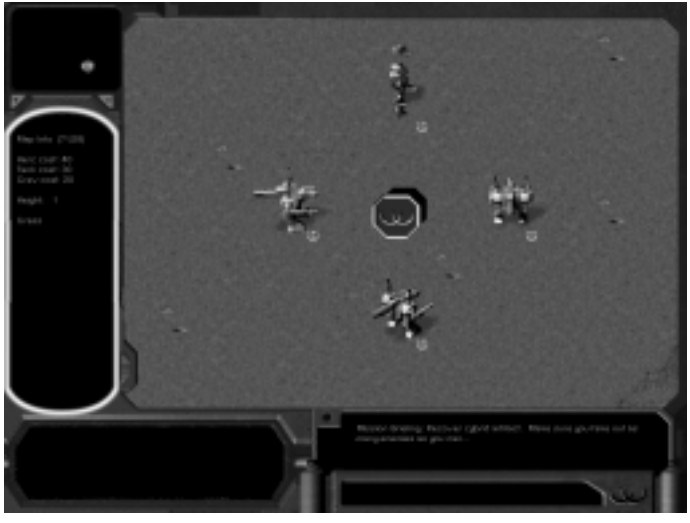


Figure 27 Cell characteristics are displayed when you right-click on an exposed cell.

picted in Figure 28 A-D.

To set formations, select all of the vehicles (Shift-click or click and drag), then press the F key. From the pop-up menu select the appropriate formation.

Targeting and Firing

Targeting and firing vary according to one of three firing modes:

Manual

This mode requires that you manually select each target and manually fire your weapon(s). To manually target an enemy vehicle, emplacement, or facility, first select the offensive vehicle(s), then pass your cursor over the target. When the cursor changes to this , left click once to target. The cursor will change to this once you pass it over a selected target. Left click a second time to fire a round from the weapon located in the first hardpoint of each selected offensive vehicle. Each click on a targeted enemy results in the next available weapon being fired from each selected offensive vehicle. If a weapon is recharging or if no more ammunition is available, then your selected vehicle will not fire.

In manual firing mode, you can select which weapon to fire. If only one offensive vehicle is selected, selecting a target will automatically display your vehicle's weapons in the General Status Display area. If multiple offensive vehicles are selected, selecting a target will display the first vehicle's weapon list. A green weapon status display means it is available to fire. A red weapon status display means that it is either out of ammunition or is recharging. If it is recharging, the yellow indicator bar across the top of the weapon status display shows how long

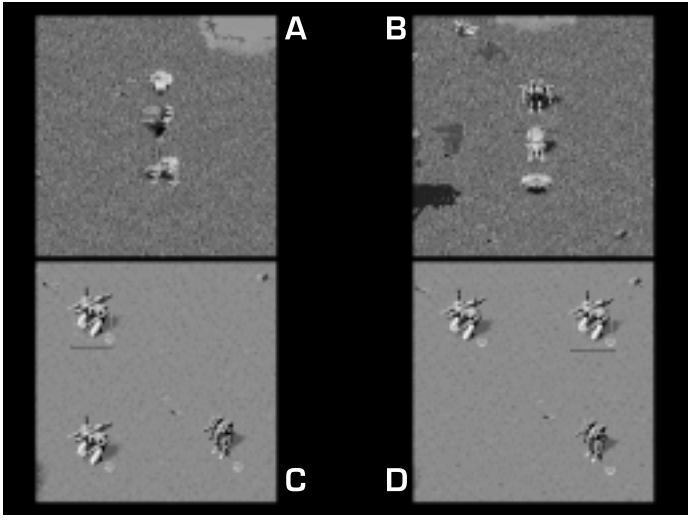


Figure 28 A: Line Abreast; B: Line Deep; C: Wedge; D: Inverted Wedge

before the weapon is fully recharged.

Click on a green weapon status display to fire that weapon.

Auto-Fire at Selected Target

This mode requires only that you manually select a target. Once a target is selected, your vehicle(s) will automatically fire upon it when within range.

Auto-Fire at Best Target

This mode requires no manual selection of targets or firing. Vehicle movement is your only responsibility.

Your vehicle must be within range of an enemy vehicle in order to fire upon it in any mode.

To quickly change firing modes, press the 0 key to display a pop-up menu, then select your firing mode.

Target Status

A color-coded wire-frame image of the target appears below the weapons list (see Figure 29). Green means the component is operable, yellow means it is slightly damaged, and red means it is inoperable. The target type and range (in cells) appear below the wire-frame image. Red bars over the wire-frame image indicate obstructions between your offensive vehicle and the target. The eight sides of the green octagon around the wire-frame image each represent a shield facing.

Mine Laying

Certain internal components have been developed for mine-laying operations. Once a vehicle is equipped with a minelayer, the actual process requires a manual procedure. The internal components status must first be displayed.

First, position your minelayer vehicle over the cell where you plan to lay a mine. Then click on its wire-frame image in the vehicle status

display to reveal the component list (or use the appropriate hot key, Shift - 1 through 4). Click on any internal component to reveal the internal components status display. Finally, click on the minelayer component status indicator to set the mine (or click Shift - 1 through 4 again). A marker appears over that cell, similar to an enemy marker flag.

Ore Extraction

Several internal components are designed for mining operations in the ore-rich terrain of certain Typhoeus planets. See the section, *Data and Specifications* on page 47 for specifics on each mining device. If a vehicle is equipped with a salvage device, then moving the vehicle over a cell containing an ore deposit will automatically initiate the extraction procedure.

Experience will teach you to visually survey a cell for ore, however, you can right click on any cell to determine its geological makeup.

Salvaging

Destroyed vehicles, enemy and friendly, can be salvaged for valuable credits when you return to the Hercbase. Ore can also be mined with a salvage device. You can equip most of your vehicles with a salvage device as an internal component. Salvage devices vary in how much they can recycle from a pile of debris. See the section on *Data and Specifications* on page 47 for specifics on salvage devices.

Salvage and mining work the same way. Simply stop your vehicle over the cell where the salvaging is to occur.

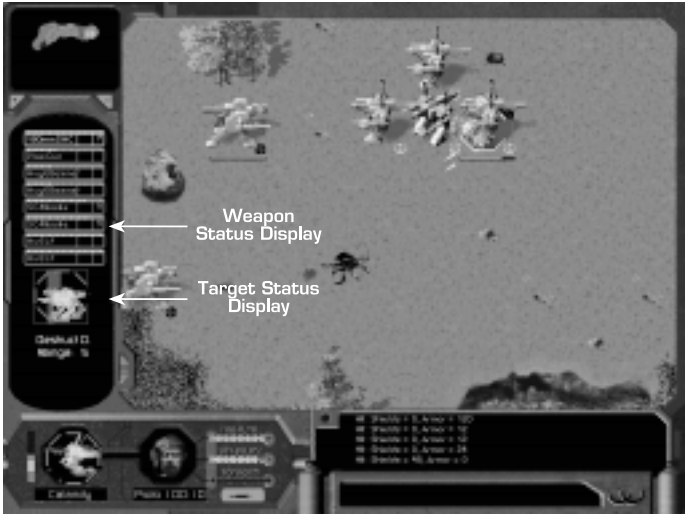


Figure 29 The General Status Display converts to a weapons list when a target is selected.

General Status Display

The General Status Display is a window into your mission operations. Several displays appear here, some of which have already been discussed (Cell Characteristics, Weapons Status, and Target Status). A list of all the vehicle's components appears when you click on the vehicle in the vehicle status display (see Figure 30). The status of the component is listed as a percentage in the right column. The figure to the right of

the vehicle type's name indicates the overall status of the vehicle. Right-click on any component to open a window that describes the component. This is the same component description that is accessible from inside the Vehicle Facility (see page 26).

Internals Status

Click on any internal component to reveal an internals status display (see Figure 31). This display indicates whether the internal component is on or off, and whether it is recharged and available for use. Most internal components can be manually deactivated from this display if they are no longer needed or if you need to conserve energy. To do so, click on the individual component in this display. The active indicator (ON, READY) will change to OFF.

Figure 30 The vehicle's components listed.

Bioderm Status

It's easy to pay attention only to your vehicle's conditions and forget about your pilot's during the heat of battle. This mistake can be fatal and costly. The first indicator of your pilot's status is its image that appears at the bottom of the mission screen. The Health, Stability, and Toxin meters are backup indicators. Click on the pilot's image to reveal a detailed status list (see Figure 33).

A healthy Bioderm will appear just as it did when you manufactured it. As its vehicle takes hits, or as it spends time in hostile atmospheres with substandard life support systems, it will begin to degenerate. The transparent coloration on a Bioderm's face isn't some romantic afterglow – it's dying. Jackup temporarily increases a Bioderm's skill ratings, but it does have one side effect – it increases toxins. So use it sparingly. One click on the Jackup Injection button administers enough of a dosage to increase skill ratings by 5% each, while increasing the toxin level by 5%. Once a Bioderm's toxin level reaches 50%, its behavior becomes unpredictable.

The detailed Bioderm status list includes all of its potential and current skill ratings, as well as its age, learning, discipline, and command

Figure 31 All internal components are displayed when you click on a component list entry.

Figure 32 The pilot's image indicates its health, as do the health, stability, and toxin meters.

levels. The Health, Stability, and Detox rates in this list improve these ratings for the Bioderm (negative numbers decrease this ratings). Rates are increased with experience.

The condition of the Bioderm's life support system is listed here, as is the rating of the damage to the Bioderm that is caused by the outside atmosphere.

Vehicle Status Display

More than one vehicle can be selected at the same time for maneuvers. A small wire-frame icon of each selected vehicle appears in the Vehicle Status Display (see Figure 26). Click on any image to see a list of that vehicle's components in the General Status Display.

The name of the vehicle appears below its wire-frame image. The eight sides of the green octagon around the vehicle represent the eight

shield facings. The multi-colored meter to the left of the wire-frame image represents the power consumption of the vehicle's reactor.

Messages

Logistical information is displayed in the message window during a mission. If the list of messages is longer than the display area, click on the infrared port at the upper left corner of the message display to see more.

Figure 33 Click on the pilot's image to reveal details of its status.

Views

As discussed earlier in this section, the Mini-Map can be used to quickly move around the mission area. Placing your cursor at the edges of the screen can also scroll the operations display. Use the + and – zoom buttons below the Mini-Map to zoom in and out, or use the plus and minus keys on your keypad. For even more fine-tuned viewing, you can preset eight different views and return to those views with a shortcut command.

To preset a view, manually create the view in the operations display. Then press Shift + G on your keyboard and click on an available preset slot when the pop-up menu appears. To return to a preset view, press V on the keyboard and click on the preset view from the pop-up menu to recall it.

Simulation Preferences

There are six Preference tabs which allow you to customize *Cyberstorm 2*: General, Terrain, Battle, Windows, campaign, and Multiplayer. Open the Preferences dialog box by pressing Ctrl + P on your keyboard, then click on one of the tabs at the top of the dialog box to adjust the settings.

All settings within the Preferences dialog box are adjusted via checkbox, drop-down menu, slider bar, or by typing in a textbox. Checkboxes are clicked on to display or remove a checkmark. Drop-down menus are used by clicking the down arrow button to display the menu, then

Figure 34 The Vehicle Status Display.

selecting the choice from the menu. Slider bars are adjusted by clicking and holding on the slider button to drag it either left or right. Type inside of textboxes by simply clicking once inside them, then entering your text.

General Tab

Sound Occurrences & Sound Volumes

Sound Effects – slider bar sets the quantity and volume of sound effects played throughout the game.

Music – slider bar sets the quantity and volume of background music heard in the game.

Voice – slider bar sets the quantity and volume of voice playback.

Hercbase Ambient Animation

Determines the quantity of animation at the Hercbase (inside the Bioderm Facility, Vehicle Facility, etc.); fewer animations will speed the game.

Play Intro & Play Movies – checkbox toggles the introductory movie and the short transitional movies that appear between certain sites on the Hercbase.

Misc.

Extreme Confirmation – if you're the type who means what he says and doesn't want his computer questioning his every move, make sure there's no check mark in this box. Otherwise, to be safe, have the computer confirm your selections at certain points around the Hercbase.

Extreme Information – if you believe that information is power, make sure there's a checkmark in this box. This controls the amount of game information you will receive during play.

Terrain Tab

Visual Detail

These sliders set the amount of visual detail, whether zoomed in or out, while in the field during missions. Lower detail settings will increase game speed.

Scrolling Speed

These slider bars determine how quickly the operations display scrolls when you place your cursor at the edges of the screen (Auto) or when you use the arrow keys on your keyboard (Manual).

Tactical Overlays

These are the Corporate Identification labels that appear with each vehicle in the operations display.

Outline places a small colored outline around the vehicle. Colored Box places a very small colored box above the vehicle. Large Icon places a large Corporation logo at the base of the vehicle. Small Icon... figure it out. Lights place colored lights on the vehicle. Candy Coating "paints" your vehicles in the Corporation colors.

Outline Grid? - when a check appears next to this box, all of the cells visible in the operations display are outlined with a grid.

Battle Tab

Speed

Adjust the slider bars to change the movement and firing speeds, as well as the speed with which the shields regenerate.

Boost

Adjust these sliders to change the shield power, weapon power, sensor range, and reactor power.

Game Style

Select one of three modes: Real Time, Simultaneous Turns, or Turn Based.

Turn Speed

Set the time limit for each turn. This applies to Turn Based play only.

Misc.

The Fog of War sets the visibility limits outside of your sensors' range.

Windows Tab

Display

Set the overall display to one of six different options. Your monitor must support the selected option.

All of the other options on this screen will affect the performance of the simulation depending on the speed of your CPU.

Campaign Tab

Difficulty

This sets the general difficulty level of the simulation. The more difficult the setting, the more tactical precision that is required on your part.

Enemy Behavior

Set the aggressiveness level and the financial attitude of the enemy.

Misc

Default Battle Orders will determine the default setting for firing upon enemy targets.

Multiplayer Tab

Place the cursor inside any of these 10 taunt boxes and type a short message. Use the shortcut Taunt menu (Ctrl + T) to send the message while in a multiplayer game.

Data and Specifications

Each vehicle and component serves a specific purpose in the development of your corporate fleet. This section describes the characteristics of every component to help you maintain and assemble the finest force in the galaxy. Each subsection shows a data chart followed by a legend that describes the column headings in each chart.

Corporation Data

This chart explains the technology levels of each corporation for both single player and multiplayer missions at each of the 10 Force Values. The first row of each corporation is what they start with in single player campaigns. The remaining rows show multiplayer levels.

			Research Levels:																Facility Levels (quickstart base missions):									
Level	Credits	Rank	Sys: Drives	Sys: Reactors	Sys: Life Supt.	Sys: Computers	Sys: Sensors	Sys: Internals	Def: Armor	Def: Shields	Weap: Ballistic	Weap: Plasma	Weap: Missile	Weap: Energy	Weap: Advanced	Weap: ELF	Weap: Particle	Cmd. Center	Bioderm Fac.	Vehicle Fac.	Launch Pad	Turret № 1	Turret № 2	Turret № 3	Turret № 4	Turret № 5	Turret № 6	Turret № 7	Turret № 8
	CUC:																											
1	300,000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	0	0	0	0	0	0	0
2	520,000	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	1	1	0	0	0	0
3	900,000	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	0	0	2	2	1	0	0	1
4	1,400,000	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	1	1	2	2	1	0	0	1
5	2,250,000	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	3	3	3	3	1	1	2	2	2	1	1	2
6	3,300,000	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	3	3	3	3	2	2	2	2	2	1	1	2
7	4,750,000	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	4	3	3	4	2	2	3	3	2	2	2	2
8	6,500,000	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	4	4	4	4	2	2	3	3	3	2	2	3
9	8,900,000	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	4	4	4	4	3	3	4	4	3	3	3	3
10	11,700,000	10	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	5	4	4	5	3	3	4	4	4	3	3	4
	Unitech:																											
1	200,000	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	2	2	2	3	0	0	1	1	1	0	0	1
2	360,000	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	3	3	3	3	1	1	2	2	1	1	1	1
3	630,000	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	3	3	4	2	2	2	2	2	1	1	2
4	990,000	4	4	4	4	4	4	6	6	6	4	4	4	4	4	4	4	4	3	4	4	2	2	3	3	3	2	2	3
5	1,600,000	5	5	5	5	5	5	8	8	8	5	5	5	5	5	5	5	4	4	4	4	3	3	3	3	3	3	3	3
6	2,500,000	6	6	6	6	6	6	9	9	9	6	6	6	6	6	6	6	4	4	4	5	3	3	4	4	4	3	3	4
7	3,750,000	7	7	7	7	7	7	11	11	11	7	7	7	7	7	7	7	5	4	4	5	4	4	4	4	4	4	4	4
8	5,300,000	8	9	9	9	9	9	12	12	12	8	8	8	8	8	8	8	5	4	5	5	4	4	5	5	5	4	4	5
9	7,400,000	9	11	11	11	11	11	14	14	14	9	9	9	9	9	9	9	5	5	5	5	5	5	5	5	5	4	4	5
10	9,900,000	10	13	13	13	13	13	16	16	16	10	10	10	10	10	10	10	5	5	5	5	5	5	5	5	5	5	5	5

			Research Levels:																Facility Levels (quickstart base missions):										
Level	Credits	Rank	Sys: Drives	Sys: Reactors	Sys: Life Supt.	Sys: Computers	Sys: Sensors	Sys: Internals	Def: Armor	Def: Shields	Weap: Ballistic	Weap: Plasma	Weap: Missile	Weap: Energy	Weap: Advanced	Weap: ELF	Weap: Particle	Cmnd. Center	Bioderm Fac.	Vehicle Fac.	Launch Pad	Turret № 1	Turret № 2	Turret № 3	Turret № 4	Turret № 5	Turret № 6	Turret № 7	Turret № 8
	Sentinel:																												
1	200,000	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	3	1	0	0	0	0	0	0	0	0
2	360,000	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2	1	3	2	1	1	2	2	1	1	1	1
3	630,000	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	2	2	3	2	2	2	2	2	2	1	1	2
4	990,000	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6	6	3	3	3	2	2	2	3	3	3	2	2	3
5	1,600,000	5	5	5	5	5	5	5	5	5	8	8	8	8	8	8	8	3	3	3	3	3	3	3	3	3	3	3	3
6	2,500,000	6	6	6	6	6	6	6	6	6	9	9	9	9	9	9	9	3	3	4	3	3	3	4	4	4	3	3	4
7	3,750,000	7	7	7	7	7	7	7	7	7	11	11	11	11	11	11	11	3	3	4	4	4	4	4	4	4	4	4	4
8	5,300,000	8	8	8	8	8	8	8	8	8	12	12	12	12	12	12	12	4	3	4	4	4	4	5	5	5	4	4	5
9	7,400,000	9	9	9	9	9	9	9	9	9	14	14	14	14	14	14	14	4	4	4	4	5	5	5	5	5	4	4	5
10	9,900,000	10	10	10	10	10	10	10	10	10	16	16	16	16	16	16	16	4	4	5	4	5	5	5	5	5	5	5	5
	TekWerks:																												
1	165,000	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	1	1	1	0	0	0	0	0	0	0	0
2	260,000	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	0	0	1	1	0	0	0	0
3	540,000	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	2	2	2	0	0	1	1	1	0	0	1
4	910,000	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	3	2	2	2	1	1	1	1	1	1	1	1
5	1,300,000	5	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	3	3	3	3	1	1	2	2	1	1	1	1
6	2,000,000	6	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	3	3	3	3	1	1	2	2	2	1	1	2
7	3,000,000	7	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	3	3	3	3	2	2	2	2	2	2	2	2
8	4,300,000	8	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	4	4	4	4	2	2	3	3	3	2	2	3
9	6,200,000	9	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	4	4	4	4	3	3	3	3	3	3	3	3
10	8,600,000	10	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	4	4	4	4	3	3	4	4	3	3	3	3

Corporation Data (continued)

Level	Credits	Rank	Research Levels: Sys: Drives	Sys: Reactors	Sys: Life Supt.	Sys: Computers	Sys: Sensors	Sys: Internals	Def: Armor	Def: Shields	Weap: Ballistic	Weap: Plasma	Weap: Missile	Weap: Energy	Weap: Advanced	Weap: ELF	Weap: Particle	Cmd. Center	Facility Levels (quickstart base missions): Biodenn Fac.	Vehicle Fac.	Launch Pad	Turret № 1	Turret № 2	Turret № 3	Turret № 4	Turret № 5	Turret № 6	Turret № 7	Turret № 8
	HyperSonic:																												
1	200,000	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0
2	360,000	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	1	1	0	0	0	0
3	630,000	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	3	2	2	2	2	0	0	1	1	1	0	0	1
4	990,000	4	4	4	4	6	6	6	4	4	4	4	4	4	4	4	4	3	3	3	3	1	1	1	1	1	1	1	1
5	1,600,000	5	6	6	6	8	8	8	6	6	6	6	6	6	6	6	6	3	3	3	3	1	1	2	2	1	1	1	1
6	2,500,000	6	7	7	7	9	9	9	7	7	7	7	7	7	7	7	7	3	3	3	3	1	1	2	2	2	1	1	2
7	3,750,000	7	8	8	8	11	11	11	8	8	8	8	8	8	8	8	8	3	3	3	3	2	2	2	2	2	2	2	2
8	5,300,000	8	10	10	10	12	12	12	10	10	10	10	10	10	10	10	10	4	4	4	4	2	2	3	3	3	2	2	3
9	7,400,000	9	11	11	11	14	14	14	11	11	11	11	11	11	11	11	11	4	4	4	4	3	3	3	3	3	3	3	3
10	9,900,000	10	12	12	12	16	16	16	12	12	12	12	12	12	12	13	12	4	4	4	4	3	3	4	4	3	3	3	3
	StellarWave:																												
1	250,000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0
2	410,000	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	0	0	1	1	0	0	0	0
3	700,000	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	0	0	1	1	1	0	0	1
4	1,125,000	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	2	1	1	1	1	1	1	1	1
5	1,800,000	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	3	3	3	3	1	1	2	2	1	1	1	1
6	2,800,000	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	3	3	3	4	1	1	2	2	2	1	1	2
7	4,000,000	7	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	4	3	3	4	2	2	2	2	2	2	2	2
8	5,500,000	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	4	3	4	4	2	2	3	3	3	2	2	3
9	7,800,000	9	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	4	4	4	4	3	3	3	3	3	3	3	3
10	10,350,000	10	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	4	4	4	4	3	3	4	4	3	3	3	3

			Research Levels:																Facility Levels (quickstart base missions):									
Level	Credits	Rank	Sys: Drives	Sys: Reactors	Sys: Life Supt.	Sys: Computers	Sys: Sensors	Sys: Internals	Def: Armor	Def: Shields	Weap: Ballistic	Weap: Plasma	Weap: Missile	Weap: Energy	Weap: Advanced	Weap: ELF	Weap: Particle	Cmnd. Center	Bioderm Fac.	Vehicle Fac.	Launch Pad	Turret № 1	Turret № 2	Turret № 3	Turret № 4	Turret № 5	Turret № 6	Turret № 7	Turret № 8
	ISI:																												
1	200,000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0
2	360,000	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	1	1	0	0	0	0
3	630,000	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	3	0	0	1	1	1	0	0	1
4	990,000	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	3	3	1	1	1	1	1	1	1	1
5	1,600,000	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	3	3	3	3	1	1	2	2	1	1	1	1
6	2,500,000	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	3	3	3	3	1	1	2	2	2	1	1	2
7	3,750,000	7	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	3	3	3	3	2	2	2	2	2	2	2	2
8	5,300,000	8	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	4	4	4	4	2	2	3	3	3	2	2	3
9	7,400,000	9	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	4	4	4	4	3	3	3	3	3	3	3	3
10	9,900,000	10	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	4	4	4	4	3	3	4	4	3	3	3	3
	Yamaguchi:																												
1	200,000	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	0	0	0	0	0	0	0	0
2	360,000	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	4	1	2	0	0	1	1	0	0	0	0
3	630,000	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	2	4	2	2	0	0	1	1	1	0	0	1
4	990,000	4	4	4	6	4	4	4	4	4	5	5	5	5	5	5	5	2	4	2	3	1	1	1	1	1	1	1	1
5	1,600,000	5	6	6	8	6	6	6	6	6	7	7	7	7	7	7	7	2	4	3	3	1	1	2	2	1	1	1	1
6	2,500,000	6	7	7	9	7	7	7	7	7	8	8	8	8	8	8	8	3	5	3	3	1	1	2	2	2	1	1	2
7	3,750,000	7	8	8	11	8	8	8	8	8	10	10	10	10	10	10	10	3	5	3	3	2	2	2	2	2	2	2	2
8	5,300,000	8	10	10	12	10	10	10	10	10	11	11	11	11	11	11	11	4	5	4	4	2	2	3	3	3	2	2	3
9	7,400,000	9	11	11	14	11	11	11	11	11	12	12	12	12	12	12	12	4	5	4	4	3	3	3	3	3	3	3	3
10	9,900,000	10	12	12	16	12	12	12	12	12	13	13	13	13	13	13	13	4	5	4	4	3	3	4	4	3	3	3	3

Armor Specifications

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Juggernaut	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre
Standard 5cm	1	10	1,000	250	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Standard 11cm	1	10	2,200	550	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Standard 18cm	1	10	3,600	900	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Std-AB Coated 5cm	2	10	2,000	313	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Std-AB Coated 11cm	2	10	4,400	688	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Std-AB Coated 18cm	2	10	7,200	1,125	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Std-Assault 18cm	2	10	4,500	900	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Trinnium 4cm	3	10	1,600	180	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Trinnium 10cm	3	10	4,000	450	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Trinnium 17cm	3	10	6,800	765	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Trinnium-AB 5cm	4	10	4,000	281	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Trinnium-AB 11cm	4	10	8,800	619	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Trinnium-AB 18cm	4	10	14,400	1,013	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Trinnium-TD 11cm	4	10	8,800	619	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Trinnium-Assault 18cm	4	10	9,000	810	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Trinnium-TD 18cm	4	10	14,400	1,013	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Trinnium-TD 5cm	5	10	4,000	281	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Trinnium-Assault 13cm	5	10	6,500	585	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Trinnum-Assault 22cm	5	10	11,000	990	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Didrate 12cm	6	10	7,200	660	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Didrate 18cm	6	10	10,800	990	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Trinnium-Assault 28cm	6	10	14,000	1,260	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Trinnium-AB 28cm	6	10	22,400	1,575	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Chassis Availability: Which units can mount this component.

Full Name	Eff. to Front	Eff. to Sides	Eff. to Rear	Defl. 100%	Defl. 0%	Subt. 100%	Subt. 0%	Eff. vs. Energy	Eff. vs. Adv. Tech.	Eff. vs. Particle	Eff. vs. ELF	Eff. vs. Missile	Eff. vs. Plasma	Eff. vs. Ballistic	Eff. vs. Explosive	Armor Thickness	Armor Type	Armor Coating	Armor Rating
Standard 5cm	100	100	100	5	1	0	0	100	100	100	100	100	100	100	100	5	STD	none	13
Standard 11cm	100	100	100	11	2.2	0	0	100	100	100	100	100	100	100	100	11	STD	none	29
Standard 18cm	100	100	100	18	3.6	0	0	100	100	100	100	100	100	100	100	18	STD	none	48
Std-AB Coated 5cm	100	100	100	5	1	0	0	100	100	100	100	50	100	50	50	5	STD	AB	27
Std-AB Coated 11cm	100	100	100	11	2.2	0	0	100	100	100	100	50	100	50	50	11	STD	AB	59
Std-AB Coated 18cm	100	100	100	18	3.6	0	0	100	100	100	100	50	100	50	50	18	STD	AB	96
Std-Assault 18cm	60	100	150	18	3.6	0	0	100	100	100	100	100	100	100	100	18	STD	Ass	60
Trinnium 4cm	100	100	100	5.2	1.3	0	0	100	100	100	100	75	100	75	75	4	TRN	none	21
Trinnium 10cm	100	100	100	13	3.25	0	0	100	100	100	100	75	100	75	75	10	TRN	none	53
Trinnium 17cm	100	100	100	22.1	5.525	0	0	100	100	100	100	75	100	75	75	17	TRN	none	91
Trinnium-AB 5cm	100	100	100	6.5	1.625	0	0	100	100	100	100	38	100	38	38	5	TRN	AB	53
Trinnium-AB 11cm	100	100	100	14.3	3.575	0	0	100	100	100	100	38	100	38	38	11	TRN	AB	117
Trinnium-AB 18cm	100	100	100	23.4	5.85	0	0	100	100	100	100	38	100	38	38	18	TRN	AB	192
Trinnium-TD 11cm	100	100	100	14.3	3.575	0	0	50	100	100	100	75	50	75	75	11	TRN	TD	117
Trinnium-Assault 18cm	60	100	150	23.4	5.85	0	0	100	100	100	100	75	100	75	75	18	TRN	Ass	120
Trinnium-TD 18cm	100	100	100	23.4	5.85	0	0	50	100	100	100	75	50	75	75	18	TRN	TD	192
Trinnium-TD 5cm	100	100	100	6.5	1.625	0	0	50	100	100	100	75	50	75	75	5	TRN	TD	53
Trinnium-Assault 13cm	60	100	150	16.9	4.225	0	0	100	100	100	100	75	100	75	75	13	TRN	Ass	87
Trinnum-Assault 22cm	60	100	150	28.6	7.15	0	0	100	100	100	100	75	100	75	75	22	TRN	Ass	147
Didrate 12cm	100	100	100	18	5.4	1.2	0.36	75	100	100	100	100	75	100	100	12	DID	none	96
Didrate 18cm	100	100	100	27	8.1	1.8	0.54	75	100	100	100	100	75	100	100	18	DID	none	144
Trinnium-Assault 28cm	60	100	150	36.4	9.1	0	0	100	100	100	100	75	100	75	75	28	TRN	Ass	187
Trinnium-AB 28cm	100	100	100	36.4	9.1	0	0	100	100	100	100	38	100	38	38	28	TRN	AB	299

Eff. to Front: The percentage of damage that is passed through on shots from the front. Eff. to Sides: The percentage of damage that is passed through on shots from the sides. Eff. to Rear: The percentage of damage that is passed through on shots from the rear. Defl. 100%, 0%: The percentage removed from overall damage when armor is at full strength and minimal strength, respectively. Subt. 100%, 0%: Damage points removed from subhit damage when armor is at full strength and minimal strength, respectively. Eff. vs. Energy, Adv. Tech., Particle, etc.: The percentage of damage that is passed through on hits from enemy weapons, by type. Armor Thickness: Armor thickness in centimeters. Armor Type: Material used in armor. Armor Coating: Type of coating applied to armor. Armor Rating: Relative effectiveness of armor based on type, coating and thickness.

Armor Specifications (continued)

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Juggernaut	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre
Didrate 23cm	7	10	13,800	1,265	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Didrate 6cm	7	10	3,600	330	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y
Did-MeshShield 11cm	7	10	9,900	605	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Did-MeshShield 17cm	7	10	15,300	935	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Did-MeshShield 5cm	8	10	4,500	275	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Did-AB Coating 6cm	8	10	7,200	413	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Did-AB Coating 12cm	8	10	14,400	825	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Didrate-Assault 28cm	8	10	21,000	1,540	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Didrate 35cm	8	10	21,000	1,925	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Tri-Didrate 8cm	9	10	8,000	360	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Tri-Didrate 19cm	9	10	19,000	855	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Tri-Didrate 27cm	9	10	27,000	1,215	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Tri-Didrate 36cm	9	10	36,000	1,620	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Tri-AB Coating 8cm	10	10	16,000	450	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Tri-AB Coating 19cm	10	10	38,000	1,069	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Tri-MeshShield 19cm	10	10	28,500	855	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Tri-AB Coating 27cm	10	10	54,000	1,519	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Tri-Assault 36	10	10	45,000	1,620	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Tri-MeshShield 10cm	11	10	15,000	450	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
Tri-MeshShield 21cm	11	10	31,500	945	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Tri-AB Coating 4cm	12	10	8,000	225	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	Y	Y
Liquid-Tri 21cm	12	10	42,000	840	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Liquid-Tri 28cm	12	10	56,000	1,120	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Chassis Availability: Which units can mount this component.

Full Name	Eff. to Front	Eff. to Sides	Eff. to Rear	Defl. 100%	Defl. 0%	Subt. 100%	Subt. 0%	Eff. vs. Energy	Eff. vs. Adv. Tech.	Eff. vs. Particle	Eff. vs. ELF	Eff. vs. Missile	Eff. vs. Plasma	Eff. vs. Ballistic	Eff. vs. Explosive	Armor Thickness	Armor Type	Armor Coating	Armor Rating
Didrate 23cm	100	100	100	34.5	10.35	2.3	0.69	75	100	100	100	100	75	100	100	23	DID	none	184
Didrate 6cm	100	100	100	9	2.7	0.6	0.18	75	100	100	100	100	75	100	100	6	DID	none	48
Did-MeshShield 11cm	100	100	100	16.5	4.95	1.1	0.33	75	100	100	50	50	75	100	100	11	DID	MS	132
Did-MeshShield 17cm	100	100	100	25.5	7.65	1.7	0.51	75	100	100	50	50	75	100	100	17	DID	MS	204
Did-MeshShield 5cm	100	100	100	7.5	2.25	0.5	0.15	75	100	100	50	50	75	100	100	5	DID	MS	60
Did-AB Coating 6cm	100	100	100	9	2.7	0.6	0.18	75	100	100	100	50	75	50	50	6	DID	AB	96
Did-AB Coating 12cm	100	100	100	18	5.4	1.2	0.36	75	100	100	100	50	75	50	50	12	DID	AB	192
Didrate-Assault 28cm	60	100	150	42	12.6	2.8	0.84	75	100	100	100	100	75	100	100	28	DID	Ass	280
Didrate 35cm	100	100	100	52.5	15.75	3.5	1.05	75	100	100	100	100	75	100	100	35	DID	none	280
Tri-Didrate 8cm	100	100	100	13.2	4.62	1.2	0.42	60	100	100	100	100	60	100	100	8	TRI	none	107
Tri-Didrate 19cm	100	100	100	31.35	10.9725	2.85	0.9975	60	100	100	100	100	60	100	100	19	TRI	none	253
Tri-Didrate 27cm	100	100	100	44.55	15.5925	4.05	1.4175	60	100	100	100	100	60	100	100	27	TRI	none	360
Tri-Didrate 36cm	100	100	100	59.4	20.79	5.4	1.89	60	100	100	100	100	60	100	100	36	TRI	none	480
Tri-AB Coating 8cm	100	100	100	13.2	4.62	1.2	0.42	60	100	100	100	50	60	50	50	8	TRI	AB	213
Tri-AB Coating 19cm	100	100	100	31.35	10.9725	2.85	0.9975	60	100	100	100	50	60	50	50	19	TRI	AB	507
Tri-MeshShield 19cm	100	100	100	31.35	10.9725	2.85	0.9975	60	100	100	50	50	60	100	100	19	TRI	MS	380
Tri-AB Coating 27cm	100	100	100	44.55	15.5925	4.05	1.4175	60	100	100	100	50	60	50	50	27	TRI	AB	720
Tri-Assault 36	60	100	150	59.4	20.79	5.4	1.89	60	100	100	100	100	60	100	100	36	TRI	Ass	600
Tri-MeshShield 10cm	100	100	100	16.5	5.775	1.5	0.525	60	100	100	50	50	60	100	100	10	TRI	MS	200
Tri-MeshShield 21cm	100	100	100	34.65	12.1275	3.15	1.1025	60	100	100	50	50	60	100	100	21	TRI	MS	420
Tri-AB Coating 4cm	100	100	100	6.6	2.31	0.6	0.21	60	100	100	100	50	60	50	50	4	TRI	AB	107
Liquid-Tri 21cm	100	100	100	37.8	15.12	6.3	2.52	50	100	100	100	100	50	100	100	21	LIQ	none	560
Liquid-Tri 28cm	100	100	100	50.4	20.16	8.4	3.36	50	100	100	100	100	50	100	100	28	LIQ	none	747

Eff. to Front: The percentage of damage that is passed through on shots from the front. Eff. to Sides: The percentage of damage that is passed through on shots from the sides. Eff. to Rear: The percentage of damage that is passed through on shots from the rear. Defl. 100%, 0%: The percentage removed from overall damage when armor is at full strength and minimal strength, respectively. Subt. 100%, 0%: Damage points removed from subhit damage when armor is at full strength and minimal strength, respectively. Eff. vs. Energy, Adv. Tech., Particle, etc.: The percentage of damage that is passed through on hits from enemy weapons, by type. Armor Thickness: Armor thickness in centimeters. Armor Type: Material used in armor. Armor Coating: Type of coating applied to armor. Armor Rating: Relative effectiveness of armor based on type, coating and thickness.

Armor Specifications (continued)

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Juggernaut	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre
Liquid-Tri 9cm	13	10	18,000	360	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
Liquid-Tri 33cm	13	10	66,000	1,320	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Liq-ACC 20cm	13	10	100,000	1,000	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Liq-AB Coating 20cm	13	10	80,000	1,000	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Liq-Assault 28cm	13	10	70,000	1,120	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Liq-ACC 9cm	14	10	45,000	450	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
Liq-AB Coating 9cm	14	10	36,000	450	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
Liq-MeshShield 28cm	14	10	84,000	1,120	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Liq-Assault 24cm	14	10	60,000	960	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Liq-ACC 28cm	14	10	140,000	1,400	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Clearplast 12cm	15	10	60,000	360	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
Clearplast 17cm	15	10	85,000	510	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Clearplast 23cm	15	10	115,000	690	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Clearplast 29cm	15	10	145,000	870	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Clearplast 36cm	15	10	180,000	1,080	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	-
Clear-ThermalMesh 11cm	16	10	165,000	495	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
Clear-ThermalMesh 16cm	16	10	240,000	720	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	-	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y
Clear-ThermalMesh 22cm	16	10	330,000	990	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Clear-ThermalMesh 28cm	16	10	420,000	1,260	-	-	-	-	-	-	-	-	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-
Clear-ThermalMesh 34cm	16	10	510,000	1,530	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	-

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Chassis Availability: Which units can mount this component.

Full Name	Eff. to Front	Eff. to Sides	Eff. to Rear	Defl. 100%	Defl. 0%	Subt. 100%	Subt. 0%	Eff. vs. Energy	Eff. vs. Adv. Tech.	Eff. vs. Particle	Eff. vs. ELF	Eff. vs. Missile	Eff. vs. Plasma	Eff. vs. Ballistic	Eff. vs. Explosive	Armor Thickness	Armor Type	Armor Coating	Armor Rating
Liquid-Tri 9cm	100	100	100	16.2	6.48	2.7	1.08	50	100	100	100	100	50	100	100	9	LIQ	none	240
Liquid-Tri 33cm	100	100	100	59.4	23.76	9.9	3.96	50	100	100	100	100	50	100	100	33	LIQ	none	880
Liq-ACC 20cm	100	100	100	36	14.4	6	2.4	50	50	50	100	100	50	100	100	20	LIQ	ACC	1,333
Liq-AB Coating 20cm	100	100	100	36	14.4	6	2.4	50	100	100	100	50	50	50	50	20	LIQ	AB	1,067
Liq-Assault 28cm	60	100	150	50.4	20.16	8.4	3.36	50	100	100	100	100	50	100	100	28	LIQ	Ass	933
Liq-ACC 9cm	100	100	100	16.2	6.48	2.7	1.08	50	50	50	100	100	50	100	100	9	LIQ	ACC	600
Liq-AB Coating 9cm	100	100	100	16.2	6.48	2.7	1.08	50	100	100	100	50	50	50	50	9	LIQ	AB	480
Liq-MeshShield 28cm	100	100	100	50.4	20.16	8.4	3.36	50	100	100	50	50	50	100	100	28	LIQ	MS	1,120
Liq-Assault 24cm	60	100	150	43.2	17.28	7.2	2.88	50	100	100	100	100	50	100	100	24	LIQ	Ass	800
Liq-ACC 28cm	100	100	100	50.4	20.16	8.4	3.36	50	50	50	100	100	50	100	100	28	LIQ	ACC	1,867
Clearplast 12cm	100	100	100	22.8	10.26	5.4	2.43	150	100	50	100	50	50	50	50	12	CLR	none	800
Clearplast 17cm	100	100	100	32.3	14.535	7.65	3.4425	150	100	50	100	50	50	50	50	17	CLR	none	1,133
Clearplast 23cm	100	100	100	43.7	19.665	10.35	4.6575	150	100	50	100	50	50	50	50	23	CLR	none	1,533
Clearplast 29cm	100	100	100	55.1	24.795	13.05	5.8725	150	100	50	100	50	50	50	50	29	CLR	none	1,933
Clearplast 36cm	100	100	100	68.4	30.78	16.2	7.29	150	100	50	100	50	50	50	50	36	CLR	none	2,400
Clear-ThermalMesh 11cm	100	100	100	20.9	9.405	4.95	2.2275	75	50	50	50	50	25	50	50	11	CLR	TM	2,200
Clear-ThermalMesh 16cm	100	100	100	30.4	13.68	7.2	3.24	75	50	50	50	50	25	50	50	16	CLR	TM	3,200
Clear-ThermalMesh 22cm	100	100	100	41.8	18.81	9.9	4.455	75	50	50	50	50	25	50	50	22	CLR	TM	4,400
Clear-ThermalMesh 28cm	100	100	100	53.2	23.94	12.6	5.67	75	50	50	50	50	25	50	50	28	CLR	TM	5,600
Clear-ThermalMesh 34cm	100	100	100	64.6	29.07	15.3	6.885	75	50	50	50	50	25	50	50	34	CLR	TM	6,800

Eff. to Front: The percentage of damage that is passed through on shots from the front. Eff. to Sides: The percentage of damage that is passed through on shots from the sides. Eff. to Rear: The percentage of damage that is passed through on shots from the rear. Defl. 100%, 0%: The percentage removed from overall damage when armor is at full strength and minimal strength, respectively. Subt. 100%, 0%: Damage points removed from subhit damage when armor is at full strength and minimal strength, respectively. Eff. vs. Energy, Adv. Tech., Particle, etc.: The percentage of damage that is passed through on hits from enemy weapons, by type. Armor Thickness: Armor thickness in centimeters. Armor Type: Material used in armor. Armor Coating: Type of coating applied to armor. Armor Rating: Relative effectiveness of armor based on type, coating and thickness.

Drive Specifications

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Drive Rating
HFlex 100 Walker System	1	20	6,000	121	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
HFlex 200 Walker System	1	20	12,000	485	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
HFlex 500 Walker System	1	20	30,000	3,030	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30
TFlex 150 TrackDrive	1	10	4,500	164	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	30
TFlex 250 TrackDrive	1	10	7,500	455	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	30
TFlex 600 TrackDrive	1	10	18,000	2,618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	30
GFlex 75 GravDrive	1	40	6,750	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	30
GFlex 225 GravDrive	1	40	20,250	307	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	30
HFlex 110X LegDrive System	2	20	7,700	134	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35
HFlex 225X LegDrive System	2	20	15,750	563	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35
TFlex 175X TrackDrive	2	10	6,125	204	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	35
TFlex 250X TrackDrive	2	10	8,750	417	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	35
GFlex 90X GravDrive	3	40	9,450	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	35
GFlex 275X GravDrive	3	40	28,875	388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	35
HFlex 475X LegDrive System	3	20	33,250	2,314	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35
TFlex 660X TrackDrive	3	10	23,100	2,681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	35
ImpDrive 125 Armored Walker	4	20	10,000	149	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
ImpDrive 275 Armored Walker	4	20	22,000	720	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
ImpTrack 300 Armored Tracks	4	10	12,000	514	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	40
ImpGrav 100	4	40	12,000	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	40
ImpDrive 550 Armored Walker	5	20	44,000	2,689	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40
ImpTrack 350 Armored Tracks	5	10	14,000	653	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	40
ImpTrack 700 Armored Tracks	5	10	28,000	2,613	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	40
ImpGrav 245	5	40	29,400	267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	40
TDrive 150 Walker	6	20	13,500	188	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
TDrive 300 Walker	6	20	27,000	750	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
TDrive 550 Walker	6	20	49,500	2,521	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
T-Track 295	6	10	13,275	435	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	45

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Chassis Availability: Which units can mount this component. Drive Rating: The amount of weight/power point this drive will support.

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Drive Rating
T-Track 440	6	10	19,800	968	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	45
TGrav 130 Reinforced Drive	7	40	17,550	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	45
TGrav 255 Reinforced Drive	7	40	34,425	255	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	45
TDrive 750 Heavy Walker	7	20	67,500	4,412	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45
T-Track 800	7	10	36,000	3,012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	45
HyperFlex 175 LegDrive	8	20	10,000	74	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
HyperFlex 300 LegDrive	8	20	30,000	667	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
HyperFlex-T 325	8	10	16,250	469	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	50
HyperFlex-T 510	8	10	25,500	1,156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	50
HyperFlex-G 140	9	40	21,000	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	50
HyperFlex-G 260	9	40	39,000	237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	50
HyperFlex 495 LegDrive	9	20	49,500	1,719	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
HyperFlex 675 LegDrive	9	20	67,500	3,197	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50
HyperFlex-T 590	9	10	29,500	1,466	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	50
Augmented TDrive 145	10	20	15,950	140	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55
Augmented TDrive 260	10	20	28,600	451	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55
Augmented TGrav 150	10	40	24,750	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	55
Augmented T-Track 375	11	10	20,625	536	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	55
UltiDrive 425 Walker	12	20	51,000	1,095	-	-	-	-	-	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
UltiGrav 190	12	40	34,200	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	60
UltiTrack 275	13	10	16,500	263	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	60
UltiDrive 800 Heavy Walker	13	20	96,000	3,710	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
HyperDrive 290 Walker	14	20	37,700	467	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65
HyperTrack 625	14	10	40,625	1,302	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	65
HyperDrive 325 Walker	15	20	42,250	563	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65
HyperGrav 165	15	40	32,175	73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	65
HyperGrav 250	16	40	48,750	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	65
HyperTrack 400	16	10	26,000	492	-	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	65

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Chassis Availability: Which units can mount this component. Drive Rating: The amount of weight/power point this drive will support.

Note: The number in the drive name denotes the amount of energy the drive can use for movement.

Targeting Computer Specifications

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Hit % Inc.	LOS % Inc.
Bertrand-Altase	1	10	525	20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	5	0
Lock-On 100	2	20	600	40	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	0
Lock-On 200	3	20	725	60	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	15	0
Quickfire 7	4	40	700	80	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	10	10
Lock-On 440	4	20	900	80	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	20	0
Quickfire 11	5	40	950	120	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	15	15
Quickfire 11A	6	40	1,350	160	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	15	25
Lock-On 1000	6	20	1,400	120	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	30	0
Image Enhancement	7	30	1,750	200	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	25	25
TrueLock	7	30	2,525	180	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	45	0
Quickfire 3000	8	40	2,950	280	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	35	35
Fire Control Manager	9	30	4,100	240	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	60	0
QuickFire-X	9	40	4,550	360	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	45	45
Adv. F. C. Manager	10	30	6,125	300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	75	0
TrueLock-X	11	30	7,700	480	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	60	60
Predictor System	12	50	8,500	480	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	80	40
Enh. Predictor System	13	50	11,100	560	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	90	50
Adv. Predictor System	14	25	14,100	640	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100	60
Active-Lock Predictor	15	25	16,900	720	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100	80
Omni-Lock FCP	16	25	20,500	800	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	100	100

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Chassis Availability: Which units can mount this component. Hit % Inc.: Amount to effectively increment the pilots skill for weapons. LOS % Inc.: Amount to increase the LOS (Line Of Sight) to the target.

Hardpoint Mounting Specifications

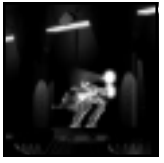
Shadow

Available Hardpoint Slots: Two Energy Type 1, two Missile Type 1.

Available Internal Component Slots: Two

Note: The Shadow's sensors are vulnerable.

Remora

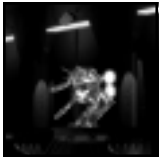


Available Hardpoint Slots: Two Advanced Flexi-mount Type 2, two Ballistic Type 1.

Available Internal Component Slots: One

Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons.

Ogre

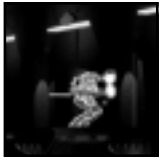


Available Hardpoint Slots: Two Advanced Flexi-mount Type 2, two Advanced Flexi-mount Type 1, two Ballistic Type 1.

Available Internal Component Slots: Four

Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons.

Sensei



Available Hardpoint Slots: Two Energy Type 2, two Ballistic Type 1, two Missile Type 2.

Available Internal Component Slots: Two

Note: The Sensei's sensors are vulnerable.

Giant

Available Hardpoint Slots: Two Ballistic Type 3, two Ballistic Type 2, two Ballistic Type 1.

Available Internal Component Slots: Four

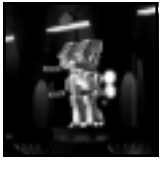
Mantis

Available Hardpoint Slots: Two Advanced Flexi-mount Type 3, two Flexi-mount Type 2.

Available Internal Component Slots: Four

Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons. Flexi-mount hardpoints accept only ballistic and energy weapons.

Demon



Available Hardpoint Slots: Two Advanced Flexi-mount Type 3, two Flexi-mount Type 2, two Missile Type 3.

Available Internal Component Slots: Four

Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons. Flexi-mount hardpoints accept only ballistic and energy weapons. The Demon's missile hardpoints are sheltered.

Troll

Available Hardpoint Slots: Six Energy Type 3.

Available Internal Component Slots: Two

Note: The Troll's hardpoints are sheltered.

Apocalypse

Available Hardpoint Slots: One Flexi-mount Type 4, three Flexi-mount Type 2, two Missile Type 3, two ELF Type 3.

Available Internal Component Slots: Four

Note: Flexi-mount hardpoints accept only ballistic and energy weapons. The Apocalypse's sensors are vulnerable. The Type 4 Flexi-mount is vulnerable, while the missile hardpoints are sheltered.

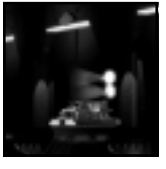
Annihilator

Available Hardpoint Slots: Two Flexi-mount Type 4, two Flexi-mount Type 3.

Available Internal Component Slots: Four

Note: Flexi-mount hardpoints accept only ballistic and energy weapons. The Annihilator's Type 4 Flexi-mounts are vulnerable.

Lynx

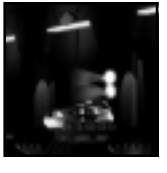


Available Hardpoint Slots: One Advanced Flexi-mount Type 2.

Available Internal Component Slots: One

Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons.

Bloodhound



Available Hardpoint Slots: Two Advanced Flexi-mount Type 1.

Available Internal Component Slots: One

Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons.

Viper

Available Hardpoint Slots: One Flexi-mount Type 3, one Missile Type 2.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

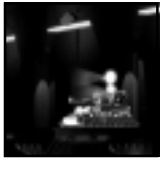
Stingray

Available Hardpoint Slots: Two Flexi-mount Type 2, two Missile Type 2.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Raider



Available Hardpoint Slots: One Flexi-mount Type 2, two Flexi-mount Type 1, two Missile Type 2.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Lancer

Available Hardpoint Slots: One Flexi-mount Type 3, one Flexi-mount Type 1, one Missile Type 2.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

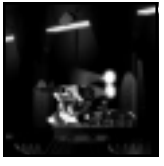
Hammer

Available Hardpoint Slots: One Flexi-mount Type 4.

Available Internal Component Slots: None

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Devastator



Available Hardpoint Slots: One Flexi-mount Type 3, two Flexi-mount Type 1, two ELF Type 2.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Thunder

Available Hardpoint Slots: One Flexi-mount Type 3, two Flexi-mount Type 1, two Missile Type 1.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Lightning

Available Hardpoint Slots: One Flexi-mount Type 2, two Missile Type 2.

Available Internal Component Slots: One

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

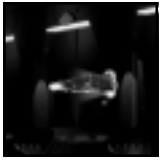
Skyfox

Available Hardpoint Slots: Four Flexi-mount Type 1.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Meteor



Available Hardpoint Slots: Two Advanced Flexi-mount Type 1.

Available Internal Component Slots: Two

Note: Note: Advanced flexi-mount hardpoints accept only ballistic, ELF and energy weapons.

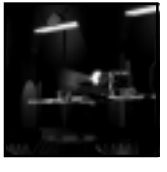
Talon

Available Hardpoint Slots: Four Flexi-mount Type 2, two Missile Type 2.

Available Internal Component Slots: Two

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Sabre



Available Hardpoint Slots: Two Flexi-mount Type 3, two Flexi-mount Type 2, two Missile Type 2.

Available Internal Component Slots: Four

Note: Flexi-mount hardpoints accept only ballistic and energy weapons.

Cybrid Vehicles

Arachnus

Available Hardpoint Slots: Four Flexi-mount Type 1.

Available Internal Component Slots: One

Note: The Arachnus' drive is vulnerable.

Malignus

Available Hardpoint Slots: Two Missile Type 3, four Flexi-mount Type 1.

Available Internal Component Slots: Two

Note: The Malignus' drive and sensors are vulnerable.

Hades

Available Hardpoint Slots: Two Missile Type 3, two Energy Type 3, four Ballistic Type 1.

Available Internal Component Slots: Two

Hardpoint Specifications: Advanced Technology Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
EMP Gun	350	1	1250	0	36	60	Energy_1	4	8	AdvTech	100	0	0	1	100/0/0/0	1	-	25
Heavy EMP Gun	350	1	2813	0	40	214	Energy_2	4	8	AdvTech	150	0	0	1	100/0/0/0	1	-	38
Scanner Missile	100	2	4500	18	1	56	Missile_1	10	12	AdvTech	0	60	60	1	100/0/0/0	1	Y	30
Scrambler Beam	400	3	6667	0	16	69	Energy_2	3	5	AdvTech	0	10	10	1	100/0/0/0	1	-	17
Web Caster	125	4	8789	18	1	72	Cannon_1	8	6	AdvTech	0	75	75	1	100/0/0/0	1	-	47
Wavelock Beamer	200	4	8100	0	63	395	Energy_2	2	6	AdvTech	150	15	0	1	100/0/0/0	1	-	90
Pulse EMP Gun	350	5	3600	0	60	90	Energy_1	2	8	AdvTech	120	0	0	1	100/0/0/0	1	-	60
Heavy Pulse EMP Gun	350	5	10000	0	84	429	Energy_2	2	8	AdvTech	200	0	0	1	100/0/0/0	1	-	100
Hellfire Cannon	100	6	112896	0	210	6327	Energy_4	8	8	AdvTech	60	12	0	1	100/0/0/0	16	-	168
EMP Mortar	300	6	3516	0	64	72	Energy_1	4	8	AdvTech	150	0	0	2	100/80/0/0	1	Y	38
Radiation Beam	250	7	3333	0	60	63	Energy_1	6	10	AdvTech	0	100	0	1	100/0/0/0	1	-	33
Heavy Web Caster	125	7	22500	18	1	399	Cannon_2	8	8	AdvTech	0	120	120	1	100/0/0/0	1	-	75
Thermal Lance	10	8	40500	0	175	237	Energy_1	10	1	AdvTech	300	300	0	1	100/0/0/0	1	-	90
Heavy Anti-Sensor Missile	100	8	12500	20	1	234	Missile_2	10	12	AdvTech	0	100	100	1	100/0/0/0	1	Y	50
Thermal Needler	100	9	11250	0	82	106	Energy_1	4	6	AdvTech	0	6	6	1	100/0/0/0	10	-	75

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
Heavy Thermal Needler	100	9	25313	0	112	509	Energy_2	4	8	AdvTech	0	9	9	1	100/0/0/0	10	-	113
EMP Beam	300	10	9000	0	90	93	Energy_1	5	8	AdvTech	300	0	0	1	100/0/0/0	1	-	60
Hellswatter	100	11	250880	0	300	9495	Energy_4	8	8	AdvTech	80	16	0	2	100/100/0/0	16	Y	224
Disruptor Beam	150	11	11250	0	24	53	Energy_2	4	8	AdvTech	0	15	15	1	100/0/0/0	1	-	19
"Shiva" Cannon	100	12	451584	0	420	15772	Energy_4	8	10	AdvTech	120	24	0	1	100/0/0/0	16	-	336
Fusion Borer	10	12	112500	0	250	1205	Energy_2	10	1	AdvTech	500	500	0	1	100/0/0/0	1	-	150
X-Beam	250	13	35156	0	74	603	Energy_2	2	10	AdvTech	0	75	75	1	100/0/0/0	1	-	188
EMP Enveloper	300	14	117029	0	150	2504	Energy_3	7	8	AdvTech	80	0	0	1	100/0/0/0	16	-	183
ATN "Penetrator" Cannon	5	15	225000	0	580	7912	Cannon_4	5	10	AdvTech	0	30	30	1	100/0/0/0	10	-	300
Thunderwave Beam	200	15	16200	0	60	272	Energy_2	4	6	AdvTech	300	30	0	1	100/0/0/0	1	-	90
Starfire Cannon	100	16	564480	0	600	16193	Energy_4	10	10	AdvTech	150	30	0	1	100/0/0/0	16	-	336

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Hardpoint Specifications: Ballistic Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
20mm Light Autocannon	105	1	2250	90	1	145	Cannon_1	1.25	5	Ballistic	0	30	5	1	100/0/0/0	1	-	60
50mm Autocannon	50	1	2880	60	1	110	Cannon_1	2.5	6	Ballistic	0	24	4	1	100/0/0/0	2	-	48
120mm Heavy Autocannon	35	1	5488	18	1	301	Cannon_2	3.5	8	Ballistic	0	80	12	1	100/0/0/0	1	-	56
180mm Super-Heavy Cannon	20	1	9288	12	1	1179	Cannon_4	10	8	Ballistic	0	172	29	1	100/0/0/0	1	-	43
30mm Rapid-Fire Chain Gun	175	2	2822	45	1	104	Cannon_1	1.25	5	Ballistic	0	6	0	1	100/0/0/0	7	-	67
200mm HEAP Gun	20	2	4963	16	1	456	Cannon_3	6.5	10	Ballistic	0	100	18	1	100/0/0/0	1	-	39
140mm "Ranger" Cannon	150	2	3200	40	11	219	Cannon_2	4	10	Ballistic	0	32	32	1	100/0/0/0	1	-	40
EF Cannon	200	3	10368	45	64	433	Cannon_2	4	7	Ballistic	4	4	0	1	100/0/0/0	24	-	72
"Devastator" Chain Gun	150	4	5018	60	1	122	Cannon_1	1.25	5	Ballistic	0	8	0	1	100/0/0/0	7	-	90
260mm Auto Mortar	150	4	11522	18	1	622	Cannon_3	6.5	10	Ballistic	0	32	5	3	100/80/40/0	4	Y	49
210mm HEAP-X Cannon	20	5	15577	16	1	801	Cannon_3	6.5	10	Ballistic	0	180	30	1	100/0/0/0	1	-	69
EF Rotary Cannon	200	5	10800	60	52	510	Cannon_2	1.5	7	Ballistic	4	4	0	1	100/0/0/0	15	-	120
170mm High Velocity Accelerated Cannon (HVAC)	10	6	18000	12	1	1328	Cannon_4	10	10	Ballistic	0	240	40	1	100/0/0/0	1	-	60
"Ranger-X" Cannon	150	6	14400	30	1	463	Cannon_2	2	10	Ballistic	0	48	48	1	100/0/0/0	1	-	120

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
Heavy EF Cannon	200	7	25200	32	55	1220	Cannon_3	3.5	7	Ballistic	7	7	0	1	100/0/0/0	20	-	120
200mm Rapid-Fire Howitzer	75	7	24300	16	1	1001	Cannon_3	4	10	Ballistic	0	36	6	3	100/80/40/0	4	Y	90
50mm Light Accelerated Autocannon	150	8	11849	48	5	101	Cannon_1	3.5	7	Ballistic	6	36	6	1	100/0/0/0	3	-	82
"Vindicator" Thermal Chain Gun	150	8	9408	60	8	121	Cannon_1	1.5	6	Ballistic	12	12	2	1	100/0/0/0	4	-	112
70mm Accelerated Autocannon	150	9	12544	40	8	91	Cannon_1	4.5	7	Ballistic	8	40	8	1	100/0/0/0	3	-	75
90mm Accelerated Autocannon	150	9	37632	36	8	576	Cannon_2	6	8	Ballistic	12	60	12	1	100/0/0/0	4	-	112
200mm HyperCannon	10	10	110208	15	150	5143	Cannon_4	6	9	Ballistic	0	500	50	1	100/0/0/0	1	-	192
100mm Accelerated Pulse Autogun	175	10	10533	24	18	325	Cannon_2	1.75	8	Ballistic	6	36	6	1	100/0/0/0	2	-	110
60mm Accelerated Chain-Gun	150	11	23040	75	65	202	Cannon_1	1.25	6	Ballistic	3	18	3	1	100/0/0/0	5	-	192
"Talon" Hyper-Flux Cannon	200	12	90000	30	90	1255	Cannon_2	2	9	Ballistic	0	20	20	1	100/0/0/0	6	-	300
5mm Anti-Matter Autocannon	150	13	16200	99	5	152	Cannon_1	1	6	Ballistic	0	45	0	1	100/0/0/0	2	-	180
15mm Anti-Matter Autocannon	150	13	19200	75	8	139	Cannon_2	1.5	6	Ballistic	0	60	0	1	100/0/0/0	2	-	160
Thermal Howitzer	75	14	64800	16	9	1432	Cannon_3	6	10	Ballistic	9	54	9	3	100/80/40/0	5	Y	120
120mm Accelerate Pulse Chain-Gun	175	15	51200	60	9	867	Cannon_2	1	6	Ballistic	4	24	4	1	100/0/0/0	5	-	320
300mm PCG ("Planet Crusher Gun")	5	15	169280	10	1	5516	Cannon_4	10	8	Ballistic	0	800	80	1	100/0/0/0	1	-	184
280mm ATX Super-Heavy Cannon	5	16	223949	16	1	6583	Cannon_4	10	7	Ballistic	12	120	12	3	100/50/20/0	6	-	173

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Hardpoint Specifications: ELF Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
Light ELF Whip	400	1	4000	0	60	105	ELF_1	5	1	EMFlux	0	40	40	1	100/0/0/0	1	-	40
Medium ELF Whip	400	1	9000	0	72	415	ELF_2	5	1	EMFlux	0	60	60	1	100/0/0/0	1	-	60
Heavy ELF Whip	500	1	20250	0	100	1490	ELF_3	5	1	EMFlux	0	90	90	1	100/0/0/0	1	-	90
Razorwhip	400	2	4375	0	65	110	ELF_1	3.5	2	EMFlux	0	35	35	1	100/0/0/0	1	-	50
Heavy Razorwhip	400	2	10804	0	80	473	ELF_2	3.5	2	EMFlux	0	55	55	1	100/0/0/0	1	-	79
Auto-ELF	500	3	2813	0	36	94	ELF_1	1	2	EMFlux	0	15	15	1	100/0/0/0	1	-	75
Arcrazor	300	4	25000	0	110	1364	ELF_3	5	3	EMFlux	0	100	100	1	100/0/0/0	1	-	100
Heavy Auto-ELF	500	4	7813	0	45	479	ELF_2	1	2	EMFlux	0	25	25	1	100/0/0/0	1	-	125
Chain-ELF	500	5	3200	0	33	84	ELF_1	1	2	EMFlux	0	8	8	1	100/0/0/0	2	-	80
Lightning Cannon	200	6	10563	0	70	312	Cannon_2	5	5	EMFlux	0	65	65	1	100/0/0/0	1	-	65
Heavy Chain-ELF	500	7	9800	0	41	446	ELF_2	1	2	EMFlux	0	14	14	1	100/0/0/0	2	-	140

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
"Thor" Thundercannon	200	8	15313	0	85	339	Cannon_3	5	5	EMFlux	0	70	70	2	100/80/0/0	1	-	70
ThunderClaw	300	9	35714	0	85	1398	ELF_3	3.5	2	EMFlux	0	50	50	1	100/0/0/0	2	-	143
ELF Mortar	500	10	20167	0	122	369	Energy_2	6	10	EMFlux	0	22	22	2	100/80/0/0	4	Y	73
"Tornado" ELF Autowhip	300	11	15313	0	40	469	ELF_2	1	1	EMFlux	0	35	35	1	100/0/0/0	1	-	175
Deathwhip	300	12	115714	0	220	3045	ELF_3	3.5	2	EMFlux	0	90	90	1	100/0/0/0	2	-	257
Lightning Repeater Cannon	200	13	12800	0	50	389	Cannon_2	1	5	EMFlux	0	16	16	1	100/0/0/0	2	-	160
ELF "Buzzsaw"	500	14	45000	0	115	848	ELF_2	1	2	EMFlux	0	15	15	1	100/0/0/0	4	-	300
Heavy ELF Mortar	500	15	40681	0	185	489	Energy_2	7	10	EMFlux	0	27	27	2	100/80/0/0	5	Y	96
Positron Flux Whip	300	16	195313	0	200	6808	Energy_4	4	1	EMFlux	0	250	250	1	100/0/0/0	1	-	313

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Hardpoint Specifications: Energy Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
SE 400 Laser Cannon	300	1	1176	0	28	55	Energy_1	3	4	Energy	60	12	0	1	100/0/0/0	1	-	28
SE 660 Laser Cannon	300	1	2400	0	34	211	Energy_2	3	6	Energy	90	15	0	1	100/0/0/0	1	-	40
SE 1000 Heavy Laser Cannon	300	1	5104	0	59	698	Energy_3	3	8	Energy	125	25	0	1	100/0/0/0	1	-	58
SC 400 Compression Laser	250	2	1666	0	29	55	Energy_1	3.5	3	Energy	60	24	0	1	100/0/0/0	1	-	31
SC 660 Compression Laser	250	2	3749	0	41	238	Energy_2	3.5	5	Energy	90	36	0	1	100/0/0/0	1	-	46
SC 1000 Compression Laser	250	2	6665	0	59	712	Energy_3	3.5	7	Energy	120	48	0	1	100/0/0/0	1	-	62
SCX Heavy Compression Laser	250	3	18514	0	123	2272	Energy_4	3.5	9	Energy	200	80	0	1	100/0/0/0	1	-	103
SP 500 Light Pulse Laser	350	3	1225	0	23	48	Energy_1	2	5	Energy	50	10	0	1	100/0/0/0	1	-	35
SP 750 Standard Pulse Laser	350	3	3136	0	35	238	Energy_2	2	7	Energy	80	16	0	1	100/0/0/0	1	-	56
SP 1200 Magna Pulse Laser	350	4	7056	0	54	760	Energy_3	2	9	Energy	120	24	0	1	100/0/0/0	1	-	84
SE 700G Laser Gatling	350	5	1985	0	12	197	Energy_2	1	3	Energy	15	3	0	1	100/0/0/0	3	-	63
SE 1000G Heavy Laser Gatling	350	5	4802	0	23	719	Energy_3	1	5	Energy	35	7	0	1	100/0/0/0	2	-	98
Laser Mortar	300	6	9923	24	48	623	Energy_3	4	10	Energy	180	36	0	2	100/100/0/0	1	Y	63
SPG Gatling Pulse Laser	350	7	3528	0	25	246	Energy_2	1	7	Energy	20	4	0	1	100/0/0/0	3	-	84
SPGX Heavy Gatling Pulse Laser	350	7	7938	0	44	861	Energy_3	1	9	Energy	30	6	0	1	100/0/0/0	3	-	126

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
SCGL Gatling Compression Laser (Light)	300	8	8748	0	48	344	Energy_2	1.5	5	Energy	30	12	0	1	100/0/0/0	3	-	108
SCGH Gatling Compression Laser (Heavy)	300	8	19683	0	87	1252	Energy_3	1.5	7	Energy	45	18	0	1	100/0/0/0	3	-	162
"Hydra" Compression Cannon	100	9	51840	0	172	3049	Energy_4	5	8	Energy	400	160	0	1	100/0/0/0	1	-	144
BL-1 Blaster Cannon	200	10	25000	0	107	454	Energy_2	5	4	Energy	250	125	0	1	100/0/0/0	1	-	100
BH-1 Heavy Blaster Cannon	200	10	51840	0	180	1671	Energy_3	5	6	Energy	360	180	0	1	100/0/0/0	1	-	144
Blast Mortar	300	11	37500	20	120	1138	Energy_3	6	10	Energy	300	150	0	2	100/100/0/0	1	Y	100
PBL Pulse Blaster	250	12	10000	0	82	101	Energy_1	2	5	Energy	100	50	0	1	100/0/0/0	1	-	100
PBH Heavy Pulse Blaster	250	12	25600	0	127	535	Energy_2	2	7	Energy	160	80	0	1	100/0/0/0	1	-	160
GB-1 Blaster Gatling	250	13	27648	0	96	568	Energy_2	1.5	4	Energy	48	24	0	1	100/0/0/0	3	-	192
HGB-1 Heavy Blaster Gatling	250	13	62208	0	176	2177	Energy_3	1.5	6	Energy	72	36	0	1	100/0/0/0	3	-	288
HBM Heavy Blast Mortar	200	13	100000	16	280	2477	Energy_3	4	6	Energy	400	200	0	2	100/100/0/0	1	Y	200
LCB Light Compression Blaster	200	14	17600	0	117	111	Energy_1	5.5	4	Energy	200	120	0	1	100/0/0/0	1	-	80
HCB Heavy Compression Blaster	200	14	39600	0	160	531	Energy_2	5.5	6	Energy	300	180	0	1	100/0/0/0	1	-	120
Hyper-Compression Blaster	200	15	70400	0	197	1669	Energy_3	5.5	7	Energy	400	240	0	1	100/0/0/0	1	-	160
"Avenger" Compression Blaster Cannon	100	16	148225	0	275	4939	Energy_4	8	8	Energy	700	420	0	1	100/0/0/0	1	-	193

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Hardpoint Specifications: Particle Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
E-Beamer	300	1	3750	0	60	291	Energy_2	3	8	Particle	50	50	0	1	100/0/0/0	1	-	50
Heavy E-Beamer	300	1	8438	0	90	972	Energy_3	3	8	Particle	75	75	0	1	100/0/0/0	1	-	75
Twin E-Beamer	300	2	6534	0	92	384	Energy_2	3	8	Particle	33	33	0	1	100/0/0/0	2	-	66
Gauss Cannon	150	3	1291	48	26	83	Cannon_1	3	7	Particle	8	40	0	1	100/0/0/0	1	-	29
Heavy Gauss Cannon	125	3	2904	36	32	223	Cannon_2	3	8	Particle	12	60	0	1	100/0/0/0	1	-	44
Gauss Repeater	175	4	2178	60	19	270	Cannon_2	1	6	Particle	2	10	0	1	100/0/0/0	3	-	66
PBW	300	4	7200	0	75	307	Energy_2	4	8	Particle	80	80	0	1	100/0/0/0	1	-	60
Light Particle Gun	300	5	3403	0	70	83	Cannon_1	4	9	Particle	15	75	0	1	100/0/0/0	1	-	41
Medium Particle Gun	280	5	11858	0	122	413	Cannon_2	4	9	Particle	28	140	0	1	100/0/0/0	1	-	77
Heavy Particle Gun	260	5	24200	0	165	1351	Cannon_3	4	9	Particle	40	200	0	1	100/0/0/0	1	-	110
Super-Heavy Particle Gun	240	6	54450	0	245	3981	Cannon_4	4	9	Particle	60	300	0	1	100/0/0/0	1	-	165
Gatling E-Beamer	300	6	4608	0	39	310	Energy_2	1	8	Particle	32	32	0	1	100/0/0/0	1	-	96
Amplified Gauss Cannon	150	7	2904	48	41	85	Cannon_1	3	7	Particle	12	60	0	1	100/0/0/0	1	-	44
Heavy Amplified Gauss Cannon	150	7	8067	40	61	308	Cannon_2	3	8	Particle	20	100	0	1	100/0/0/0	1	-	73
Rapid Gauss Repeater	150	8	5808	72	70	141	Cannon_1	1.5	6	Particle	4	20	0	1	100/0/0/0	3	-	88

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
PBW Tri-barrel	300	8	51840	0	245	1893	Energy_3	5	8	Particle	80	80	0	1	100/0/0/0	3	-	144
Neutron Particle Gun	400	9	4538	0	68	74	Cannon_1	3	10	Particle	15	75	0	1	100/0/0/0	1	-	55
Heavy Neutron Particle Gun	400	9	12604	0	94	349	Cannon_2	3	10	Particle	25	125	0	1	100/0/0/0	1	-	92
NBW	450	10	39690	0	245	692	Energy_2	5	8	Particle	210	210	0	1	100/0/0/0	1	-	126
PBW Microburster	300	10	5184	0	48	70	Energy_1	2	5	Particle	24	24	0	1	100/0/0/0	2	-	72
Laser-Amplified Particle Gun (LAMP)	300	11	30250	0	172	522	Cannon_2	5	8	Particle	50	250	0	1	100/0/0/0	1	-	110
Heavy Laser-Amplified Particle Gun (HLAMP)	300	11	77440	0	298	2224	Cannon_3	5	8	Particle	80	400	0	1	100/0/0/0	1	-	176
Super-Accelerated Gauss Gun (SAGG)	150	12	18973	36	94	421	Cannon_2	2.5	7	Particle	14	70	0	1	100/0/0/0	2	-	123
Heavy NBW	450	13	81000	0	270	2090	Energy_3	5	8	Particle	300	300	0	1	100/0/0/0	1	-	180
Gauss Tri-barrel	150	14	8894	60	72	102	Cannon_1	3	6	Particle	7	35	0	1	100/0/0/0	3	-	77
NBW Microburster	450	15	50625	0	160	748	Energy_2	2	4	Particle	50	50	0	1	100/0/0/0	3	-	225
Positron Beamer	500	16	221257	0	330	7121	Energy_4	7	6	Particle	40	200	0	1	100/0/0/0	4	-	251

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Hardpoint Specifications: Plasma Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
Light Plasma Gun	100	1	1296	0	30	65	Cannon_1	2	4	Plasma	12	6	0	1	100/0/0/0	3	-	36
Plasma Gun	100	1	3600	0	40	307	Cannon_2	2	4	Plasma	20	10	0	1	100/0/0/0	3	-	60
Heavy Plasma Gun	100	2	8100	0	52	961	Cannon_3	2	4	Plasma	30	15	0	1	100/0/0/0	3	-	90
Plasma Flamer	120	3	8229	0	62	360	Energy_2	3.5	3	Plasma	30	15	0	1	100/0/0/0	4	-	69
Heavy Plasma Flamer	100	3	17701	0	88	1254	Energy_3	3.5	3	Plasma	44	22	0	1	100/0/0/0	4	-	101
Plasma Chaingun	100	4	1800	0	26	67	Cannon_1	1	4	Plasma	10	5	0	1	100/0/0/0	3	-	60
Plasma Beam	120	5	9600	0	55	352	Energy_2	3	3	Plasma	60	30	0	1	100/0/0/0	2	-	80
Heavy Plasma Beam	150	5	21600	0	84	1294	Energy_3	3	3	Plasma	90	45	0	1	100/0/0/0	2	-	120
Plasma Pulse Flamer	120	6	3600	0	38	70	Energy_1	2	3	Plasma	20	10	0	1	100/0/0/0	3	-	60
Accelerated Plasma Cannon	100	6	17424	0	69	1178	Cannon_3	2	4	Plasma	44	22	0	1	100/0/0/0	3	-	132
Plasma Mortar	175	7	16200	0	115	390	Cannon_2	5	10	Plasma	30	15	0	2	100/60/0/0	6	Y	72
Fusion Flamer	175	8	6670	0	58	79	Energy_1	4	3	Plasma	33	22	0	1	100/0/0/0	3	-	58
Heavy Fusion Flamer	200	8	19900	0	88	447	Energy_2	4	3	Plasma	57	38	0	1	100/0/0/0	3	-	100
Heavy Fusion Beam	200	9	61250	0	165	2076	Energy_3	4	3	Plasma	75	50	0	1	100/0/0/0	4	-	175
Fusion Mortar	200	9	40186	0	220	693	Cannon_2	5	10	Plasma	27	18	0	2	100/60/0/0	9	Y	113

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
Fusion Gatling	225	10	9408	0	61	105	Energy_1	1.5	2	Plasma	18	12	0	1	100/0/0/0	4	-	112
Starplasma Beam	150	11	104533	0	180	4694	Energy_4	6	3	Plasma	280	140	0	1	100/0/0/0	2	-	187
Plasma Web	200	12	136533	0	125	1438	Energy_2	6	4	Plasma	40	20	0	1	100/0/0/0	16	-	213
Fusion Cannon	110	12	18816	0	69	372	Cannon_2	3	4	Plasma	48	32	0	1	100/0/0/0	3	-	112
Fusion Chaingun	100	13	20008	0	80	141	Cannon_1	1.5	2	Plasma	21	14	0	1	100/0/0/0	5	-	163
Starfusion Beamer	150	14	240100	0	350	8182	Energy_4	8	3	Plasma	210	140	0	1	100/0/0/0	4	-	245
Accelerated Fusion Cannon	100	15	156800	0	184	3340	Cannon_3	4	4	Plasma	60	40	0	1	100/0/0/0	8	-	280
Starfusion Mortar	200	15	89303	0	360	917	Cannon_2	9	10	Plasma	54	36	0	2	100/60/0/0	9	Y	126
Fusion Web	200	16	490000	0	365	3694	Energy_2	8	4	Plasma	75	50	0	1	100/0/0/0	16	-	350

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Hardpoint Specifications: Propelled Weapons

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
SP Missile Launcher	400	1	1411	24	1	56	Missile_1	3	12	Propel	0	20	2	1	100/0/0/0	2	Y	31
SG Missile Launcher	400	1	2721	18	1	200	Missile_2	3.5	12	Propel	0	20	2	1	100/0/0/0	3	Y	39
MY Rocket Launcher	400	1	2836	12	1	47	Missile_1	6	12	Propel	0	15	1	2	100/100/0/0	5	Y	28
"Jihad" Missile System	100	1	8000	4	1	261	Missile_2	10	1	Propel	0	20	2	2	100/80/0/0	8	-	37
MicroMissile Launcher	250	2	2700	45	1	97	Missile_1	1.5	8	Propel	0	15	0	1	100/0/0/0	3	-	60
SP-2 Heavy Missile Launcher	300	3	4761	12	1	460	Missile_2	4.5	12	Propel	0	30	3	1	100/0/0/0	3	Y	46
"Katyushka-Z" Rocket System	250	4	3386	12	1	118	Missile_3	7.5	12	Propel	0	20	2	3	100/100/100/0	4	Y	25
Darkfist Heavy Missile	300	5	6348	10	1	436	Missile_3	6	10	Propel	0	40	4	1	100/0/0/0	3	Y	46
Saturation Missiles	300	6	15626	8	1	303	Missile_2	6.5	12	Propel	0	20	2	3	100/100/100/0	8	Y	57
SP-X Rapid Missile System	250	6	5643	12	1	480	Missile_3	3	12	Propel	0	40	4	1	100/0/0/0	2	Y	61
Hunter-Killer Missiles	300	7	7524	8	1	381	Missile_3	9	8	Propel	0	40	4	1	100/0/0/0	4	Y	41

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Full Name	Armor Level	Research Level	Purchase Cost	Ammo	Energy	Weight	Mount Type	MRR (seconds)	MxR	Skill	DvS	DvNS	PenD	DArea	DSpread	Subhits	Indirect Fire?	Offensive Rating
Streak Missiles	200	8	3174	32	1	51	Missile_1	3	12	Propel	0	20	2	1	100/0/0/0	3	Y	46
Thermal Rockets	150	8	7350	20	42	255	Missile_2	3	6	Propel	35	35	0	1	100/0/0/0	2	-	70
H-K Rapid Missile System	200	9	5878	22	1	169	Missile_2	4.5	8	Propel	0	50	5	1	100/0/0/0	2	Y	51
Heavy Saturation Rocket System	200	10	10254	10	1	381	Missile_3	6.5	12	Propel	0	20	2	4	100/100/100/100	6	Y	42
"HOG" Missile	100	11	12855	3	1	46	Missile_1	10	1	Propel	0	60	6	3	100/80/50/0	3	-	41
Rapid Saturation Rocket System	150	12	10157	14	1	474	Missile_3	2.5	12	Propel	0	20	2	3	100/100/100/0	4	Y	74
HyperMissile Launcher	250	12	4356	20	1	47	Missile_1	2	8	Propel	0	22	0	1	100/0/0/0	3	-	66
THUD Missile (THermal Underground Detonation)	150	13	68344	12	275	1723	Missile_3	6	8	Propel	25	25	2	2	100/100/0/0	10	Y	135
Plasma Missiles	200	14	17857	16	125	297	Missile_2	7	12	Propel	50	25	0	1	100/0/0/0	5	Y	71
Soulcrusher Heavy Missile	300	15	34279	6	1	795	Missile_3	10	8	Propel	0	120	12	1	100/0/0/0	3	Y	83
AVS Rocket System	150	16	26662	8	1	564	Missile_3	10	10	Propel	0	40	4	4	100/100/100/100	6	Y	55

ARM: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Ammo: The number of shots the weapon has before it must reload (0 is unlimited). Energy: The amount of energy used to power the weapon to the maximum recharge rate (or per shot in turn-based play). MRR: The maximum recharge rate of the weapon in seconds (how fast will it fire if fully powered, in seconds). MxR: The maximum range of the weapon in squares. Skill: The bioderm skill used to determine the hit change when firing the weapon. DvS: The amount of damage inflicted to a target's shields in a single hit from the weapon. DvNS: The amount of damage inflicted to a target's armor if there was no shield present for that hit. PenD: The amount of damage inflicted per subhit to a target's armor that ignores all shields. DArea: The radius of the explosive effect in squares. DSpread: The percentage of damage in the target square, and then radiating outward (left to right). Subhits: The number of hits actually scored with each successful hit. Indirect Fire?: Does the weapon do indirect damage? Offensive Rating: Overall firepower of weapon on a per-second basis (damage vs. shields/sec. + 2x damage vs. armor/sec. + 3x penetrative damage/sec.)

Internal Device Specifications

Full Name	Armor	Research Level	Purchase Cost	Ammo	Energy	System Weight	Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre
							Chassis Availability:																										
Empty Internal Slot	100	1	0	n/a	0	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Scanner Amplifier	250	1	2,500	n/a	10	10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
"Spy" System	250	3	5,500	n/a	15	30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Enhanced Scanner Amp	250	6	6,250	n/a	15	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Omniview Scanner Amp	250	9	9,500	n/a	25	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Ultraview Scanner Amp	250	12	13,500	n/a	35	125	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shield Amplifier	175	2	2,000	n/a	10	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shield Recharger	175	5	4,500	n/a	10	60	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Shield Refocuser	175	8	6,000	n/a	15	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Advanced Shield Amp	175	6	5,000	n/a	20	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Adv. Shield Recharger	175	10	11,000	n/a	20	100	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Adv. Shield Refocuser	175	13	20,000	n/a	35	175	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Overdrive Node	50	5	3,000	n/a	15	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Adv. Overdrive Node	50	9	7,500	n/a	35	100	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HyperDrive Node	50	14	18,000	n/a	75	250	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Targeter System	250	1	1,500	n/a	5	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HyperTarget	250	5	4,000	n/a	15	40	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
OmniTarget	250	9	7,500	n/a	25	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
X-Band Tracking System	250	4	4,500	n/a	25	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z-Band Tracking System	250	8	8,500	n/a	35	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
OmniTrack System	250	13	11,000	n/a	40	250	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Single-Band ECM	150	1	500	n/a	5	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Zerosignal Dampener	150	4	1,750	n/a	10	35	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Energy: The amount of energy used to power the item. Chassis Availability: Which units can mount this component. *Note: See page 85 for descriptions.*

Full Name	Armor	Research Level	Purchase Cost	Ammo	Energy	System Weight	Shadow	Chassis Availability: Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre
Variable Pulse Ghoster	150	7	3,750	n/a	15	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Electronic Image Displacer	150	10	7,000	n/a	20	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Active Offset Jamming	150	13	9,500	n/a	35	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HyperGhoster	150	15	13,000	n/a	15	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Light Vehicle Cloaking Device	300	6	10,000	n/a	100	200	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	Y	Y	Y	-	-
Medium Vehicle Cloaking Device	300	6	40,000	n/a	200	400	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	Y	Y
Heavy Vehicle Cloaking Device	300	6	90,000	n/a	300	800	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-
Super-Heavy HERC Cloaking Device	300	6	160,000	n/a	500	1,600	-	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mine Scanner	100	1	1,000	n/a	5	10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Standard MineLayer	50	2	2,500	8	30	350	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Command MineLayer	50	4	6,000	8	40	350	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
AMX MineLayer	50	7	9,600	6	50	500	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
ELF MineLayer	50	9	11,500	6	40	500	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Cloaked MineLayer	50	11	35,000	6	60	600	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
MineDecoy System	50	2	1,000	40	1	200	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Sensor Missile	200	2	1,500	6	1	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Remote Sensor Pod	200	5	20,000	6	25	300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Energy: The amount of energy used to power the weapon to the maximum recharge rate. Chassis Availability: Which units can mount this component. *Note: See page 85 for descriptions.*

Internal Device Specifications (continued)

Full Name	Armor	Research Level	Purchase Cost	Ammo	Energy	System Weight	Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre
							Chassis Availability:																										
Remote Sensor Multi-Pod	200	7	25,000	6	35	350	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Remote Sensor Cluster Missile	200	9	35,000	6	50	600	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Light Salvage System	100	1	1,000	n/a	5	350	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Medium Salvage System	75	1	3,000	n/a	5	500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Heavy Salvage System	50	1	5,000	n/a	5	900	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Field Recovery System	25	1	7,000	n/a	5	1,500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ProtoNanite Repair	100	3	15,000	n/a	50	100	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Enhanced ProtoNanite	100	6	25,000	n/a	150	200	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NanoRepair	100	9	50,000	n/a	250	300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Advanced NanoRepair	100	12	80,000	n/a	375	400	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
OmniRepair System	100	16	125,000	n/a	500	500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Auxiliary Ammunition Pack	50	1	1,000	1	1	300	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Light Vehicle Self Destruct System	300	7	10,000	n/a	10	100	Y	Y	Y	-	-	-	-	-	-	-	-	-	-	Y	Y	Y	Y	-	-	-	-	-	Y	Y	Y	-	-
Medium Vehicle Self Destruct System	300	7	40,000	n/a	20	200	-	-	-	Y	Y	Y	Y	Y	-	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	Y	Y
Heavy Vehicle Self Destruct System	300	7	90,000	n/a	40	400	-	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-
Super-Heavy HERC Self Destruct System	300	7	160,000	n/a	80	800	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weapon Recharger	50	5	20,000	n/a	200	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Advanced Weapon Recharger	50	9	50,000	n/a	300	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mine IFF Neutralizer	100	4	30,000	n/a	100	500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Energy: The amount of energy used to power the weapon to the maximum recharge rate. Chassis Availability: Which units can mount this component. *Note: See page 85 for descriptions.*

Internal Device Descriptions

Empty Internal Slot	Various Internal devices to make the unit more powerful may be mounted here.
Scanner Amplifier	The scanner amplifier extends a unit's sensor radius.
"Spy" System	This system adds not only to range of scans, but to the height of terrain it can view over.
Enhanced Scanner Amp	An advanced form of the Scanner Amp, it extends visibility of sensor systems further.
Omniview Scanner Amp	An advanced form of the "Spy" system, the Omniview gives a significant boost to both range of detection and the height of terrain it can "see" over.
Ultraview Scanner Amp	An improved Omniview system, the Ultraview is the best of the sensor boosting systems.
Shield Amplifier	The Shield Amplifier adds a small amount to the shield pool of any vehicle equipped with it.
Shield Recharger	The Recharger system boosts the recharge rate of a shield system so the pool regenerates 50% faster.
Shield Refocuser	The Recharger halves the time necessary for a shield to refocus to close off a downed shield facing.
Advanced Shield Amp	This system is identical to the Shield Amplifier, but gives double the boost.
Advanced Shield Recharger	The Advanced Shield Recharger doubles the recharge rate of the shield system it is attached to.
Advanced Shield Refocuser	This system is the most powerful of all the shield boosting systems, and divides the refocus time of a shield to 1/3 normal time.
Overdrive Node	This system increases performance of the vehicle drive system and thus increases the speed of the vehicle. Note that it cannot augment speed past the maximum for the chassis.

Advanced Overdrive Node	This system dramatically increases performance of the vehicle drive system and thus increases the speed of the vehicle. Note that it cannot augment speed past the maximum for the chassis.
HyperDrive Node	The most powerful of the drive boosters, the HyperDrive node boosts the effectiveness of drives by 90%.
Targeter System	The Targeter adds a 25% boost to all firing.
HyperTarget	The HyperTarget is an improved Targeter, and boosts targeting by 35%.
OmniTarget	An improved HyperTarget, the OmniTarget boosts by 50% the targeting system of the equipped vehicle.
X-Band Tracking System	The X-Band system boosts all friendly vehicle targeting potentials by 10%.
Z-Band Tracking System	The Z-Band system boosts all friendly vehicle targeting potentials by 20%.
OmniTrack System	An improved version of the Z-Band Tracking system, the OmniTrack System adds 30% to all friendly units for targeting calculations.
Single-Band ECM	The basic ECM system decreases enemy targeting percentages.
Zerosignal Dampener	An advanced ECM system, it disrupts enemy target locks and dramatically improves battlefield survivability.
Variable Pulse Ghoster	A third generation ECM suite, the Variable Pulse Ghoster uses stealth technology to create a jamming sphere and makes lockon almost impossible.
Electronic Image Displacer	The Electronic Image Displacer, or EID, gives the equipped unit excellent jamming and targeting avoidance.
Active Offset Jamming	The Active Offset Jamming system combines all available technologies into a massive, but powerful, jamming system
HyperGhoster	The HyperGhoster uses the technology of the Active Offset Jammer, but reduces it in size and power consumption dramatically.

Light Vehicle Cloaking Device	This system allows the equipped unit to avoid enemy detection through cloaking. Only enemies equipped with special sensors can detect cloaked units. This unit works with light tanks, HERCs, and grav vehicles only.
Medium Vehicle Cloaking Device	This system allows the equipped unit to avoid enemy detection through cloaking. Only enemies equipped with special sensors can detect cloaked units. This unit works with medium tanks, HERCs, and grav vehicles only.
Heavy Vehicle Cloaking Device	This system allows the equipped unit to avoid enemy detection through cloaking. Only enemies equipped with special sensors can detect cloaked units. This unit works with heavy tanks and HERCs only.
Super-Heavy HERC Cloaking Device	This system allows the equipped unit to avoid enemy detection through cloaking. Only enemies equipped with special sensors can detect cloaked units. This unit works only with the Apocalypse and Annihilator chassis.
Mine Scanner	This system allows the equipped unit to detect enemy mines before triggering them accidentally.
Standard MineLayer	The Standard Minelayer allows the deployment of basic mines. The Standard Minelayer holds eight mines.
Command MineLayer	The Command Minelayer allows the deployment of special command detonated mines. Though a grav unit will not trigger it, one caught in its blast radius will be affected. The Command Minelayer carries eight mines.
AMX MineLayer	The AMX Minelayer deploys a much more powerful standard mine. This mine is especially deadly as it can detect grav units as well as ground units. The AMX Minelayer contains only six mines due to their enlarged warhead.
ELF MineLayer	The ELF MineLayer deploys a special ELF mine that ignores enemy shielding. The ELF Minelayer carries only six mines.

Cloaked MineLayer	The Cloaked MineLayer deploys mines that cannot be detected, and are therefore VERY dangerous. The Cloaked MineLayer contains only six mines.
MineDecoy System	The MineDecoy system deploys pods that duplicate the shape and electronic signature of a mine, but do not contain explosives. This system is used to decoy enemy units and cause them to evade an area. The MineDecoy holds 40 decoys.
Sensor Missile	This system allows the launching of sensor missiles that can reveal unseen areas in tactical combat.
Remote Sensor Pod	The Remote Sensor Pod fires an advanced Sensor Missile that deploys micropods as it travels, allowing continued detection of any area the missile traveled through.
Remote Sensor Multi-Pod	The Remote Sensor Multi-Pod allows the launching of three sensor missiles simultaneously.
Remote Sensor Cluster Missile	The most powerful of the Sensor Missiles, this system allows a triple launch of missiles that not only detect unseen areas tactically, but leave micropods that allow continued detection of those areas.
Light Salvage System	The Light Salvage system allows an equipped vehicle to salvage one enemy unit or to retrieve one item from the battlefield. Also, salvage systems can store substantial quantities of valuable ore.
Medium Salvage System	The Medium Salvage system allows an equipped vehicle to salvage two enemy units or to retrieve two items from the battlefield. Also, salvage systems can store substantial quantities of valuable ore.
Heavy Salvage System	The Heavy Salvage system allows an equipped vehicle to salvage three enemy units or to retrieve three items from the battlefield. Also, salvage systems can store substantial quantities of valuable ore.
Field Recovery System	The Field Recovery system allows an equipped vehicle to salvage five enemy units or to retrieve five items from the battlefield. Also, salvage systems can store substantial quantities of valuable ore.

ProtoNanite Repair	This is the first version of limited battlefield repair. It uses nanite technology to allow in-battle repair of damaged components.
Enhanced ProtoNanite	The Enhanced ProtoNanite system doubles the repair rate of the ProtoNanite system, but still does not allow repair of heavily damaged components.
NanoRepair	The first system capable of dealing with critical damage, the NanoRepair system can repair any component not completely destroyed, given enough time.
Advanced NanoRepair	This system is merely an advanced form of the NanoRepair system and can repair at a higher rate.
OmniRepair System	The ultimate repair system, the OmniRepair system can deal with any damage that isn't total, and repairs quite quickly.
Auxiliary Ammunition Pack	This system allows a single full reload of any ammunition expending weapons on the battlefield.
Light Vehicle Self Destruct System	This system allows the equipped vehicle to trigger its reactor and explode in an attempt to take enemy forces out as a last act of defiance. This unit may only be deployed on light tanks, HERCs, and grav vehicles.
Medium Vehicle Self Destruct System	This system allows the equipped vehicle to trigger its reactor and explode in an attempt to take enemy forces out as a last act of defiance. This unit may only be deployed on medium tanks, HERCs, and grav vehicles.
Heavy Vehicle Self Destruct System	This system allows the equipped vehicle to trigger its reactor and explode in an attempt to take enemy forces out as a last act of defiance. This unit may only be deployed on heavy tanks and HERCs.

Super-Heavy HERC Self Destruct System	This system allows the equipped vehicle to trigger its reactor and explode in an attempt to take enemy forces out as a last act of defiance. This unit may only be deployed on the Apocalypse and Annihilator chassis.
Weapon Recharger	The Weapon Recharger improves the effective weapon recharge rate, allowing a slightly higher rate of fire.
Advanced Weapon Recharger	This system dramatically increases the effective weapon recharge rate.
Mine IFF Neutralizer	The Mine IFF Neutralizer confuses enemy mines so that they do not detonate when an IFF Neutralizer-equipped unit enters the detection radius. This system effective renders the vehicle immune to minefields, though beware travelling through minefields that might be triggered by another unit.

Life Support Specifications

Full Name	Armor	Research Level	Repair/Cost %	Purchase Cost	Energy	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Increase in H/T	Increase in S/T	Decrease in T/T	Ejection?	Shields vs. Rad?
Basic Life Support	100	1	10	50	1	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.00	0.00	0.00	N	N
Standard Medisys	100	1	25	150	3	20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1.00	0.00	0.00	N	N
Improved Medisys	125	2	25	250	4	20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	2.00	0.00	0.00	N	N
Dermsafe System	100	2	20	100	2	30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.00	0.00	0.00	Y	N
Integrated Medisys	125	3	25	450	5	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	2.00	0.00	1.00	N	N
Integrated Dermsafe	100	3	20	900	6	35	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	2.00	0.00	1.00	Y	N
Advanced Medisys	125	4	25	750	6	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	3.00	0.00	2.00	N	N
Advanced Dermsafe	100	4	20	1,500	7	35	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	3.00	0.00	2.00	Y	N
Reactive Life Support	125	5	35	1,250	10	40	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	3.00	1.00	3.00	N	N
Reactive Dermsafe	100	6	30	2,500	12	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	3.00	1.00	3.00	Y	N
Reactive AntiRad	200	6	50	2,500	10	80	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	3.00	1.00	3.00	N	Y
BioEnviron	125	7	40	1,550	10	30	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.00	1.00	4.00	N	N
Advanced BioEnviron	125	8	40	2,150	12	35	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	5.00	2.00	5.00	N	N
BioEnviron Dermsafe	100	9	35	4,300	15	45	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	5.00	2.00	5.00	Y	N
BioRepair	100	10	45	2,750	15	35	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.00	3.00	6.00	N	N
Shielded BioRepair	100	10	45	5,500	18	45	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.00	3.00	6.00	N	Y
LiquidLife System	125	11	50	3,350	15	40	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	8.00	3.00	8.00	N	N
Armored LiquidLife	20	12	50	6,700	15	120	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	8.00	3.00	8.00	N	Y
LiquidLife Dermsafe	20	13	50	15,800	25	125	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	9.00	4.00	9.00	Y	Y
Bioderm Regeneration System	100	14	80	12,450	15	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	99.00	3.00	8.00	N	N
Advanced Regeneration	100	15	80	12,950	20	60	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	99.00	4.00	9.00	N	N
UltiRegen	20	16	90	53,000	40	200	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	99.00	5.00	9.00	Y	Y

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Energy: The amount of energy used to power the weapon to the maximum recharge rate. Chassis Availability: Which units can mount this component. Increase in H/T, S/T: The number of points added to the pilot's health and stability each second, respectively. Decrease in T/T: The number of points subtracted from the pilot's toxin level each second. Ejection? Can this unit eject the bioderm before the destruction of the vehicle? Shields vs. Rad? Can this unit ignore the effects of a radiation gun?

Reactor Specifications

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Energy Rate
Fission Reactor 300	1	20	1,800	180	300
Fission Reactor 400	2	20	3,200	320	400
Fission Reactor 500	1	20	5,000	500	500
Fission Reactor 600	2	20	7,200	720	600
Fission Reactor 700	1	20	9,800	980	700
Fission Reactor 900	1	20	16,200	1,620	900
Fission Reactor 1100	1	20	24,200	2,420	1,100
Fission Reactor 1300	2	20	33,800	3,380	1,300
Fission Reactor 1500	1	20	45,000	4,500	1,500
Fission Reactor 1800	2	20	64,800	6,480	1,800
Fission Reactor 2200	2	20	96,800	9,680	2,200
Fusion Reactor 250	3	30	2,083	94	250
Fusion Reactor 410	4	30	5,603	252	410
Fusion Reactor 600	5	30	12,000	540	600
Fusion Reactor 710	3	30	16,803	756	710
Fusion Reactor 875	4	30	25,521	1,148	875
Fusion Reactor 1000	5	30	33,333	1,500	1,000
Fusion Reactor 1225	3	30	50,021	2,251	1,225
Fusion Reactor 1450	4	30	70,083	3,154	1,450
Fusion Reactor 1780	5	30	105,613	4,753	1,780
Fusion Reactor 2310	6	30	177,870	8,004	2,310
Ion Power System 300	6	40	4,800	90	300
Ion Power System 475	7	40	12,033	226	475
Ion Power System 625	8	40	20,833	391	625
Ion Power System 750	7	40	30,000	563	750
Ion Power System 990	8	40	52,272	980	990

Full Name	Research Level	Repair/Cost %	Purchase Cost	System Weight	Energy Rate
Ion Power System 1300	9	40	90,133	1,690	1,300
Ion Power System 1550	7	40	128,133	2,403	1,550
Ion Power System 1700	8	40	154,133	2,890	1,700
Ion Power System 2020	9	40	217,621	4,080	2,020
Ion Power System 2400	10	40	307,200	5,760	2,400
CPS Reactor 350	10	50	8,167	92	350
CPS Reactor 515	11	50	17,682	199	515
CPS Reactor 690	12	50	31,740	357	690
CPS Reactor 850	10	50	48,167	542	850
CPS Reactor 1015	11	50	68,682	773	1,015
CPS Reactor 1375	12	50	126,042	1,418	1,375
CPS Reactor 1500	10	50	150,000	1,688	1,500
CPS Reactor 1810	11	50	218,407	2,457	1,810
CPS Reactor 2100	12	50	294,000	3,308	2,100
CPS Reactor 2420	13	50	390,427	4,392	2,420
AMC Power System 400	13	75	16,000	80	400
AMC Power System 635	14	75	40,323	202	635
AMC Power System 790	15	75	62,410	312	790
AMC Power System 950	13	75	90,250	451	950
AMC Power System 1220	14	75	148,840	744	1,220
AMC Power System 1470	15	75	216,090	1,080	1,470
AMC Power System 1600	13	75	256,000	1,280	1,600
AMC Power System 2000	14	75	400,000	2,000	2,000
AMC Power System 2350	15	75	552,250	2,761	2,350
AMC Power System 2700	16	75	729,000	3,645	2,700

Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state.

Sensor Specifications

Full Name	Armor	Research Level	Repair/Cost %	Purchase Cost	Energy	System Weight	Chassis Availability: Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Sensor Range	Overview Height	FOW Removed?	See Cloaked Units?
Standard Scan 2000	1,000	1	25	520	5	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	5	0	N	N
Standard Scan 3000	800	1	25	800	15	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	0	N	N
Scout X6 Scanner	1,000	1	25	2,939	10	50	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	8	1	N	N
Scout MX7 Scanner	900	1	25	3,704	15	75	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	9	1	N	N
Advanced Scan System	800	2	25	800	10	50	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	0	N	N
Hyperscan	1,000	3	25	1,118	30	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	0	N	N
Remote Scout System	1,000	4	35	5,879	5	25	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	8	1	Y	N
Armored Hyperscan	100	4	25	1,118	30	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	0	N	N
SPY-9Z Scout Scanner	700	5	25	3,354	20	100	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	7	2	N	N
Crystal Mx Scanner	650	6	25	1,600	20	100	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	1	N	N
Crystal Hyperscan	800	7	25	2,236	30	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	1	N	N
N-Wave Anti-cloak Scan	400	8	35	1,600	150	750	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6	0	N	Y
SPY-2 Advanced Scout	600	9	25	6,788	25	125	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	10	2	N	N
Armored Hypercrystal	50	9	25	2,236	30	150	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	1	N	N
Remote N-Wave Scanner	1,000	10	35	4,472	175	875	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	0	Y	Y
Omni-X	1,000	11	25	4,409	5	25	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	8	2	N	N
Scout Omni-ZX	1,000	12	25	10,800	15	75	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	11	3	N	N
Remote Omni-X	1,000	13	25	6,708	15	75	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7	2	Y	N
Advanced N-Wave	450	14	35	5,879	250	1,250	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	8	1	N	Y
Armored Scout Omni	100	14	25	10,800	15	75	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	11	3	N	N
EOG Omniscanner	400	15	45	7,408	75	375	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	9	3	N	N
EOG Scout Omniscanner	500	16	45	46,872	100	500	Y	-	-	-	Y	-	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	-	-	-	-	-	Y	-	15	4	N	Y

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Energy: The amount of energy used to power the weapon to the maximum recharge rate. Chassis Availability: Which units can mount this component. Sensor Range: The number of squares radius the sensor allows the unit to see. Overview Height: The height of obstacle the sensor can see over. FOW Removed: Does this sensor unit allow fog of war revealed terrain to remain revealed and "visible"? See Cloaked Units? Can this sensor unit see cloaked units?

Shield Specifications

Full Name	Armor	Research Level	Repair/Cost %	Purchase Cost	Energy	System Weight	Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Max Shield Pool	Recharge Rate	Refocus Rate	Hardened?	Shielded vs. EMP?
	Chassis Availability:																																					
No Shield	250	1	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	9.0	N	N
Standard 150	250	1	10	188	2	38	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	150	6	3.0	N	N
Standard 500	200	1	10	625	6	125	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	500	20	3.0	N	N
Standard 900	150	1	10	1,125	11	225	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	900	36	3.0	N	N
Standard 300	250	2	10	530	4	75	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	300	12	3.0	N	N
Standard 700	200	2	10	1,237	9	175	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	700	28	3.0	N	N
Standard 1200	150	2	10	2,121	15	300	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	1,200	48	3.0	N	N
Standard 600	250	3	10	1,299	8	150	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	600	24	3.0	N	N
Standard 1000	200	3	10	2,165	13	250	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,000	40	3.0	N	N
Standard 1500	150	3	10	3,248	19	375	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	1,500	60	3.0	N	N
FastRecharge 600	250	4	15	1,500	8	150	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	600	48	3.0	N	N
FastRecharge 1000	200	4	15	2,500	13	250	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,000	80	3.0	N	N
FastRecharge 1500	150	4	15	3,750	19	375	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	1,500	120	3.0	N	N
Standard 800	250	5	10	2,236	10	200	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	800	32	3.0	N	N
Standard 1250	200	5	10	3,494	16	313	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,250	50	3.0	N	N
Standard 1800	150	5	10	5,031	23	450	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	1,800	72	3.0	N	N
FastRecharge 1800	150	6	15	5,511	23	450	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	1,800	144	3.0	N	N
Focus 1250	200	6	20	3,827	16	313	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,250	50	2.0	N	N
Hardened 800	250	7	20	5,292	40	400	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	800	32	3.0	Y	N
Standard 2200	150	7	10	7,276	28	550	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,200	88	3.0	N	N
Standard 3000	100	7	10	9,922	38	750	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	-	Y	-	-	-	-	3,000	120	3.0	N	N
Standard 950	250	8	10	3,359	12	238	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	950	38	3.0	N	N

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Energy: The amount of energy used to power the weapon to the maximum recharge rate. Chassis Availability: Which units can mount this component. Max Shield Pool: The number of total shield points in the shield pool when at maximum strength. Recharge Rate: The number of pool points regained per second. Refocus Rate: The speed at which a downed shield facing is rebuilt with remaining pool points. Hardened? Can this shield reduce the effects of penetrative damage (PenD is halved against this shield)? Shielded vs. EMP? Is this shield resistant to the effects of EMP weapons (Damage from EMP weapons is halved)?

Full Name	Armor	Research Level	Repair/Cost %	Purchase Cost	Energy	System Weight	Shadow	Remora	Arachnus	Ogre	Sensei	Malignus	Giant	Mantis	Demon	Troll	Hades	Apocalypse	Annihilator	Lynx	Bloodhound	Viper	Stingray	Raider	Lancer	Hammer	Devastator	Thunder	Lightning	Skyfox	Meteor	Talon	Sabre	Max Shield Pool	Recharge Rate	Refocus Rate	Hardened?	Shielded vs. EMP?
							Chassis Availability:																																
FastRecharge 2200	150	8	15	7,778	28	550	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,200	176	3.0	N	N
Focus 1800	150	8	20	6,364	23	450	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	1,800	72	2.0	N	N
Standard 1600	200	9	10	6,000	20	400	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,600	64	3.0	N	N
EGS 950	250	9	25	7,125	48	475	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	950	38	3.0	N	Y
Standard 1100	250	10	10	4,348	14	275	Y	Y	Y	Y	Y	Y	-	-	-	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	1,100	44	3.0	N	N
Hardened 2200	150	10	20	17,393	110	1,100	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,200	88	3.0	Y	N
Standard 2600	150	10	10	10,277	33	650	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,600	104	3.0	N	N
Standard 3500	100	11	10	14,510	44	875	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	3,500	140	3.0	N	N
EGS 1600	200	11	25	13,266	80	800	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,600	64	3.0	N	Y
FastRecharge 2600	150	11	15	10,779	33	650	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,600	208	3.0	N	N
Focus 2600	150	12	20	11,258	33	650	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,600	104	2.0	N	N
HyperShield 950	250	12	30	16,454	190	950	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	950	76	2.0	Y	Y
FastRecharge 4000	100	13	15	18,028	50	1,000	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	Y	-	-	-	-	-	4,000	320	3.0	N	N
FastRecharge 2800	150	13	15	12,619	35	700	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,800	224	3.0	N	N
FastRecharge 1900	200	13	15	8,563	24	475	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,900	152	3.0	N	N
HyperShield 1600	200	14	30	29,933	320	1,600	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,600	128	2.0	Y	Y
HyperShield 2200	150	14	30	41,158	440	2,200	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,200	176	2.0	Y	Y
EGS 2600	150	14	25	24,321	130	1,300	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,600	104	3.0	N	Y
HyperShield 1100	250	15	30	21,301	220	1,100	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1,100	88	2.0	Y	Y
HyperShield 1900	200	15	30	36,793	380	1,900	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	Y	Y	Y	Y	Y	Y	-	-	-	Y	Y	1,900	152	2.0	Y	Y
HyperShield 2800	150	16	30	56,000	560	2,800	-	-	-	-	-	-	Y	Y	Y	-	Y	Y	Y	-	-	-	-	-	-	Y	Y	Y	-	-	-	-	2,800	224	2.0	Y	Y
HyperShield 4000	100	16	30	80,000	800	4,000	-	-	-	-	-	-	-	-	-	-	-	Y	Y	-	-	-	-	-	-	-	-	Y	-	-	-	-	4,000	320	2.0	Y	Y

Armor: The armor level of the item (100 is normal, 50 is strong, 200 is weak). Research Level: Each type of weapon or system is a separate research chain, from 1 to 16. Repair/Cost %: The percentage of the purchase price to repair the item from a 0% damage state. Energy: The amount of energy used to power the weapon to the maximum recharge rate. Chassis Availability: Which units can mount this component. Max Shield Pool: The number of total shield points in the shield pool when at maximum strength. Recharge Rate: The number of pool points regained per second. Refocus Rate: The speed at which a downed shield facing is rebuilt with remaining pool points. Hardened? Can this shield reduce the effects of penetrative damage (PenD is halved against this shield)? Shielded vs. EMP? Is this shield resistant to the effects of EMP weapons (Damage from EMP weapons is halved)?

Chassis Specifications

Full Name	Purchase Cost	System Weight	Type	Vulnerability	Terrain Cost	Chance: Stand	Chance: Crouch	Rank Available: CUC	UniTech	Sentinel	TekWorks	HyperSonic	Stellar	ISI	Yamaguchi
Shadow	327	310	HERC	95	0.700	60	30	1	n/a	1	1	1	1	1	1
Remora	510	438	HERC	80	0.750	75	38	1	1	1	n/a	1	1	1	n/a
Arachnus	339	356	HERC	75	0.700	70	35	n/a	n/a	n/a	n/a	n/a	n/a	1	n/a
Ogre	6,275	1,333	HERC	60	0.850	100	66	n/a	1	1	1	n/a	1	1	1
Sensei	4,380	1,061	HERC	70	0.900	85	43	1	1	1	1	1	1	n/a	1
Malignus	6,924	1,587	HERC	55	1.000	80	40	n/a	n/a	n/a	n/a	n/a	n/a	1	n/a
Giant	14,895	2,560	HERC	50	1.100	110	72	1	1	1	1	1	n/a	1	1
Mantis	9,481	1,778	HERC	60	1.000	85	43	3	4	3	3	3	2	n/a	3
Demon	72,600	5,500	HERC	40	1.250	120	80	n/a	1	1	n/a	1	1	1	1
Troll	45,804	3,951	HERC	45	1.150	120	90	5	6	n/a	5	5	4	n/a	5
Hades	50,625	4,500	HERC	40	1.200	110	75	n/a	n/a	n/a	n/a	n/a	n/a	1	n/a
Apocalypse	370,834	16,640	HERC	25	1.400	150	120	3	4	1	3	3	6	n/a	3
Annihilator	205,761	11,111	HERC	30	1.350	130	110	7	8	5	7	7	6	n/a	7
Lynx	158	344	TRACK	80	0.500	45	45	1	n/a	1	1	n/a	1	1	1
Bloodhound	174	332	TRACK	85	0.450	40	40	1	1	n/a	1	1	1	1	1
Viper	892	944	TRACK	60	0.500	60	60	1	n/a	1	1	1	1	n/a	n/a
Stingray	1,165	1,136	TRACK	65	0.600	65	65	n/a	n/a	1	n/a	n/a	n/a	1	1
Raider	1,623	1,190	TRACK	55	0.800	75	75	1	1	1	1	1	n/a	1	n/a
Lancer	4,030	1,840	TRACK	50	0.700	70	70	1	1	1	1	1	1	n/a	1
Hammer	1,171	1,185	TRACK	45	0.900	70	70	5	6	3	5	5	4	n/a	5
Devastator	50,417	7,333	TRACK	30	0.800	80	80	1	n/a	1	n/a	1	n/a	1	1
Thunder	55,556	10,000	TRACK	20	0.900	70	70	9	8	1	n/a	n/a	5	n/a	n/a
Lightning	1,985	443	GRAV	85	0.280	35	25	1	1	1	n/a	1	1	n/a	1
Skyfox	1,250	375	GRAV	80	0.300	40	25	n/a	n/a	1	1	1	1	n/a	n/a
Meteor	868	277	GRAV	85	0.250	30	20	1	n/a	1	1	n/a	1	1	n/a
Talon	16,384	1,280	GRAV	75	0.500	40	35	5	6	3	5	5	4	n/a	5
Sabre	29,911	1,878	GRAV	70	0.550	50	40	7	n/a	5	7	7	6	n/a	7

Move Cost: Number of seconds to move one cell at maximum speed. Chance: Stand, Crouch: Hit Chance % modifier to hit this chassis when standing or crouching (due to size, etc). Rank Available: Defines which chassis are available to which corp at which rank (n/a means never).

Facility Specifications

This chart only shows the preconfigured armament for the turrets that you are capable of constructing. Proper facility and financial management will allow these turrets to be built and improved over time.

Name	Hardpoint 1	Hardpoint 2	Hardpoint 3	Hardpoint 4	Hardpoint 5	Hardpoint 6	Hardpoint 7	Hardpoint 8
Turret (v1)	SE1000	SE1000	STUB	STUB	SGMissile	SGMissile	STUB	STUB
Turret (v2)	SC1000	SC1000	STUB	STUB	DarkfistMsl	DarkfistMsl	STUB	STUB
Turret (v3)	SP1200	SP1200	HvyGauCan	HvyGauCan	RadBeam	RadBeam	HKMissile	HKMissile
Turret (v4)	SCGH	SCGH	MdmPartGun	MdmPartGun	HvyWebCast	HvyWebCast	HKMissile	HKMissile
Turret (v5)	PBWTribar	PBWTribar	X-Beam	X-Beam	HvyWebCast	HvyWebCast	PlasmaMsl	PlasmaMsl

Reference

Troubleshooting

The following information should help you solve any problems you might experience with *Cyberstorm 2*. Sierra Technical Support provides this documentation as a reference to Sierra customers using Sierra software products. Sierra Technical Support makes reasonable efforts to ensure that the information contained in this documentation is accurate. Sierra makes no warranty, either express or implied, as to the accuracy, effectiveness, or completeness of the information contained in this documentation.

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HARDWARE REQUIREMENTS

REQUIRED:

An IBM-compatible Pentium-133 computer
Windows® 95
4X CD-ROM Drive
24 Mb RAM
1 Mb Local Bus Video Card
A hard disk with 30 Mb free (minimum installation)
An SVGA graphics card and SVGA color monitor.
A mouse.

INSTALLATION PROCEDURES

Insert the CD into the CD ROM drive. Wait about 10 seconds, and Windows should bring up the *Cyberstorm 2* window. Select Install.

If Auto Insert notification is turned off, install the program by clicking on Start, then Run..., then typing in D:\SETUP.EXE and clicking OK. (If your CD ROM drive is a letter other than D, substitute the appropriate drive letter.).

INSTALLATION PROBLEMS

Problem: The computer fails the Sound Card test and the voice/fanfare in the Wave/MIDI tests is not heard.

Solution: The sound card may be incorrectly configured for digital sound

(Audio) or the sound card drivers may not be properly installed or configured for Windows 95. Make sure the speakers are turned on and increase the volume levels for digital sound (Audio) in the Windows mixer program for the sound card. Consult the sound card documentation or the manufacturer for information regarding the correct configuration of the sound card in Windows 95.

Problem: "Error reading drive D" when installing *Cyberstorm 2*. Message will vary depending on what drive game is installing from. Solution: There are several factors that can cause a "read" error. The most common is a dirty or scratched CD. Check the CD to make sure that there are no smudges, finger prints, scratches or cracks on it. If there are any smudges on the CD, clean it off with a soft cloth and try it again. If the disk is scratched, it will need to be replaced.

If cleaning the CD doesn't help, the problem may lie with the CD ROM drivers. *Cyberstorm 2* may not install properly unless you are using Windows 95 virtual drivers. To determine whether you are using virtual or real mode drivers, hold down the ALT key and DOUBLE-CLICK on MY COMPUTER. Click on the PERFORMANCE tab at the top of the SYSTEM PROPERTIES window. In the FILE SYSTEM field it should read 32 BIT. It should NOT read: Some drives are using MSDOS compatibility.

For information on using virtual drivers in Windows 95, please contact the computer manufacturer.

Problem: During Setup, your computer fails the Memory test; you get a message stating you do not have enough memory to run *Cyberstorm 2*.

Solution: *Cyberstorm 2* requires a computer with a minimum of 16 MB of physical RAM to run. To free up memory in Windows 95, close any and all Windows programs (including screen savers, wallpaper, virus detection programs, shell programs like Norton Desktop or Packard Bell Navigator, etc.) that may be running. On your Taskbar, right-click on the program tab for the program you wish to shut down, and select Close. Then run *Cyberstorm 2* Setup program again and try the memory test. If your system still fails the test, consult the boot disk instructions at the end of this document and create a Windows 95 boot disk for your system. Then boot up with the boot disk, disable any and all other Windows programs, and start the Setup program again. These steps should give you enough memory to run the program.

Problem: I have Windows NT 4.0, but I do not have DirectX.

Solution: Contact Microsoft to get the latest Service Release Pack for NT.

Note: Cyberstorm 2 utilizes Microsoft DirectX. DirectX can be installed from the Cyberstorm 2 CD during the setup procedure. DirectX is an add-on to Windows 95 that provides an interface between the hardware and application. By allowing the application more direct control of your system's hardware, DirectX is capable of greatly accelerating graphics and sound.

DirectX checks your video and sound card drivers for compliance. If your current drivers are not compliant, DirectX will install new drivers. The drivers installed by DirectX are designed by Microsoft, and may not be a perfect match for your particular brand and model of video or sound cards. If your system fails to run properly after installing DirectX, you will need to contact the manufacturer of your hardware, or Microsoft tech support.

PROBLEMS WHILE USING CYBERSTORM 2

Problem: After I installed *Cyberstorm 2*, my computer rebooted in Safe Mode, or just hung when rebooting.

Solution: The DirectX installation may have put an incorrect video driver on your PC. If your PC booted in Safe Mode, you can restore your old drivers by going to the Start Menu, select Settings, then Control Panel, and double-clicking on the DirectX icon. Press the button to restore DirectX drivers. You'll then need to get the correct video drivers from your video card manufacturers web site. The Microsoft Knowledge Base (KB) article number:Q161406 at http://www.microsoft.com/kb/articles/q161/4/06.htm has more detailed information on DirectX related video driver problems.

Problem: When I start the program, I get a message saying that Indeo is not installed.

Solution: Try reinstalling the product. Indeo is automatically installed as part of the installation procedure.

Problem: I don't hear any sounds at all while running the program.

Solution: Check your speaker cables and power connection, and check the setting of your speaker volume control and the Windows volume control. Check that you don't have either the Wave output or Volume Control muted.

If this doesn't work, the DirectX installation may have installed the wrong sound card driver. The Microsoft KB article number: Q166774 at http://www.microsoft.com/kb/articles/q166/7/74.htm has more details on how to fix this problem.

Problem: No sound is heard during *Cyberstorm 2* in Windows 95.

Solution: This usually occurs when the sound card's Windows 95 drivers are not installed correctly or are not compatible with DirectX. Please contact the sound card manufacturer for DirectX compatible drivers. Also, please make sure that the sound and voices are turned on in *Cyberstorm 2* in the Options Menu.

WINDOWS 95 SYSTEM DISK INSTRUCTIONS

If all else fails, make a Windows 95 Boot disk.

Important note: Please read all instructions before beginning this procedure.

STEP 1 - FORMATTING THE DISK

To make a boot disk, system format a high density diskette in the A: drive. This procedure will transfer the "system files" to the disk and allow the computer to boot up correctly. The disk must be in the A: drive

To format a disk in Windows 95, put the disk in the drive, open My Computer, then right click on the A: icon. From the pop-up menu, select Format. Under "Format type" select Full. Under "Other options", choose Copy system files. Click on Start.

After the disk is formatted, copy the MSDOS.SYS file from the hard drive to the floppy disk. To do this, leave the floppy disk in the drive, open Windows Explorer and find the MSDOS.SYS file in the root of the C: drive. Right click on the file, then select Send to from the pop-up menu. Send the file to the A: drive.

Note: If there is not an MSDOS.SYS file in Explorer, the file is hidden. To make the file visible, select View, Options, then Show all files. To hide them again after making the boot disk, choose View, Options, Hide files of this type.

STEP 2 -REBOOT THE COMPUTER AND RUN CYBERSTORM 2

Leave the disk in the drive and restart the computer by clicking on Start and then Shut Down. Restart the computer. The computer will now re-boot with the boot disk. When Windows 95 is ready, start *Cyberstorm 2*.

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Montag bis Freitag von 9h - 19Uhr
Fax: (0) 6103-99-40-35

Robert-Bosh-Str. 32
D-63303 Dreieich
Germany

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Technical Support	Monday-Friday, 10:00 a.m.- 6:45 p.m. PST
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http://www.sierra.com	support@sierra.com

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In Canada, call 1-900-451-3356 at $1.25 per minute.

Credits

Designer / Director:
Graeme 'Printouts-can't-be-Too-Small' Bayless

Associate Designer:
Scott 'I-have-a-Change-but-it's-Easy' Bandy

Producer:
Neil 'You-Got-It' Haldar

Lead Software Engineer:
Stephen Cordon

Software Engineers:
Christoper 'Shell-FX-Slider-Guy' Singleton
Michael 'Campaign-Guy' Lytton
Gary 'Terrain-Guy' Shannon
Cristina 'Notta-Guy' Negoita

Mission Scripting:
Cristina Negoita

Additional Programming Assistance:
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Brian 'Modeless' Apgar
Glenn 'Spiffy' Wallace
Nancy 'Also-Also-Spiffy' Hamilton
Dave 'Plug-In' McClurg
Dan 'Guru' White
Outpost2 and Vampire Wars teams
Dynamix R&D Group

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Mary Ann O'Leary

Buck-Stops-Here Art Person:
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Sue Garner

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Sean 'Grizzly Adams' Frackowiak
Sue 'Da Techie' Garner
Geoff Hampton
Brad 'Big Dawg' Heinz
Jerome Kluth
Eric Lanz
Darion 'Official Gumball Supplier of the 1998 QA Cyberstorm 2 Team' Lowenstein
Jake 'The Vulture' Martin
Joe 'Lord booty' McGuire
Robert 'Plasma Cannons!!!' Quattrone Jr.
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Special thanks to our numerous beta testers for their valuable effort.

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