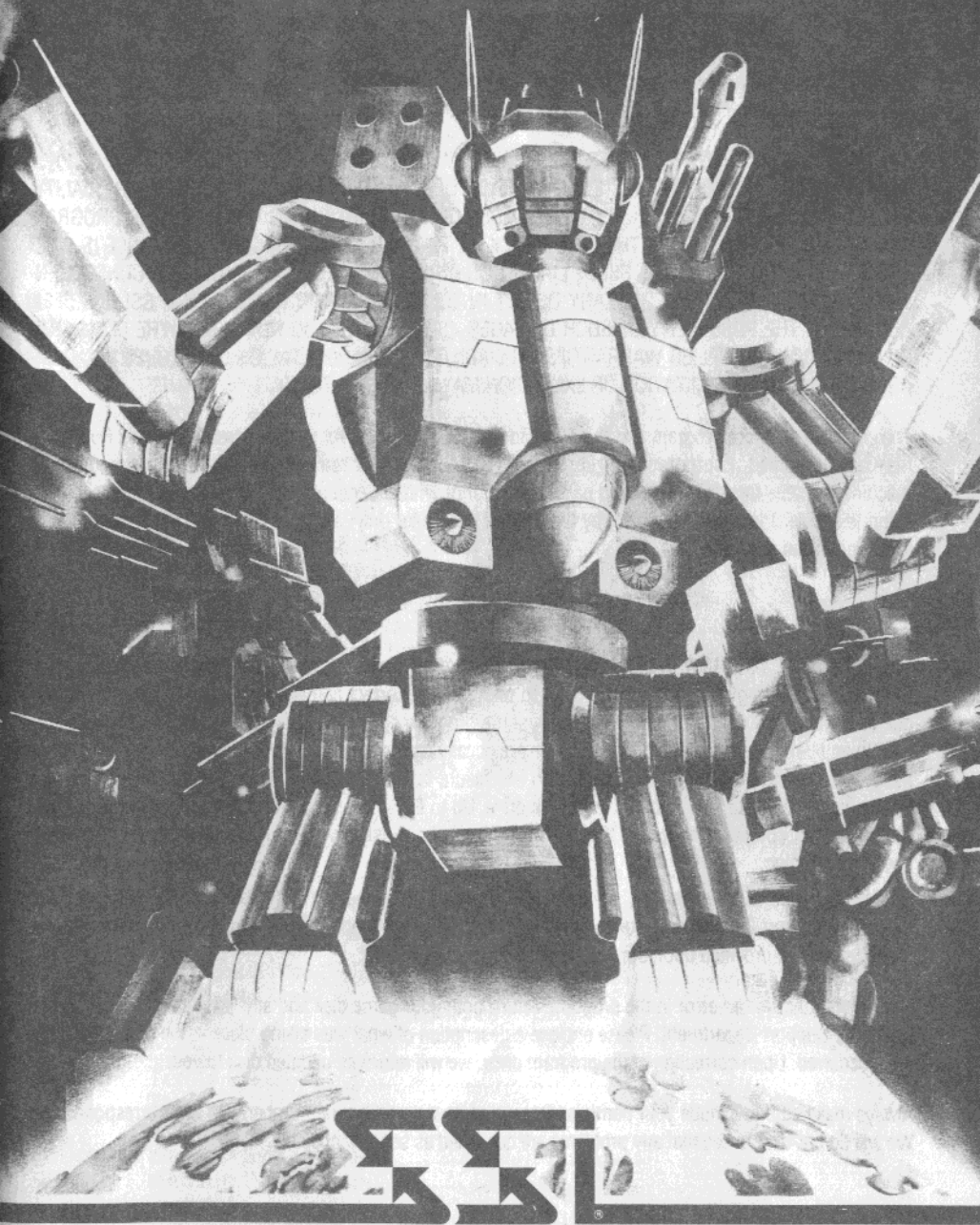


CYBER EMPIRES™



SSI

STRATEGIC SIMULATIONS, INC.

STRATEGIC SIMULATIONS, INC. LIMITED WARRANTY

Strategic Simulations, Inc. ("SSI") warrants that the diskette(s) on which the enclosed program is recorded will be free from defects in materials and workmanship for a period of 30 days from the date of purchase. If within 30 days of purchase the diskette(s) prove defective in any way, you may return the diskette(s) to Strategic Simulations, Inc., 675 Almanor Avenue, Sunnyvale, CA 94086-2901 and SSI will replace the diskette(s) free of charge. In addition, if the diskette(s) prove defective at any time after the first 30 days, return the diskette(s) to SSI and SSI will replace the diskette(s) for a charge of \$10.00 (each disk) plus \$4.00 for shipping and handling. California residents, add applicable sales tax.

SSI MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE SOFTWARE PROGRAM RECORDED ON THE DISKETTE OR THE GAME DESCRIBED IN THIS RULE BOOK, THEIR QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THE PROGRAM AND GAME ARE SOLD "AS IS." THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE IS WITH THE BUYER. IN NO EVENT WILL SSI BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE PROGRAM OR GAME EVEN IF SSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.)

The enclosed software program and this Rule Book are copyrighted. All rights are reserved. This Rule Book may not be copied, photographed, reproduced, or translated or reduced to any electrical medium or machine-readable form, in whole or in part, without prior written consent from SSI. The program accompanying this Rule Book may be copied, by the original purchaser only, as necessary for use on the computer for which it was purchased.

©1992 Strategic Simulations, Inc. All Rights Reserved.

WHAT TO DO IF YOU HAVE A DEFECTIVE DISK: Each of our games undergoes extensive playtesting prior to its release. Through this process we hope to uncover and correct any errors in programming. However, due to the complex nature of our simulations, some program errors may go undetected until after publication. In addition to errors in the program, there are occasionally problems with the disk itself. We experience the industry standard of approximately a 3 to 5% failure rate of duplicated disks. Before assuming that a disk is defective, make sure to check your disk drive. Up to 95% of the disks returned to us as defective will run fine on our computer systems. Often the problem is with a disk drive that needs servicing for alignment, speed, or cleaning.

Should you have a defective disk, please return the disk only (keep all other parts of the game) to our Customer Support Department, along with a note describing the problem you have encountered. A replacement disk will be provided upon our receipt of the defective disk.

Should you uncover an error in the program, return both your game disk and any "save game" disks to our Customer Support Department. Please enclose a description of what was taking place in the game when the error occurred. Upon correction of the program error, we will return an updated disk to you.

Always make sure to include your name, address, and daytime telephone number with any correspondence. We will do our best to see that any problems are corrected as soon as possible.



CONTENTS

INTRODUCTION	1
STARTUP	1
Your Game Box Should Contain	1
Backup Disks	1
Readme File	1
Installing and Starting the Game	1
Soundcard Setup	1
Documentation Check	1
Game Interface	1
INITIAL GAME OPTIONS MODE	2
The Complete Campaign Option	2
The Strategy Campaign Option	3
The Battle Practice Option	3
SETTING UP A CAMPAIGN GAME	4
The Complete and Strategy Campaigns	4
Winning a Campaign Game	4
The Geography of the Planet Orion	4
The Campaign Settings Screen	4
Entering a Player's Name	6
Setting the Computer Level	7
SETTING UP A BATTLE PRACTICE GAME	8
Showdown	8
Survivor	8
STRATEGY MODE	10
The Strategy Control Screen	10
Map Icons	11
Actions on the Strategy Control Screen	11
STRATEGY CAMPAIGN CONFLICT RESOLUTION	23
COMPLETE CAMPAIGN CONFLICT RESOLUTION	23
Preparing an Attack	24
Preparing a Defense	26
The SIM Option	28
COMBAT MODE	28
The Combat Mode Screen	29
Starting a Battle	30
Manipulating the Control Cyborg	31
Ending a Battle	34
The Battle Map	34
REFERENCE	35
Country Particulars	35
Terms Used	35
Terrains	36
Strategic Hints	37
Weapon System Data	38
Weapon Data Table	41



INTRODUCTION

CYBER EMPIRES integrates strategy with arcade action on a global scale. As the commanding general of an expanding military empire, you will need sound strategic judgement, fast reflexes, and a willingness to take risks if you hope to win.

Your first task is the construction of country capitals, factories, factory enhancements, fortifications, and most important of all, cyborg armies. Initial expansion is always rapid, as each empire strives to establish a strong position. You must perpetually watch your empire's borders for signs that the enemy is preparing a major attack, while plotting your enemies' destruction.

Victory is achieved only by annihilating all opponent forces and seizing control of the countries occupied by them.

STARTUP

Your Game Box Should Contain

- This Rule Book
- Game Disk(s)
- Data Card

Backup Disks

Your version of the game permits backup copies to be made. Please make a backup copy and put the original disk(s) away for safekeeping. See your data card for more information.

Readme File

Your game disk may come with a README file that contains rules updates and/or errata. Please read this file before playing the game.

Installing and Starting the Game

Use the instructions on your data card to install and start the game.

Soundcard Setup

Check your data card for any information relating to the selection of your computer's soundcard system.

Documentation Check

To verify that you have a legitimate copy of the game, you will be asked to answer a question using information from this rule book. The answer will be a number or a single word. Each question will also list a page number. Read the question carefully, then check the listed page for the answer. Enter the answer using the keyboard.

Game Interface

CYBER EMPIRES uses two different control systems: a mouse system and a real-time action interface which uses the joystick and/or keyboard.

For controls on the Commodore Amiga, please see your system data card. Also, some MS-DOS machines may have special game interface restrictions. Refer to your data card for more information.

Using the Mouse Interface

This interface can actually use either mouse or keyboard (but not both). If a mouse driver is not loaded, the keyboard becomes operational. If neither keyboard or mouse moves the cursor, check your keyboard connections.

The mouse interface is in effect when you are in the initial game options mode, when setting up a game, and



MERCURY

The Mercury was designed to be a low-cost fighting cyborg. Its quick speed and high maneuverability make it difficult to hit, especially in confined or cluttered terrains. The Mercury's weakness lies in its light armor. This 30-ton cyborg cannot withstand much punishment. Its only weapon is the light laser. These cyborgs are most effective in numbers. Three or four have been known to destroy larger cyborgs.

Mercury Tactical Details

Speed	Fast
Cooling Factor	3
Armor	30
Weapon System 1	Light Laser (3)
Ammo System 1	Unlimited



when in the strategy mode. To control game functions in these portions of the game, move the cursor (the arrow) to the desired option on screen, using either the mouse or the cursor keys. Then select that option, using the left mouse button to click the button, or using the Enter key if using keyboard selection.

Using the Action Interface

The action interface utilizes the keyboard, and a joystick option is available for both one and two player games. The player controls one cyborg in real time combat, while the other cyborgs in the army are under computer control. This interface is described in detail in the "Combat Mode" section of this rule book.

INITIAL GAME OPTIONS MODE

CYBER EMPIRES contains three different game options. To start a game, select your preferred option on the initial option screen that appears after the documentation check.

When a game is completed, you will be returned to this screen and may select another game. Check your data card for information on returning to your computer's operating system.

The Complete Campaign Option

This option is the highlight of CYBER EMPIRES. You campaign to conquer the world of Orion, competing with one to four other empires. You begin your



endeavor in a single country, and, if successful, expand your empire to the far reaches of the planet.

When battles occur in the complete campaign, they may be resolved through an arcade action combat mode that gives you direct tactical control. This form of combat is similar to that presented in the Showdown scenario, found in the Battle Practice option (see below). Alternatively, battles may be resolved under a simulation mode.

You enter battles with the goal of destroying fortifications, factory bays, factory enhancements, and the all-important capitals. You also strive to hinder your adversaries' income by carrying out guerilla attacks on cities and unprotected lands.

The Strategy Campaign Option

In this quick game option you are engulfed in a purely strategic struggle. A strategy campaign game may be played out in a much shorter time than a complete campaign.

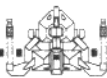
Goals are identical to those in the complete campaign, but conflicts are automatically resolved by a basic battle simulation, rather than offering you a choice of resolution methods. This battle simulation automatically sets up tactical objectives for attacks, and resolves combat by a simple comparison of the opposing forces.

The Battle Practice Option

This option deals strictly with the combat mode of CYBER EMPIRES. Its main function is to allow you to construct cyborg armies and practice commanding a cyborg force, and allows you to hone your fighting skills with individual cyborgs.

The Battle Practice option contains two different modes of play: Showdown and Survivor. Showdown mode may be configured either as a battle between a single player and the computer, or as a battle between two players, while Survivor mode is a test of a single player's arcade action abilities.

See the "Setting Up a Battle Practice Game" and "Combat Mode" sections of this rule book for additional information.



SETTING UP A CAMPAIGN GAME

The Complete and Strategy Campaigns

As noted above, there are two different Campaign games. The setup procedure and the strategy phases for both campaigns are identical.

However, in the Complete Campaign, players may either use a combat simulation, or opt to participate directly in combat. In the Strategy Campaign the combat simulation is automatically invoked. For more information on the combat mode in the Complete Campaign game, see the "Combat Mode" section of this rule book.

Winning a Campaign Game

The object of both campaigns is to conquer the world of Orion. This is accomplished by destroying all enemy empires. An empire is eliminated from the game when all its forces and countries have been lost. When this occurs, a special screen appears giving the name of the defeated opponent.

When the last opponent is eliminated, close the battle doors (select the icon of the doors). At the beginning of the next strategy phase, the game informs you that you are supreme, and a victory screen appears.

At this point, you have won the game. You may go to the Statistics/Game Options Screen and quit, or review your empire's statistics. A superior player will have a larger number of credits and/or surviving cyborgs, depending on the style of play used during the game. Even experts may be hard-pressed to retain more than a

few surviving cyborgs after a war with several Level One computer opponents (see the "Setting the Computer Level" section below for information on computer opponent difficulty levels).

The Geography of the Planet Orion

Orion is a single continent comprising 72 countries. Each country has its own unique attributes which vary in every game. Each country can hold a maximum of ten cyborgs. Orion contains five different environments: arctic, coniferous, desert, volcanic, and city. Information on each environment is available in the "Reference" section at the end of this rule book.

The Campaign Settings Screen

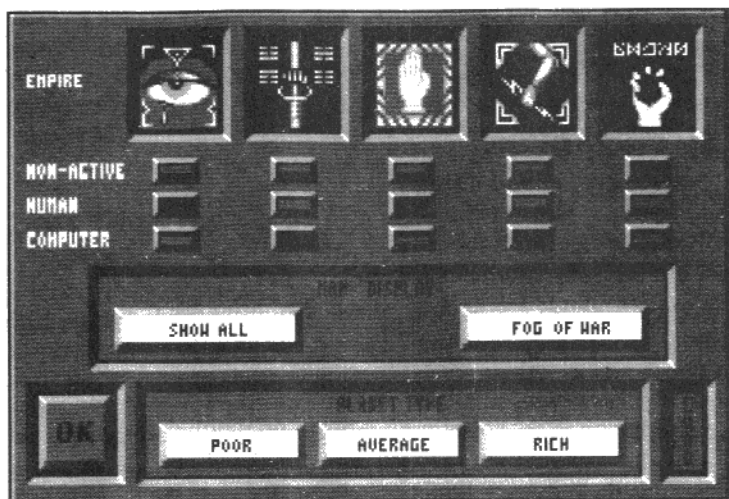
When a campaign game is selected, you must enter your preferences on the Campaign Settings screen. If several players are competing, they must agree on which settings will be used.

This screen, shown on page 5, also includes an option that allows a previously saved game to be loaded.

Note: All currently selected items are highlighted in red.

Choosing the Empires

CYBER EMPIRES can support up to five empires (players), each having a unique symbol and an associated color used on various icons. The three buttons under each imperial symbol are used for selecting the empires to be included in the game and who controls each empire.



Campaign Settings Screen

Non-Active

An empire selected to this setting will not participate in the upcoming campaign.

Human

An empire selected to this setting will be controlled by a human player.

Computer

An empire selected to this setting will be controlled by a computer player. A level of ability and resources for each computer player will be set on a later screen (see the "Setting the Computer Level" section, below).

Setting the Map Display

Show All

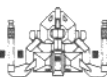
This option is the default, and allows you to see all enemy country icons. This means that each player knows the number and locations of enemy

capitals, factories, and fortifications, as well as the locations of enemy cyborgs. You should choose this option while learning the game.

Fog of War

This selection allows a player to see enemies only when an adjacent country is controlled by the enemy. Furthermore, the only icon that appears on enemy countries is the imperial flag, which signifies that a capital has been built in the country. The enemy may have a factory, a fortification, and cyborgs present, but it always looks as if only a capital is present in the location, regardless of the actual situation.

In this "Fog of War" setting, players know little, if anything, of their enemies' strengths or weaknesses. They must therefore be considerably more cautious and suspicious when dealing with them.



It is also important to note that if a player's country is adjacent to an enemy, but the enemy has no capital in the country, the country appears to be neutral.

The spy option is particularly useful under this setting. See the "Spying on the Enemy" section for more information.

Setting the Planet Type

Each country's net worth is set at random at the start of each new game, based on a value range for the particular type of planet. You may set this range to one of three positions, or scenarios. *AVERAGE* is the default.

In the poor planet scenario it is more difficult to produce large cyborgs. They are usually too expensive and most available funds are absorbed by the purchase of new capitals and fortifications. This scenario adds a significant level of challenge to the game.

The rich planet scenario provides players with more revenue from controlled countries, thus providing them with the means to purchase more factories, factory enhancements, heavier fortifications and elite battle cyborgs. You may wish to learn the game using this scenario.

Planet Type Value Range Table

PLANET TYPE COUNTRIES	VALUE RANGE FOR CITY COUNTRIES	VALUE RANGE OTHER
<i>Poor</i>	10,000 - 30,000	3,000 - 10,000
<i>Average</i>	20,000 - 60,000	6,000 - 20,000
<i>Rich</i>	30,000 - 100,000	9,000 - 30,000

Selecting OK

Once the desired empires, map display, and planet type have been chosen you are ready to begin. Selecting the OK button at this time starts the game.

The only restrictions on selecting empires to participate in a game are:

1. There must be a minimum of 2 empires.
2. One must be controlled by a human.

Loading a Game

The *LOAD* button on the campaign settings screen is used to load a previously saved game. Games saved in one type of campaign can be loaded into another. For example, a game saved in the Strategy Campaign can be loaded and played in the Complete Campaign.

The number of saved games available varies with your computer system. See your data card for more information.

Entering a Player's Name

Following the selection of the OK button, the program prompts human players for their names. To enter the General's name for a particular empire, simply type it in and press



CYCLOPS

The Cyclops is a low-cost cyborg capable of inflicting substantial damage on enemy targets. It is similar to the Mercury in speed and maneuverability but superior in armor and weaponry. Although this 90-ton cyborg can withstand a small amount of punishment, its main advantage over the Mercury is its single-barrel light auto cannon, which can cause significant damage. The Cyclops is also equipped with two light lasers. Like the Mercury, Cyclopeses are most effective in larger groups.

Cyclops Tactical Details

Speed	Fast
Cooling Factor	3
Armor	90
Weapon System 1	Light Laser (2)
Ammo System 1	Unlimited
Weapon System 2	Light Auto Cannon
Ammo System 2	25 rounds



Enter. The maximum length is eleven characters. The name entered is used with the empire symbol and associated color throughout the game.

Setting the Computer Level

There are six computer difficulty levels in CYBER EMPIRES ranging from 6 (very easy) to 1 (extremely difficult). Each computer-controlled empire can be set to any of the six levels. The program prompts for the computer level to be set. To set the level, select one of the numbered boxes (the lower the number, the more difficult the level).

On Levels 4,5, and 6, the computer suffers a reduction to its intelligence. On Levels 1,2, and 3, it is at full capa-

bility. On Levels 1 and 2, computer empires also receive an economic bonus, adding a new order of challenge to the game. Each empire's treasury (also referred to as the "vault") earns a fixed amount of interest on the current amount of credits. Be warned: at Level 1, computer empires will become extremely wealthy. Only the most expert general should attempt this level of challenge.

Once all players have entered their names and the computer levels have been selected, the game begins with the first strategy phase. See the "Strategy Mode" section for further information.



SETTING UP A BATTLE PRACTICE GAME

The main battle practice screen offers two different scenarios, and also shows the "Cybernetic Legends" screen (a hall of fame). To start the setup procedure, select one of the two large buttons. To go back to the initial options screen, select the OK button. See the "Combat Mode" section for information on how to play.

Showdown

Showdown allows you to immediately assemble a cyborg force and take it into battle against either another human or a computer-controlled enemy. You choose the cyborg force that you believe will bring you victory. The battle ends when one player overwhelms the other. The winner is rewarded with the exhilaration of victory and a summary of battle losses.

Selecting the Players

The player option screen sets an attacker on the left and a defender on the right. To select human or computer opponents, use the arrow buttons. The buttons toggle through all available combinations. Then select OK.

Selecting the Terrain

To select the terrain use the arrow buttons. The buttons toggle through all available terrains. Then select OK.

Selecting the Credit Amount

Before the battle you are allocated a sum of credits from which cyborgs must be purchased. To determine the amount of money for both opponents, use the arrow icons to select a number. Then select OK.

Purchasing Cyborgs

Once the credit limit has been established you will be given the opportunity to purchase your cyborg force on the cyborg selection screen.

Purchasing cyborgs is explained in the "Strategy Mode" section of this rule book. You can purchase up to ten cyborgs. Computer-controlled forces purchase their own cyborg force based on their credit limit.

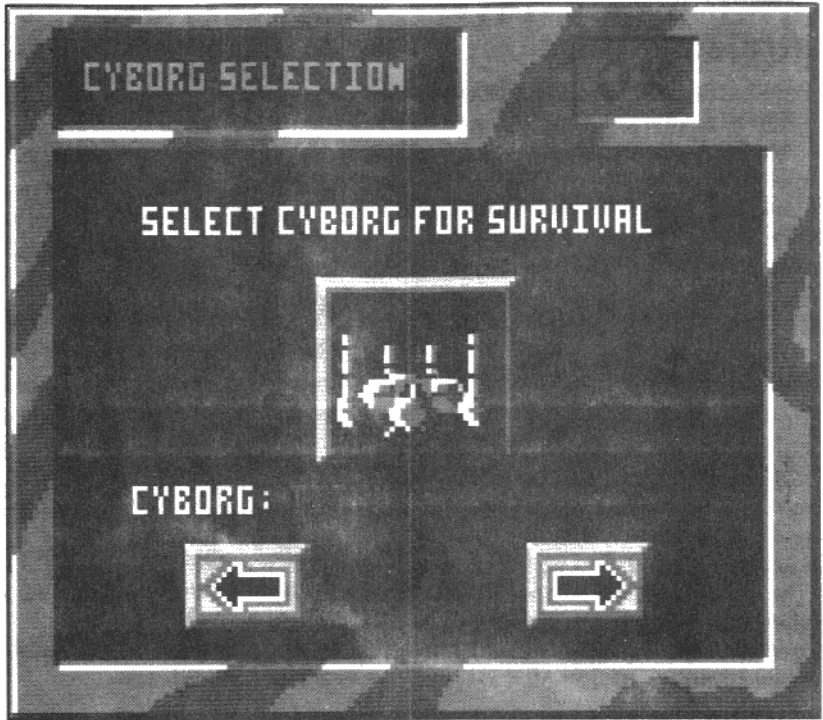
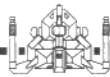
The Battle

Once you have selected your forces the combat phase of the Showdown game begins. You cannot choose missions or set cyborg formations. Both parties are lined up against each other at opposite ends of the battle map, with the computer-controlled cyborgs ordered to destroy your units as their first priority. At the end of the battle, a battle summary screen appears, listing each side's losses.

Survivor

The Survivor scenario allows you to hone your fighting skills with each type of cyborg. One player selects a cyborg and strives to survive repeated computer-controlled cyborg attacks. You should have little difficulty repelling the initial attacks. However, the longer you endure, the more tenacious the attacks become. The most resolute players will earn a place in the Hall of Cybernetic Legends. Each cyborg class has its own space on the list. The list is updated whenever a new high score is achieved.

To start the Survivor scenario select the SURVIVOR button.



Cyborg Selection Screen

Selecting the Cyborg

The cyborg selection screen appears. Use the arrow buttons until the desired cyborg is displayed. The default is the Titan. Selecting the OK button at this time starts the first battle.

The Battles

Battles begin immediately after the cyborg selection. The initial battles are fairly easy. However, the more battles you manage to survive, the stronger and more numerous the attacking computer-controlled force

becomes. Your cyborg is given full hit points and weapon ammunition before every new battle. You have no control over the selection of enemy cyborg types or battle terrain.

Becoming a Cybernetic Legend

You are ushered into this select group if you destroy more tonnage than the current high score for a particular cyborg. A special screen appears, requesting your name. When you have entered your name and hit Enter, the new high score is saved and the tactical screen appears listing the new legend.



STRATEGY MODE

You shape your empire through the purchase of structures and cyborgs in the strategy mode of *CYBER EMPIRES*. Army movements, repairs, and espionage activities also take place in this phase. All empire manipulations are managed through the strategy control screen.

After all the players have completed their respective strategy turns, they resolve the battles in the combat phase. This cycle continues until one empire stands alone where many once stood. Cyborg movements are delayed until all players have completed their respective strategy turns.

The Strategy Control Screen

The Battle Doors

These cloak each player's map so that other human players cannot see it. In the illustration the doors are open and not visible. They must be opened by selecting the door icon on the strategy control screen to start a player's turn, and closed via the same icon to end the turn.

Control Area

The illustration below shows the various icons and controls.

Scroll Arrow Icons

Select an arrow and hold the button/key down to scroll the map of Orion in the indicated direction.

Move Cyborg Icon

Move armies of cyborgs with this option.

Repair Cyborg Icon

Repair the survivors of battles with this option.

Check Status/Spy Icon

Use this option to spy on enemy countries.

Build Cyborg Icon

Use this option once you have a factory in operation.

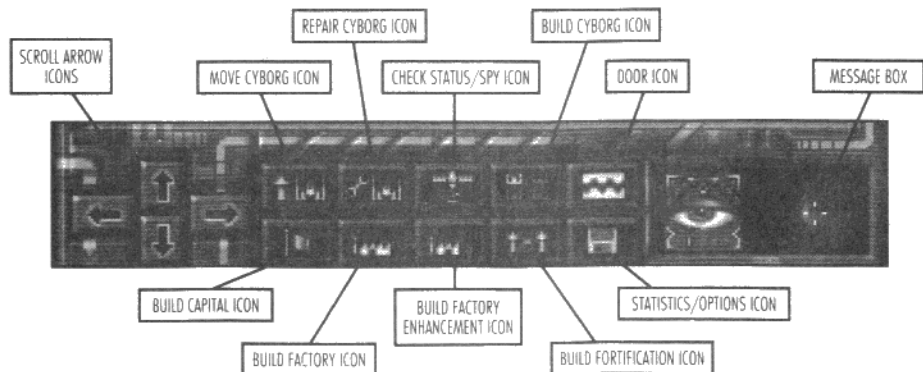
Door Icon

Select this item to open or close the battle doors.

Build Capital Icon

Use this icon to add an occupied country to your empire.

Control Area





Build Factory Icon

Use this icon to build a factory to produce cyborgs.

Build Factory Enhancement Icon

Factories can be made more efficient with this option.

Build Fortification Icon

Use this icon to build fortifications.

Statistics/Options Icon

The statistics/options screen is accessed from this icon. Games are saved here.

Message Box

This area is used to provide information to the active player. It acts as an information window, guiding the player through the manipulations of his empire, providing information concerning the current status of the player and his or her vault, as well as the year and season on Orion. It also displays instructions for all strategy activities and some information on the various countries. The information displayed depends on what activity the current player is involved in.

Map Icons

This section describes each icon used on the map itself.

Flag Icon

Indicates that a capital has been purchased and the country is under government control, producing income.

Factory

Indicates that a factory is present.

Fortification

This fort icon indicates that a light, medium, or heavy fortification is pre-

sent in the country. See your data card for more information on fortification icons.

Battle

This icon appears on all countries that were involved in a battle the previous turn, and is shown in the color of one of the attacking empires. It allows you to see where cyborgs need to be repaired.

Cyborg

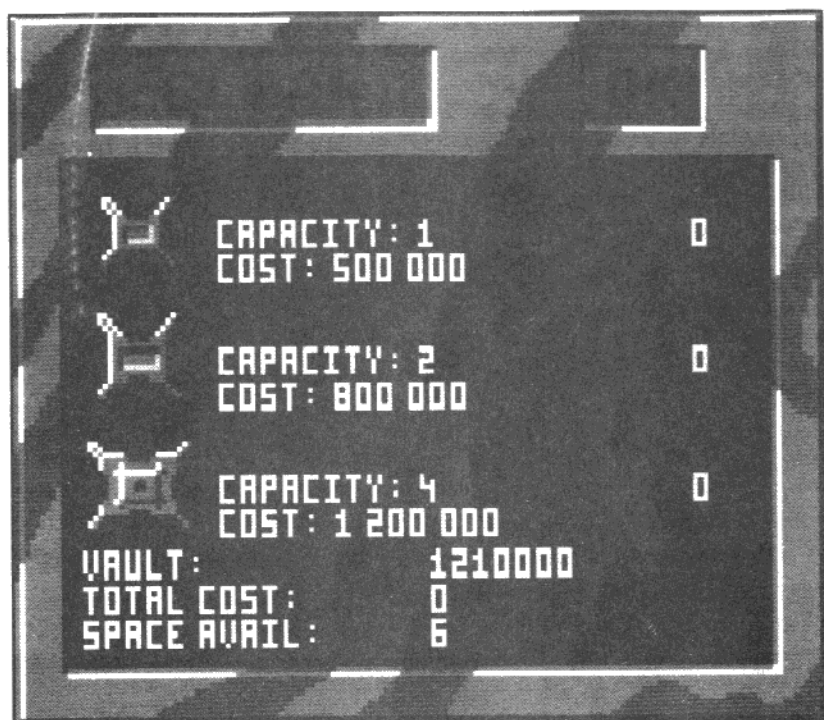
This image of a cyborg appears on all countries that have cyborgs in them at the beginning of the turn.

Actions on the Strategy Control Screen

Purchasing Capital Buildings

These are the key structures to any campaign. They provide the controlling empire with the means to exploit the net worth of a country. If an empire does not control enough capitals, it will find itself constantly short of funds for further cyborg and structure purchases. In addition to providing revenue from countries, capitals also permit other structures to be placed in a country. Without a capital, no structures can be placed in a country. If a capital building is destroyed, all other structures in that country are also destroyed. Each capital costs 30,000 credits.

Select the capital icon, then move the cursor over the target country and select it. When a capital has been successfully established your imperial flag appears in the center of the country. Capitals can only be established in countries that are currently occupied by your cyborgs.



Factory Purchase Menu

Purchasing Factories

Factories are the most expensive and single most important structures in CYBER EMPIRES. They allow an empire to construct cyborgs to use in attacking and defending critical countries. If an empire has an inadequate number of factories it struggles to advance into enemy territory and may be overrun by the sheer size of enemy forces. There are three types of factories available for purchase:

Factory Data Summary Table

FACTORY NAME	NUMBER OF FACTORY BAYS	FACTORY COST (CREDITS)
<i>Uni-Post</i>	1	500,000
<i>Dual-Post</i>	2	800,000
<i>Quadro-Post</i>	4	1,200,000

Factory Bays

All cyborgs are constructed in Factory Bays. A factory with one bay can only build one cyborg at a time, but factories with four bays can build four.

Purchasing a Factory

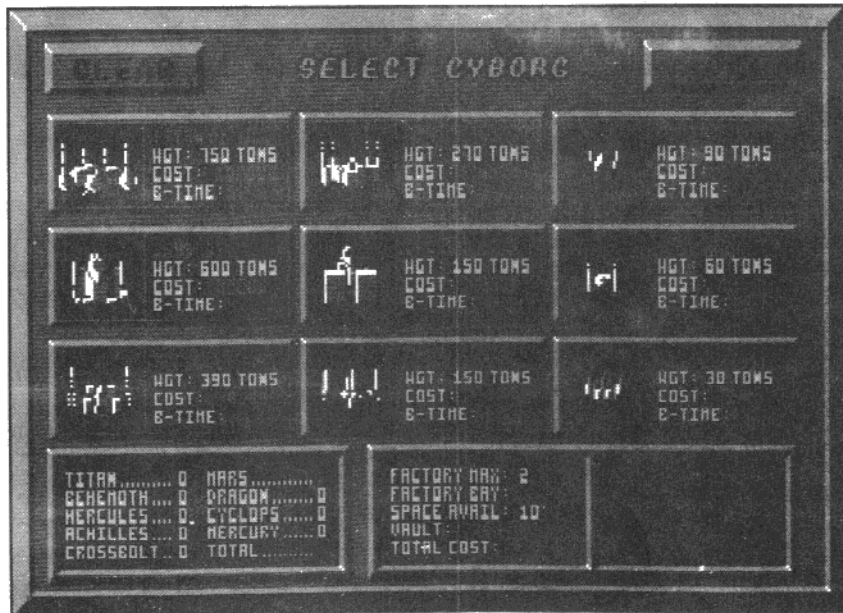
Select the build factory icon, then move the cursor over the target country and select it. A menu box appears in the middle of the screen. More than one factory may be purchased if funds and space permit.



This menu, shown above, permits the purchase of any factory or combination of factories you desire. To purchase a factory, place the cursor over the appropriate factory icon and press the button. A factory is not purchased until the OK button on the menu is selected. If you change your mind regarding a purchase you can use the CLEAR button to cancel it. This voids the previous selection(s) and returns the vault to its previous level. When a factory is successfully built, a factory icon replaces the symbol, and the factory can be used immediately to build cyborgs (see the "Cyborgs" section below).

Building Cyborgs

A "cyborg" is the ultimate synthesis of human flesh, modern robotics and advanced weaponry. The typical cyborg stands between 10 and 40 meters in height and weighs between 30 and 750 tons. The construction of a cyborg is a long process; the fusion of man and machine can take several months, depending on the class of cyborg. After extensive testing and training, elite soldiers are given the honor of becoming Cybernetic Warriors. These cyborgs are powered by a neutrino core with a life span of 4,000 years. The servos and weaponry of each cyborg are controlled through neural connections between warrior and machine.



Cyborg Selection Screen



DRAGON

The Dragon is reasonably fast and maneuverable. Unlike the Mercury and Cyclops, a single Dragon has the capability of destroying the mightiest cyborg. This 90-ton cyborg has light armor and can be destroyed easily by larger cyborgs. However, if it can close to very short range, its Hellfire weapon is something few cyborgs can escape. It also has two light lasers. Dragons are always valued members of a cyborg force, particularly in cities.

Dragon Tactical Details

Speed	Fast
Cooling Factor	3
Armor	90
Weapon System 1	Light Laser (2)
Ammo System 1	Unlimited
Weapon System 2	Hellfire
Ammo System 2	25 short bursts



Cyborg Specifications

In CYBER EMPIRES there are nine different classes of cyborgs. It is crucial to learn the strengths and weaknesses of each. In the boxed sections of this rule book you will find specifications for each cyborg. The terms used are explained in the "Combat Mode" section, below.

Purchasing Cyborgs

Select the build cyborg icon, move the cursor over the target country and select it. Cyborgs can only be built in countries that contain factories. Once completed, the screen at left appears.

To purchase a cyborg, select the box containing the cyborg's statistics. Selection of the graphic image of the cyborg brings up a data screen. All purchases are recorded in the lower

left-hand portion of the screen. If you wish to cancel any selections made during the current purchase session the CLEAR button can be used, but it only cancels cyborgs purchased during that specific session.

The OK button terminates the purchase session and places the chosen cyborgs in available factory bays. The number of cyborgs that can be purchased by any one player is restricted by the number of factory bays in that particular factory. Each cyborg occupies one factory bay during construction.

Unlike structures, cyborgs take time to construct. Smaller cyborgs take one strategy turn to complete, while the largest can take up to five.



Building Factory Enhancements

These aid in the construction of cyborgs, so they can only be placed in countries that have factories. They assist the factory in two ways: first, each cyborg's cost drops 10% for each enhancement in the country. Second, the build time is shortened. For example, if you build a Titan in a country that contains two enhancements, it will cost only 80,000 credits and be ready for battle in three rather than five turns. Production time can only be reduced by maximum of two turns for any cyborg. Each cyborg takes a minimum of one turn to complete.

Moving Cyborgs

Once you have your first cyborgs built, you are ready to move them into adjacent countries. Movement into enemy-occupied countries results in an attack.

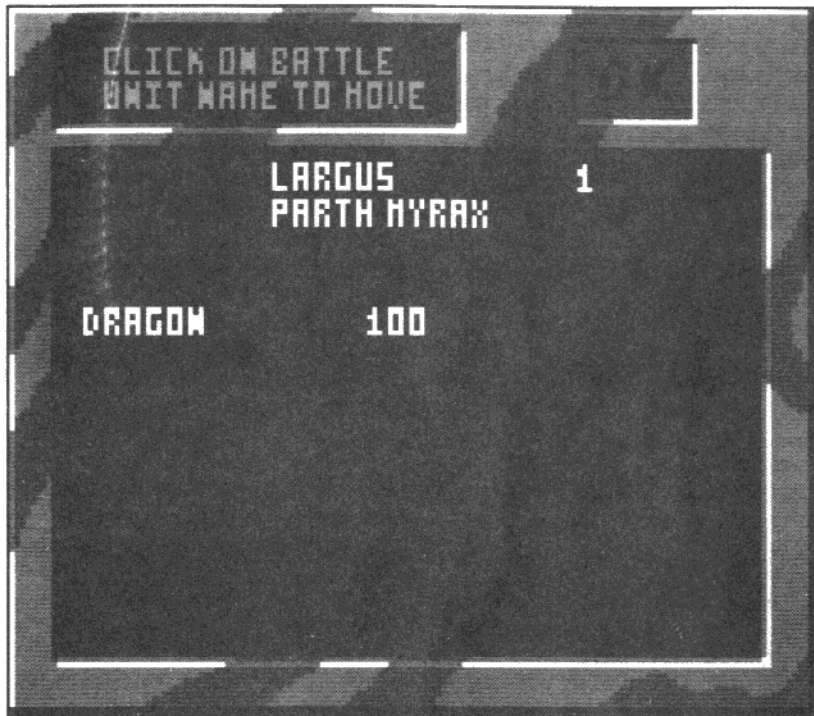
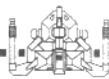
Movement is a two-step process. First, movement orders are issued by each human and computer player. Then all plotted moves are executed in a random order, country by country. All cyborgs plotted to move from one country to the same destination will do so as a group, but when they will move relative to other groups cannot be predicted.

Cyborg Cost Summary Table

CYBORG TYPE	0 ENH	1 ENH	2 ENH	3 ENH	4 ENH	5 ENH
<i>Titan</i>	100,000	90,000	80,000	70,000	60,000	50,000
<i>Behemoth</i>	90,000	81,000	72,000	63,000	54,000	45,000
<i>Hercules</i>	40,000	36,000	32,000	28,000	24,000	20,000
<i>Achilles</i>	30,000	27,000	24,000	21,000	18,000	15,000
<i>Crossbolt</i>	70,000	63,000	56,000	49,000	42,000	35,000
<i>Mars</i>	15,000	13,500	12,000	10,500	9,000	7,500
<i>Dragon</i>	10,000	9,000	8,000	7,000	6,000	5,000
<i>Cyclops</i>	5,000	4,500	4,000	3,500	3,000	2,500
<i>Mercury</i>	2,500	2,250	2,000	1,750	1,500	1,250

Cyborg Build Time Summary Table

CYBORG TYPE	0 ENH	1 ENH	2 ENH	3 ENH	4 ENH	5 ENH
<i>Titan</i>	5	4	3	3	3	3
<i>Behemoth</i>	4	3	2	2	2	2
<i>Hercules</i>	3	2	1	1	1	1
<i>Achilles</i>	3	2	1	1	1	1
<i>Crossbolt</i>	4	3	2	2	2	2
<i>Mars</i>	2	1	1	1	1	1
<i>Dragon</i>	1	1	1	1	1	1
<i>Cyclops</i>	1	1	1	1	1	1
<i>Mercury</i>	1	1	1	1	1	1



Cyborg Movement

In order to move cyborgs from one country to another, the source and destination countries must be adjacent (i.e., they must have a common border or a bridge connecting them). Cyborgs can only move once per turn and all types move at the rate of one country per turn. Countries which are occupied by you and contain cyborgs display a single cyborg icon in the color of your empire.

To plot movement, select the move cyborg icon. You must then select the country to move from (source) followed by the country you want to move to (destination). You may need to scroll the map to the point where the center portions of both countries

are visible. When this has been done successfully the screen above appears.

To move a cyborg from the source to the destination country, select the name of the cyborg. The cyborg's name appears under the destination column. This indicates the cyborg is plotted to move to the destination country. The move may be taken back by clicking on the name in the destination column. The maximum number of cyborgs that may be plotted to

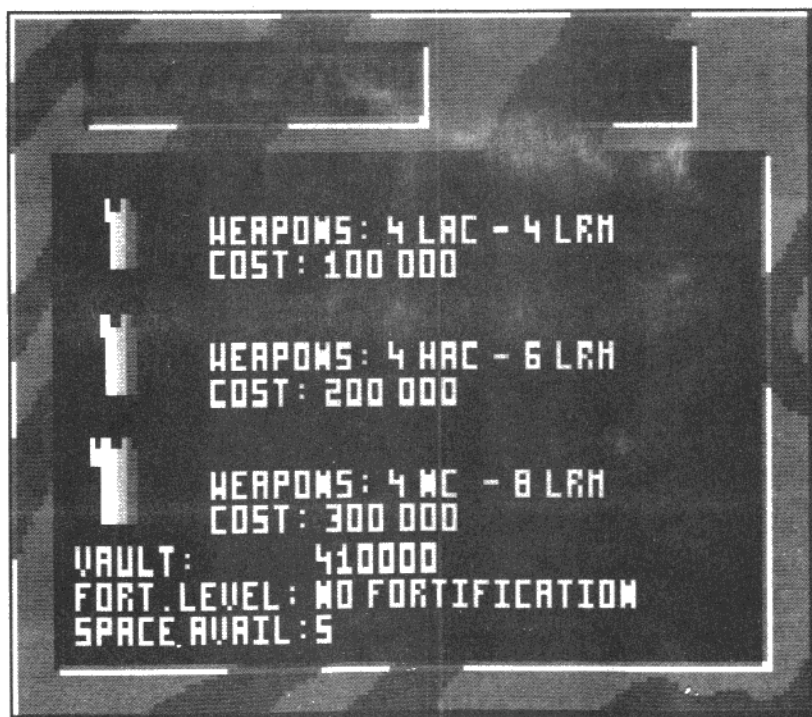


occupy any given country is ten; the move box prohibits movement if this number is exceeded. Once you have moved the desired cyborgs from the source country select the OK button. Be careful: once your cyborgs are plotted to move you can no longer manipulate them.

If the cyborgs are moving to a friendly country, when you inspect that country the units are listed along with "TRN". This means they are in transit and will appear there on your next turn.

Building Fortifications

Fortifications are the key to any defensive strategy. At best they can completely annihilate an invasion force; at worst, they still inflict heavy casualties. Fortifications also hinder enemies from successfully spying. When a fortification is purchased, a wall immediately surrounds all of the structures in the country. The wall can be breached by an attacker if the same wall section is repeatedly attacked by weapon fire. Fortifications are most effective on hot, clear terrains such as desert and volcanic, but



Fortification Selection



Fortification Summary Table

WEAPON LEVEL	WEAPON 1	WEAPON 2	AVERAGE WALL HIT POINTS	COST
<i>Light</i>	4 LAC	4 LRM	100	100,000
<i>Medium</i>	4 HAC	6 LRM	300	200,000
<i>Heavy</i>	4 NC	8 LRM	500	300,000

Note: all fortification weapons systems are automatically controlled.

are also effective on arctic and can be strong in coniferous, provided there is not an abundance of trees.

There are three different levels of fortifications. For information on the weapon systems described here, see the "Weapon System Data" section, below.

Purchasing a Fortification

Select the build fortification icon, move the cursor over the target country and select it. A menu box like the one pictured at left appears in the middle of the screen.

This menu allows the purchase of any single fortification you can afford. To buy a fortification, place the cursor over the appropriate fortification icon (castles) and press the button. A fortification is not purchased until the OK button on the menu is selected. If you change your mind you can use the

CLEAR button to cancel it. This voids the previous selection and returns the vault to its previous level. Once a fortification has been successfully built a fortification icon is placed in the country. Fortifications automatically assist in the defense of that country if it is attacked.

Upgrading Fortifications

Light and medium fortifications can be upgraded by purchasing heavier ones. The upgrade replaces the previous fortification, so another build space is not used. There is no discount on a fortification cost if used to upgrade.



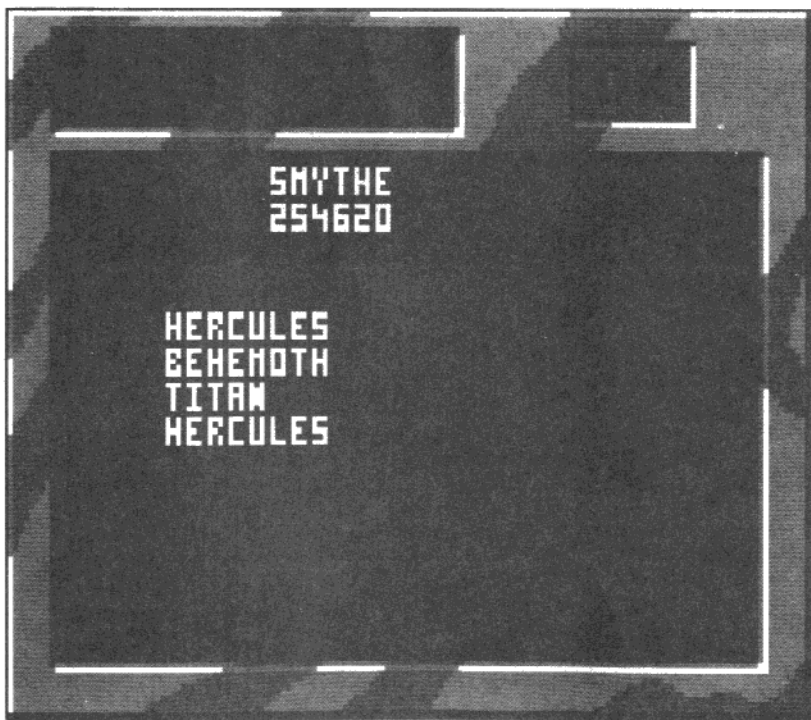
Repairing Damaged Cyborgs

Repairing damaged cyborgs is vital to a successful campaign — it is much cheaper than purchasing new cyborgs and maintains your forces' strength in important regions of the world.

Cyborgs can be repaired in any country. The cost of repairing damaged cyborgs is directly related to the damage which they have suffered.

Select the repair cyborg icon. When you have selected the target country the repair box appears in the middle of the display.

Within the repair box all cyborgs currently residing in the county are listed, as well as their current status. If the cyborg's status is "100" it is fully operational and needs no repair; if, however, the cyborg's status is less, it is not operating at optimal efficiency and should be repaired. Those needing repair have their status listed in red. To repair any one of the listed cyborgs, place the cursor over the cyborg name and select that name. If you have enough money in your vault, the cyborg will be fully repaired and its status will be upgraded to 100. Cyborgs cannot be partially repaired.



Cyborg Repair



If a country has been involved in a battle, a battle icon is placed on the country as a reminder that damaged cyborgs may exist there.

Repair Cost Summary Table

CYBORG STATUS	REPAIR COST
100	0%
90 - 99	6%
80 - 89	12%
70 - 79	18%
60 - 69	24%
50 - 59	30%
40 - 49	36%
30 - 39	42%
20 - 29	48%
10 - 19	56%
0 - 9	60%

Note: The repair cost is a percentage of the original cyborg price with no factory enhancements in place.

Checking a Country's Status

The status/spy icon on the strategy control screen allows you to inspect all the characteristics of any country which you currently occupy or control. To check the status of a country select the status/spy icon. Once the desired country has been selected the country status box appears (see bottom of page 21).

Cyborg Status

This lists the cyborgs which currently reside in the country. To return to the status box select the OK button.

Bay Status

This lists all cyborgs currently under construction. Only countries that contain factories display information in this box. The completion time (CT) is the number of seasons (strategy turns) before the cyborg is operational. Once CT reaches zero, the cyborg becomes active. Cyborgs are automatically placed in the country of construction.

If no cyborg is presently under construction (i.e., none under construction in a factory bay), "Empty Bay" appears in place of the cyborg name.

If cyborgs are trapped in the bay (i.e., a country currently has ten cyborgs in addition to those recently constructed), their names are highlighted in red and the CT column contains an "R", indicating that they have been constructed and are ready for combat but cannot be taken out of the bay. To return to the status box, select the OK button.



Country Glimpse

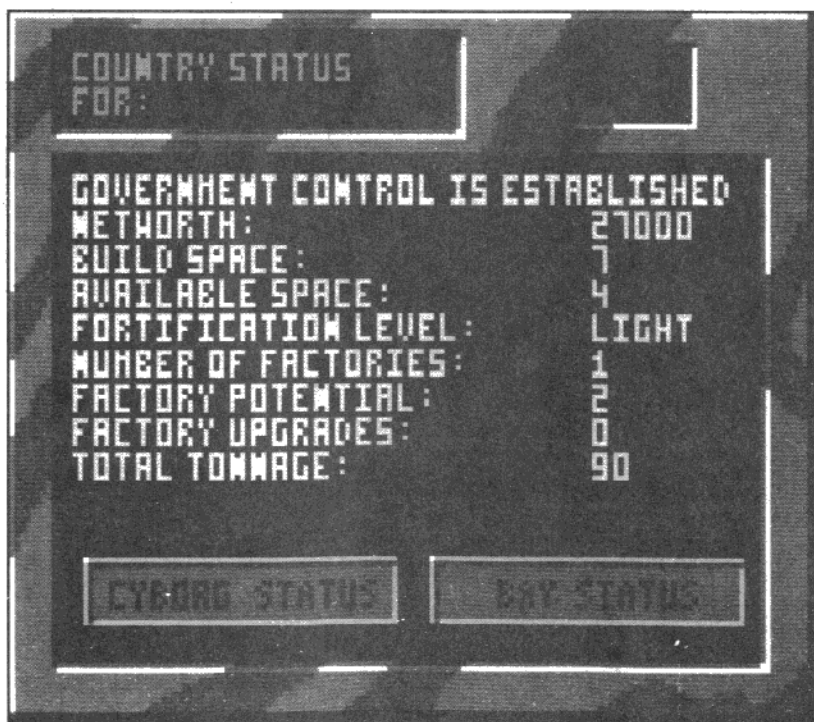
This is a quick and easy way to look at several aspects of a friendly country without using the status/spy option. The information available includes the name, net worth, number of cyborgs, and the cyborg tonnage of a particular country. To use this option make sure no icons are highlighted in red (clicking the mouse or joystick in the message box clears any highlighted icon). Place the cursor over any friendly country (no selection is required) and the message box displays the information mentioned above. This allows a player to take a quick look at one, some, or all of his countries.

Spying on the Enemy

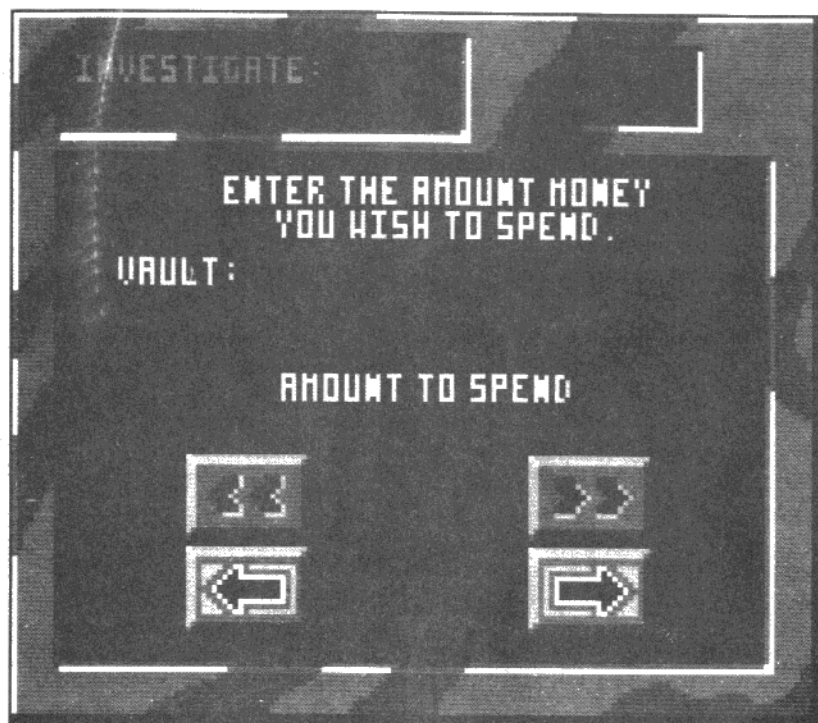
Spying provides valuable information on the opponent's strengths, weaknesses, and intentions. This option has the potential to be extremely useful when formulating attack and defense plans, especially when using the "Fog of War" option. The amount of funds spent on the spy operation is directly related to the accuracy of the operation. The more money you spend, the higher the accuracy.

The spy option cannot be used during the first turn of the game.

To spy on a country, select the status/spy icon. You must choose a neutral or unfriendly country to spy on.



Country Status



Spying on a Country

Once the country has been selected, a box like the one above appears.

You must spend at least 5,000 credits to perform a spy operation. The double arrows increase and decrease the amount spent by 10,000, and the single arrows increase and decrease the amount spent by 1,000. Once you choose the amount of money you wish to spend, select the OK button and a second box containing the results of the spy operation appears. The more money spent, the more data will be gained.

However, accuracy is rarely perfect: a random factor is always present in calculations. Furthermore, when enemy countries are fortified, it is more expensive to obtain accurate information, and heavier fortifications make costs greater.



Using the Statistics/Game Options Screen

The statistics/game options screen lets you view all the resources of an empire and contains several game options. Select the statistics/game options icon.

Empire Statistics

This summarizes an empire's strength, providing counts on every aspect of the particular empire such as: total number of capitals, occupied countries, factories, factory bays, factory enhancements, and fortifications, as well as vault and income. It also summarizes the cyborg strength, displaying the number of each type of cyborg currently in the empire.

Message Delay Option

The first option on this screen is the message delay time. This sets the time, in seconds, that a message is displayed before it is cleared. The message delay defaults to 2 seconds, but can be increased or decreased by clicking on the arrow buttons.

Saving a Game Option

To save the game, select the **SAVE GAME** button. See your data card for more information on saved games.

Quit Game Option

To quit a game, select the **QUIT GAME** button. A message appears requesting the quit game selection to be confirmed. Selecting the button again ends the game and returns the program to the main menu. Otherwise, the game continues.

STRATEGY CAMPAIGN CONFLICT RESOLUTION

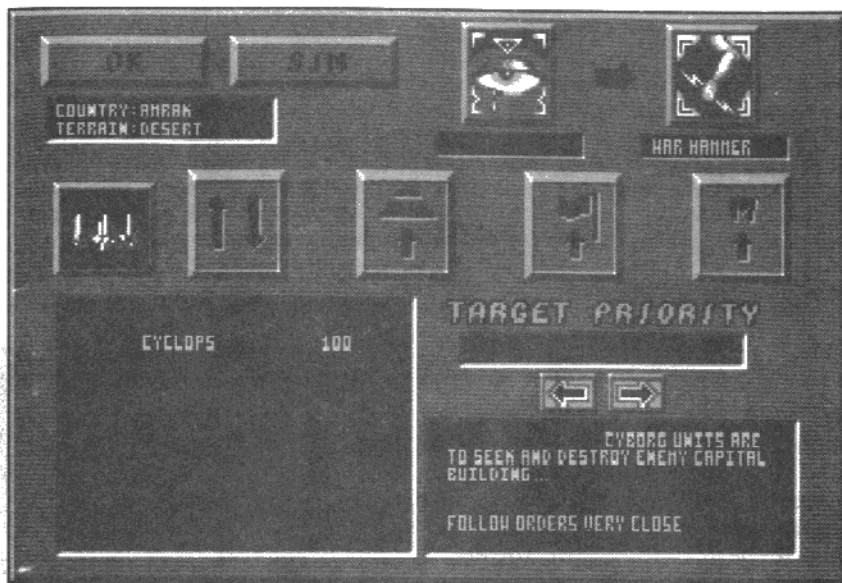
The Strategy Campaign deals only with the strategy portion of **CYBER EMPIRES**. As a result, all conflicts are resolved via the battle simulator. Following the last player's turn all cyborg movements take place, during which battles for countries may occur. Weapon sounds followed by an explosion indicate that battles have occurred. There is no way to observe the battles, as they take place immediately following the closing of the last empire's doors.

The battle simulation considers the attacking and defending cyborg types, as well as the structures of the defending country. Fortifications add to the defender's firepower and help to protect the structures in the country.

Note: during the course of a Strategy Campaign battle, some structures may be damaged or destroyed.

COMPLETE CAMPAIGN CONFLICT RESOLUTION

This form of battle resolution is much more complex than the basic battle simulation and far more exciting. The basic simulation is still available as an option, but important battles can be handled in greater detail. The attacker can decide to target capitals, factories, enhancements, or enemy cyborgs, while the defender can set up a cyborg formation to ensure maximum effectiveness against an assault. Both players control the cyborg of their choice. The other cyborgs are computer controlled, and



Attack Setup

follow orders given by their generals. You can jump from cyborg to cyborg in order to personally take control of any given situation. Battles are fought on each country's unique battle map, which graphically illustrates the country terrain.

This form of conflict resolution occurs when battles take place as a result of cyborg movements in the strategy phase. The game prompts you to prepare for combat at the beginning of each battle, and many battles may occur. Following the conclusion of all the battles for a particular turn, the program returns to the regular strategy mode.

Preparing an Attack

There are several different types of attacks in CYBER EMPIRES. The screen shown above allows the attacker to choose a particular strategy.

Attack Goal Buttons

There are four possible attack goals that are used to direct computer-controlled cyborgs during a battle. To select an attack goal, select its corresponding button. Attack goals are very important and can make the difference between victory and defeat.

The Guerilla Attack

This instructs your cyborgs to place equal emphasis on all enemy possessions. This type of attack directs your cyborgs to the closest enemy structure or cyborg in an attempt to destroy it.



MARS

The Mars is fairly fast, maneuverable, and heavily armed. It was the first cyborg to incorporate the dreaded neutrino cannon into its arsenal. The neutrino cannon can strike fear into any cyborg on the battlefield. This 150-ton cyborg is capable of absorbing a fair amount of punishment; however, the more damage it sustains, the more difficulty it has in dispensing the heat created by firing the NC. The Mars' alternate weapon is a double barrel LAC which can be used when heat levels are high.

Mars Tactical Details

Speed	Fast
Cooling Factor	2
Armor	150
Weapon System 1	Neutrino Cannon
Ammo System 1	Unlimited
Weapon System 2	Light Auto Cannon (2)
Ammo System 2	150 rounds



If the defending country is a city, the computer-controlled cyborgs pay little attention to the buildings, obliterating them as they try to destroy the enemy cyborgs or capital building. It is not advisable to set a large force to the guerilla attack goal, if the purpose of taking the city is to increase revenue. Large portions of the city could be destroyed by the attacking cyborgs, thereby greatly reducing its net worth.

The Structure Attack

This directs the computer cyborgs to place more emphasis on structures rather than enemy cyborgs. The cyborgs seek out the capital building, factories, and/or enhancements, and attempt to destroy them. The purpose is to damage enemy installations

before the invasion force is destroyed. It should be selected when the attacker realizes he does not have a strong enough force to take the country but can still damage the defending empire.

The Capital Attack

This directs computer cyborgs to place more emphasis on the destruction of the capital building than on other structures or enemy cyborgs. If the capital is successfully destroyed, all structures in the country are permanently dismantled, as there is no government to direct their operation.

The Cyborg Attack

This directs the computer cyborgs to place more emphasis on destroying the enemy cyborgs.



Target Priority

Determines how committed the computer cyborgs are in carrying out their orders. The higher the priority, the less likelihood that attacking cyborgs may deviate from their assigned mission. Lower settings allow the cyborgs more freedom in making decisions concerning their target. Target priority is increased and decreased by clicking on the arrow buttons.

The Information Box

Provides details of the attack and target priority selections.

Selecting the Control Cyborg

The control cyborg is the cyborg that you personally control. All cyborgs involved in the upcoming attack have their name and status displayed in the cyborg attack box. The cyborg you control is highlighted. Its picture is

illustrated in the box immediately above. To select an alternate cyborg simply click on the desired name.

Ending the Attack Battle Preparation

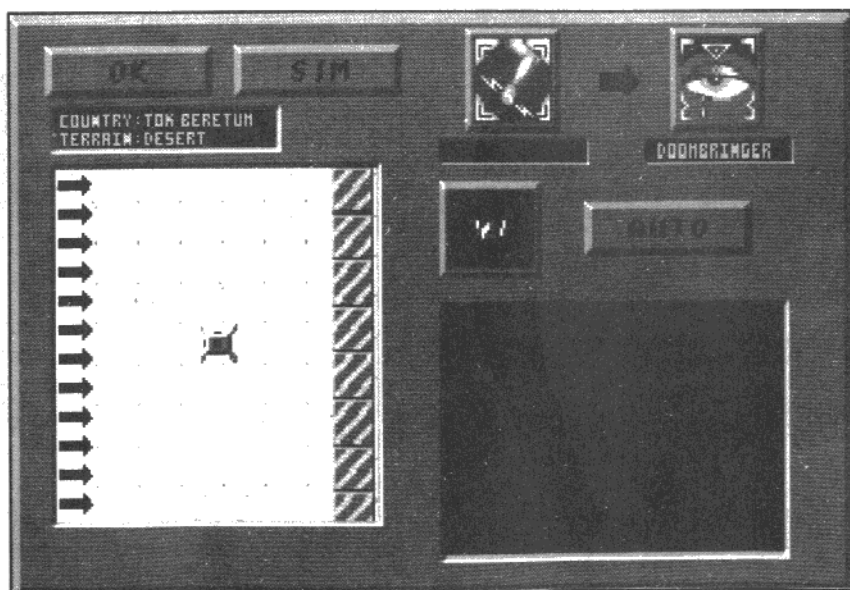
Once you have chosen the desired mission, target priority, and control cyborg the attack preparation is complete. Select the OK button to end the session. Alternatively, the SIM option can be taken.

Preparing a Defense

The defender setup screen, shown below, allows the defender to select a particular defense formation.

The Miniature Map

This represents the territory where the conflict is to take place. All structures that are in a particular country are graphically displayed on the map. The



Defender Setup

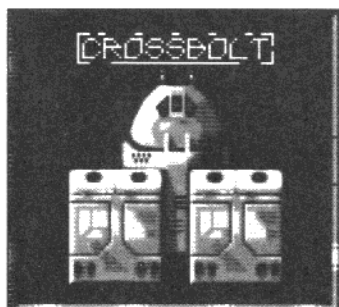


CROSSBOLT

The Crossbolt is a slow cyborg which is not designed to fight in close-range battles. Its specialty is long-range encounters, where it has few equals. Its long-range missile salvos can relentlessly pound enemy units, severely damaging them before they unleash their weapons. Several Crossbolts can quickly breach the heaviest fortification walls and destroy the capital within. At 150 tons, it can sustain a fair amount of damage. It should, under no circumstances, be involved in close-range battles, as its two LLs have difficulty warding off even the smallest cyborgs. The Crossbolt is an expensive and specialized cyborg which is known best for its awesome missile bombardments.

Crossbolt Tactical Details

Speed	Slow
Cooling Factor	2
Armor	150
Weapon System 1	Light Lasers (2)
Ammo System 1	Unlimited
Weapon System 2	Long Range Missiles (4)
Ammo System 2	80 missiles



direction from which enemy cyborgs are attacking is indicated by red arrows. Their relative positions are transferred to the battle map when the game goes into combat mode.

Setting Cyborg Locations

All defending cyborgs must be separately placed on the miniature map. The currently active cyborg is highlighted in red. To place it in a certain location on the map, move the cursor to the desired location and select. A small colored square appears on the map to indicate the location. The next cyborg to be placed is then highlighted. Once all units have been placed on the map the defender can select a control cyborg.

One cyborg is always highlighted in red to indicate that it is the control cyborg. Its location is also highlighted on the map with a uniquely colored square.

Cyborg locations will be changed automatically from your intended locations, should the chosen locations correspond with trees, walls, gun turrets, and other objects. Your cyborgs will be moved as short a distance as possible.

The AUTO Button

The AUTO button is used by lazy generals who do not really care where their cyborgs are placed. Clicking on this button places the defending cyborgs in a straight line facing the attackers.



Choosing a Control Cyborg

To choose a control cyborg, place the cursor over the cyborg's name and press the mouse or joystick button. The selected cyborg is highlighted, and so is its location on the map.

Ending the Defender Preparations

Once all cyborgs have been placed and the control cyborg selected, the OK button can be selected to begin combat, or the SIM option can be engaged.

Note: All cyborgs must be placed on the map before exiting.

The SIM Option

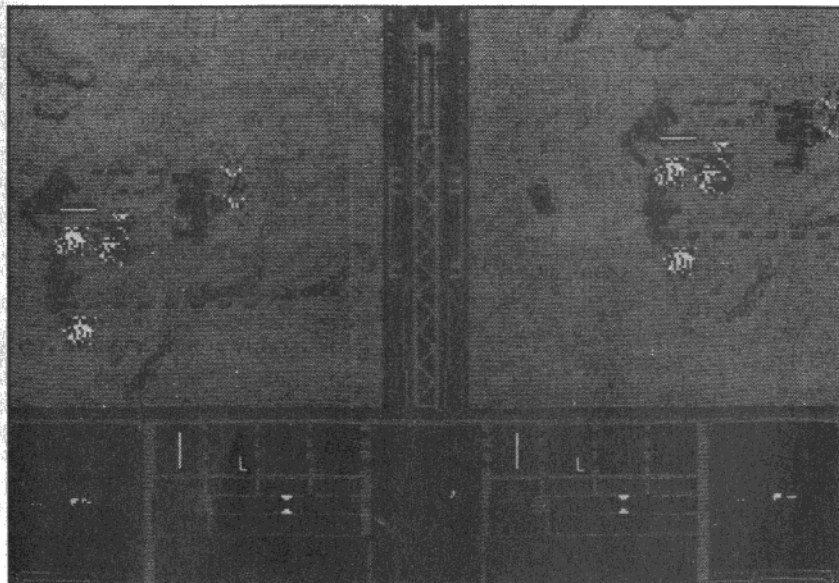
The attacker and defender screens contain a SIM button which can be used to bypass the combat mode and have the battle simulation resolve the conflict

for you. If two humans are involved in the battle, both must select this option in order for it to be invoked. In the case of you-versus-the-computer, the battle is resolved however you choose. Battles involving two computer players are always simulated.

COMBAT MODE

Following battle preparations in the Complete Campaign or Battle Practice games, the battle screen appears. The two participating empires have their symbols displayed on the respective battle windows, along with the two control cyborgs. The attacker is always placed in the left window and the defender in the right.

The interface used in this mode of the game is unique. In combat mode, the joystick and/or special combat keys are used (see "Controls" on page 31).



Combat Mode Screen



The Combat Mode Screen Battle Windows

These two windows show the control cyborg for each side, and a small portion of the battle map. The control cyborg is always in the center of its window.

Short-Range Radar Windows

There are two of these displays. The short-range radar display is oriented around each control cyborg, and can be used to fire at enemy cyborgs from a distance. Different colors are used to differentiate the control cyborg, the attackers and defenders, and any bursts of weapon fire. Refer to your data card for more information on the display for short-range radar.

Long-Range Radar Window

The long-range radar screen reveals the locations of all the cyborgs involved in the battle. Again, the attacker's and defender's cyborgs are distinguished by different colors. No weapon fire appears on the long range radar. The control cyborgs for each side are highlighted in another set of colors. Refer to your data card for more information.

Armor Meter

There is an armor meter for each control cyborg. This display is used to graphically illustrate the current condition of the control cyborg's armor. A completely red bar indicates that the cyborg has not been damaged. Every shot that strikes the cyborg causes the bar to decrease by an amount based on its armor value. Once the bar is completely black, the cyborg is unprotected and at a critical state. It explodes if it receives any further damage.

Cyborgs with weak armor suffer a proportionally greater loss from a hit than cyborgs with heavy armor. Thus a Mercury receiving ten points of damage loses one third of its bar length, while a Dragon loses only one ninth of its bar length.

As armor is reduced, the cyborg also suffers damage to its ability to dissipate heat. See the following section.

Heat Meter

Cyborgs are extremely complicated electromechanical devices, and thus are vulnerable to overheating as well as physical damage. Heat may be accumulated by hits from certain weapons, by entering pools of hot lava, and even by firing certain weapons. For example, the laser and neutrino beam weapons used by cyborgs are extremely powerful, but when these weapons are fired continuously, particularly the neutrino cannon, the cyborg heats up, possibly to the danger point. See the "Weapon and Cyborg Specifications" section for more information on heat from weapons.

Heat buildup is more of a consideration in desert terrain, and less important in arctic terrain. See the "Terrains" section for more information.

A cyborg will quickly shrug off the effects of heat. However, the worse state its armor is in, the more slowly a cyborg cools off. And some cyborgs, such as the Mars, have a more limited ability to dissipate heat, due to cost-saving engineering design.

The heat meter shows the current heat level of the control cyborg. As the heat level increases the heat meter fills up (the red bar moves to the right). If the heat meter is pushed

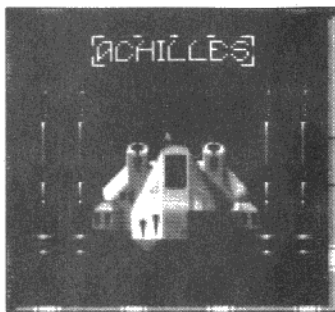


ACHILLES

The Achilles is a versatile cyborg. It is cheap, fast, maneuverable, durable, and reasonably heavily armed. Its heavy lasers can quickly overheat and destroy enemies in hot terrain, while its short-range missiles rapidly strip armor. At 270 tons the Achilles can hold its own against any cyborg. Its major disadvantage is its wide heavy laser mounting, which makes concentrated fire against a smaller cyborg impossible.

Achilles Tactical Details

Speed	Fast
Cooling Factor	3
Armor	270
Weapon System 1	Heavy Lasers (4)
Ammo System 1	Unlimited
Weapon System 2	Short Range Missiles (2)
Ammo System 2	30 missiles



past the critical level (red pointer), the cyborg **shuts down** automatically. If a cyborg shuts down it is unable to move or fire its weapons. The cyborg begins to function once it has cooled back down to the caution level (yellow pointer). However, if a cyborg ever reaches a meltdown temperature (if the heat meter is completely red), it explodes.

Weapon Selection Icons

Each cyborg has a unique set of weapon systems illustrated by weapon icons. The current weapon is highlighted by a red square. Since different cyborgs have a varying number of weapon systems, some weapon locations may be empty.

Ammunition Meters

Located directly under the weapon icon they represent. Red ammunition meters indicate full ammunition and black meters indicate that the weapon is out of ammunition.

Starting a Battle

To start a battle, both players must press their respective joystick buttons or designated keys. The empire symbols disappear and the screen springs to life. The battle can be paused by pressing "Esc".



HERCULES

The Hercules is an all-purpose heavy battle cyborg. It has the ability to fight long range with its powerful neutrino cannons and heavy lasers and short-range using its large supply of missiles. The Hercules' one weakness is its cooling factor — the double neutrino fire causes the Hercules to accumulate heat quickly, especially in hot terrains. At 390 tons the Hercules can absorb a considerable amount of punishment.

Hercules Tactical Details

Speed	Slow
Cooling Factor	5
Armor	390
Weapon System 1	Neutrino Cannon (2)
Ammo System 1	Unlimited
Weapon System 2	Heavy lasers (2)
Ammo System 2	Unlimited
Weapon System 3	Short Range Missiles (2)
Ammo System 3	40 missiles



Manipulating the Control Cyborg

In combat mode, all the control cyborg's functions are controlled either by the joystick or by the keyboard. The possible movements and functions for MS-DOS compatible machines are summarized below. For information on the Commodore Amiga, see your data card.

Controls

Joystick Controls

Movement, weapon firing, and weapon switching can be done with a joystick. Several other functions must be performed using the keyboard.

Note that the program supports two joysticks for two player games, in most MS-DOS compatible configura-

tions. Check your data card for more information.

Keyboard Controls

The game normally uses the numeric keypad on your keyboard for cyborg movement and other keys for special functions. In two-player games, or Battle Practice games where a single player sets up as the attacker (left side), you must use the left side of the keyboard (see below).

Some special functions must be performed using the keyboard, not by the joystick. These are: switch cyborg; hold fast; and retreat. (See below for information on these actions.) The two buttons on most MS-DOS compatible joysticks fire weapons and select new weapons, respectively.

The "Esc" key pauses the action.



Explanation of Combat Functions

Movement

This is achieved by moving the key or joystick in the desired direction.

Weapon Firing and Ranges

To fire the current cyborg weapon, press the joystick fire button or press the appropriate key. For rapid fire, hold the button down. The cyborg will fire a burst and then recharge.

You may attack enemy cyborgs far outside the range of your control cyborg window, using the Short-Range Radar map.

In the special case of long-range missiles, the view moves away from the control cyborg to the missile itself. You actually control and guide the missile to its target. This is a challenging skill to master: new players may wish to let the computer use cyborgs with this weapon system.

Defender/Single Player Default Keyboard Controls

THESE CONTROLS APPEAR ON THE **RIGHT** SIDE OF THE KEYBOARD.

1-9 keys on numeric keypad	movement
F10	switches control between cyborgs
F9	sets all cyborgs to hold fast
F8	instructs cyborgs to retreat
+ on numeric keypad	fires weapon
0 (Ins) on numeric keypad	switches weapon

Attacker/Second Player Default Keyboard Controls

THESE CONTROLS APPEAR ON THE **LEFT** SIDE OF THE KEYBOARD.

qwazdxc keys	movement
F1	switches control between cyborgs
F2	sets all cyborgs to hold fast
F3	instructs cyborgs to retreat
Space	fires weapon
Tab	switches weapon



Please note that while weapon ranges are fixed, weapons have widely differing rates of fire, and the same weapon may have slightly different rates of fire on different cyborgs. You must learn the limitations of each cyborg individually. Also, rapid fire is more effective against targets at short range. At long range, you must make every shot count.

Changing Weapons

Although a cyborg can only fire one weapon at a time, the weapon to be used can be set to any of the weapon systems supported by that cyborg. To change the system press the appropriate button or key and the next weapon is selected. As soon as the desired weapon is highlighted it can be discharged at the enemy.

Changing the Control Cyborg

To change the control cyborg, press the appropriate key. The switch to the new cyborg usually takes place immediately. If the control cyborg is destroyed during the course of battle, another cyborg is provided automatically, if one is available. You may have to wait for a moment before another cyborg is provided.

There are 2 reasons why a cyborg switch may not take place:

1. There are no other cyborgs left in the attack or defense.
2. All computer cyborgs are firing long-range missiles.

Holding Fast

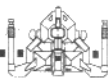
Although there is no way to direct the computer-controlled cyborgs during the battle, a general may give the hold fast order. Hold fast instructs all computer-controlled cyborgs to hold their positions and fire at any approaching cyborg. Cyborgs with long-range missile capabilities normally only launch them if the hold fast order is given. This prevents long-range missiles from smashing cyborg comrades in the backs.

To place cyborgs on hold fast press the appropriate key. To remove the hold fast order, press the key again. When hold fast is engaged, "HOLD FAST" appears at the bottom of the screen.

Retreating

During the course of a battle a general may decide to retreat his remaining cyborgs. Attacking cyborgs can only retreat to the country where the attack originated. When defending cyborgs retreat they scatter among friendly countries. If a general attempts to retreat and there are no adjacent friendly countries left, the cyborgs are destroyed.

To break off an engagement, press the appropriate key. All computer-controlled cyborgs head toward the battle map boundaries. When a cyborg touches the boundary, it disappears, and is placed in a friendly country, if possible. Retreating computer-controlled cyborgs do not defend themselves as they retreat; they merely turn their backs and run. The computer players never opt for retreat.



BEHEMOTH

The Behemoth was the first elite battle cyborg to be constructed. Although slow, it carries an intimidating array of weapons. Its intense heavy laser fire can rapidly overheat any cyborg while its light auto cannons and short-range missiles peel armor away from its opponents. At 600 tons the Behemoth can sustain a tremendous amount of punishment.

Behemoth Tactical Details

Speed	Slow
Armor	600
Weapon System 1	Heavy Lasers (4)
Cooling Factor	8
Ammo System 1	Unlimited
Weapon System 2	Short Range Missiles (2)
Ammo System 2	80 missiles
Weapon System 3	Long Range Missiles (2)
Ammo System 3	20 missiles
Weapon System 4	Light Auto Cannon
Ammo System 4	200 rounds



Ending a Battle

A battle ends when all the cyborgs from the attacker's and/or the defender's side are destroyed, or one general retreats all his cyborgs from the battle.

Immediately following the battle a summary screen showing the losses of both parties appears. Each side's cyborg losses are listed for inspection. To exit this screen click on the OK box.

The Battle Map

Each country has a unique battle map where combat takes place. Each battle map is bordered by a yellow and black striped boundary zone. Cyborgs can travel anywhere inside the zone. If a player is retreating, a cyborg coming in contact with the zone is removed from the battle.

Critical Pieces

To destroy any structure in the combat mode, the critical piece for that structure must be destroyed. Although each empire's structures have their own unique architecture, they all contain the same critical piece.



Critical Capital Piece

This is represented by the empire symbol.

Critical Factory Bay Piece

This flat grid area represents a factory bay. When it is destroyed the factory loses this bay, as well as the cyborg it is constructing. The cyborg is not shown.

Critical Factory Enhancement Piece

This icon of a square with a piece of electronic machinery in the center represents the power supply for the enhancement.

Location of Critical Structures

On all terrains, except for the city, the critical structures are placed on the side opposite the attacker. In a city the capital is always placed directly in the middle of the map.

REFERENCE

Country Particulars

Every country in CYBER EMPIRES has the following features:

Net Worth

Refers to the number of credits an empire receives from its countries at the start of each strategy turn, provided capitals are established.

Build Space

Represents the number of structures that a country can support. This number always falls between one and seven. It is set at random at the start of each game. The first country of every empire always has seven build spaces. Each structure, whether it is a capital, factory, enhancement, or fortification, requires one build space. If a country has zero build space no further structures can be built. Cities have only one build space.

Terrain

Each country is one of five terrains. The type of terrain significantly influences the outcome of battles. See the "Terrains" section below for descriptions of each type of terrain.

Terms Used

Strategy Turn

A turn in which a single player makes all his strategic moves. The turn starts when the battle doors are opened, and ends when they are closed.

Selecting a Country

In order to manipulate a country you must select it. This is accomplished by moving the cursor over the middle



of the country and pressing the mouse button or Enter key. Whenever you are required to select a country, a message to that effect appears in the message box.

Occupied Country

A country which has no capital but has cyborgs present.

Controlled Country

A country that has a capital (the imperial flag is present). No cyborgs need be present for a country to be controlled, only the capital.

Structures

This is a generic term which refers to the buildings available in CYBER EMPIRES (capitals, factories, factory enhancements, and fortifications).

Friendly Country

A country occupied or controlled by the current player.

Unfriendly Country

A country occupied or controlled by any player other than the current player.

Neutral Country

A country that is not occupied or controlled by any empire.

Taking Over a Neutral Country

A neutral country has no means by which to defend itself, and can be seized by moving only one cyborg into it. However, you must oust the ruling government and establish your own in order to receive the country's net worth every turn. This is accomplished by purchasing a capital building for the country.

Attacking an Enemy

To attack an enemy, move the cyborgs you wish to use to the target country. During the battle simulation or combat phase the conflict is resolved.

Terrains

There are five types of terrain in CYBER EMPIRES: arctic, coniferous, desert, volcanic, and city. Every country has a unique combat mode battle map which corresponds to its strategy phase appearance (i.e., if a country is arctic on the strategy map the battle map is arctic as well). Each of the terrains affect battles in different ways.

Arctic

This is a barren landscape, sometimes containing small rivers and lakes. It is the coldest climate on Orion and the easiest to fight on. Due to the low temperatures, cyborgs cool much faster and can use all their weapons with little fear of overheating. Most cyborgs are destroyed as a result of losing their armor.

Coniferous

The coniferous terrain contains lakes, rivers, and trees which seem to constantly spoil good shots. Coniferous countries are the most abundant on Orion. The amount of trees in any given country can vary from extremely sparse to terribly dense. Small cyborgs can experience difficulty on this terrain as they struggle to blast through the trees with their small weapons.



This terrain is fairly difficult to fight in because the trees restrain the maneuverability of the cyborgs. Overheating is also more of a concern on this terrain. Cyborgs often accumulate heat while they blast through the trees trying to confront the enemy.

Lakes can be found in some coniferous maps that will cool a cyborg at a slightly greater rate if entered.

Desert

The desert terrain is very hot. Overheating is a major concern here. Large weapons that produce significant amounts of heat when fired can quickly overheat a cyborg and render it immobile. The water pools in this terrain are often a welcome sight as they help cool the blistering cyborgs.

Volcanic

The volcanic terrain is arguably the most difficult to battle on. Its extreme temperatures and lava pools can cause the mightiest cyborgs to reach maximum temperature and explode if care is not taken. Unlike the desert terrain, volcanic terrain offers no water sanctuary from the torrid heat. If a cyborg becomes disabled due to heat while in a lava pool it is fatal. Firing weapons that produce large amounts of heat in this terrain must be done with extreme caution. Being hit by high heat-producing weapons is also more dangerous.

City

The city terrain is the most unique of all. Cities are extremely valuable as they provide an abundance of revenue. During the course of a battle, buildings will undoubtedly be destroyed, causing damage to the city and reducing the net worth of the country. Fierce battles have been known to decimate cities, making them almost worthless. If a city has been damaged it rejuvenates itself slowly (2% per turn).

Cities are unquestionably the most difficult terrain to defend as they cannot be fortified.

Strategic Hints

Purchases (Rich Planet)

You are advised to build an abundance of small cyborgs during the early stages of the game. It is better to have a large amount of inferior cyborgs than a small amount of slightly superior units. Factory enhancements should be purchased as soon as possible. Although they are expensive, they allow you to produce larger cyborgs more efficiently.

Expansion

Initial expansion should be fast. Although it is important to gain control of countries to increase revenue, it should not be done with reckless abandon. Try to gain control of neighboring cities as quickly as possible. This substantially increases your income and reinforcements can be sent out to defend the country. Try to surround cities with countries of other terrains. These countries can be fortified, making it difficult for enemies to damage or take control of the city.



Encountering an Enemy

Once you have encountered an enemy, try to consolidate the countries already held. Fortification at this stage should be a priority. Placing a light fortification on a country adjacent to the enemy acts as a major deterrent. As the controlling empire, you only need to hold one cyborg in the country, safely behind the fortification walls. This frees other cyborgs for further expansion, attacks, or country defenses.

Although light fortifications hold off the smaller cyborgs, the enemy will undoubtedly begin producing larger units which are capable of quickly overrunning the fortifications. Do not let the fortification lure you into a false sense of security. Upgrade light fortifications on fronts that may be subject to attack.

Invasions

Invading an enemy country can be difficult and costly. Combined attacks from 2 or 3 countries may be necessary to oust the enemy. Attack the enemy in the weakest possible location. Cities cannot be fortified and have a high net worth, and therefore should be prime targets for initial attacks. Once you have taken an enemy country, fortify it immediately. This makes it difficult for your opponent to recapture it through a counterattack.

Harassing an Enemy

If you are not capable of launching a successful attack, harass the enemy by sending Dragons into their cities and destroying larger cyborgs, followed up by a prompt retreat. This whittles away the opposition's forces and may force a premature attack.

Defending (Fortification Present)

Place cyborgs with long-range missiles outside the fortification walls and let the computer control them. Computer-controlled missiles rarely miss their target. Place the remaining cyborgs within the wall. This keeps them fresh in case the enemy breaches the wall. If you suspect your opponent is attacking with long-range missiles (from Crossbolts in particular), place some of your faster and more powerful cyborgs close to the attacker. These cyborgs may be able to destroy some Crossbolts before they have unleashed many of their missiles.

Defending (No Fortification)

If there are long-range missile cyborgs present, place all cyborgs in a straight line as far away as possible from the enemy. This gives the long-range missiles the opportunity to inflict heavy damage.

Retreating

If a battle is obviously lost, do not be a hero. Retreat and save your remaining cyborgs, because they may be useful in a counterattack.

Weapon System Data

Each cyborg has its own weapon system configuration. Firing a weapon induces the side effect of heat on firing on the firing cyborg. Weapons have different ranges, fire rates and projectile speeds, summarized in the table at the end of this section.



Light Laser

Light lasers (LL) use a concentrated pulse beam of light particles to inflict damage. The LL has a range of 250 meters and inflicts one point of damage and one point of heat for every pulse. Each pulse fired also causes one point of heat for the firing cyborg. The LL is the poor man's weapon. Its limited range and low power make it difficult to cause serious damage to other cyborgs. The LL is powered through the central core of the cyborg, so it can be fired indefinitely.

Heavy Laser

Heavy lasers (HL) use a more concentrated and focused pulse than the LL, making them much more effective in battle. The HL has an excellent range of 700 meters and inflicts 3 points of damage and 4 points of heat for every pulse. Each pulse fired causes one point of heat for the firing cyborg. The HL is a formidable weapon in any terrain and is greatly feared in hot terrains. It is powered through the central core of the cyborg so it can be fired indefinitely, although only in slow bursts.

Light Auto Cannon

The light auto cannon (LAC) fires 40mm armor-piercing shells and can fire several streams of shells, inflicting significant damage on even the heaviest cyborgs. The LAC has a range of 350 meters and inflicts 4 points of damage for every shell. The LAC does not cause any significant heat when fired.

Heavy Auto Cannon

The heavy auto cannon (HAC) is the most powerful weapon deployed by any cyborg. It is only mounted on Titan Class cyborgs because of its size requirements. The HAC is similar to its smaller brother except it fires 100mm armor-piercing shells. A single burst can critically damage or even destroy a heavy cyborg. The only weak point of this weapon is its limited range and shell speed. It has a range of 350 meters and inflicts 10 points of damage with every shell.

Short-Range Missiles

The short-range missile (SRM) is a very effective weapon. It is designed with auto-loading missile bays and can release deadly salvos in rapid succession. The SRM has a range of 400 meters. Each missile carries a heavy-duty payload that inflicts 16 points of damage and 2 points of heat per missile. SRMs severely damage heavy cyborgs and obliterate lighter ones.



TITAN

The Titan is unquestionably the most powerful cyborg in existence. Its long-range missiles can wreak havoc, the double-barrel neutrino cannons can tear cyborgs apart, and its close-range heavy auto cannon fire will annihilate any cyborg in its path. At 750 tons the Titan is the heaviest armored cyborg available. It also has a very high cooling factor which allows it to cross lava pools easily. Even Dragons have difficulty overheating the mighty Titan. The Titan has few known weaknesses.

Titan Tactical Details

Speed	Slow
Cooling Factor	15
Armor	750
Weapon System 1	Neutrino Cannon (2)
Ammo System 1	Unlimited (2)
Weapon System 2	Heavy Auto Cannon (2)
Ammo System 2	200 rounds
Weapon System 3	Long Range Missile (2)
Ammo System 3	20 missiles



Long-Range Missiles

Long-range missiles (LRM) employ the latest in camera-mounted missile technology. This guidance system allows cyborgs to guide missiles to their targets. You take control of a long-range missile as you would a cyborg, guiding the missile's flight path. The guidance system combined with the missiles' range makes this weapon deadly on open terrains. The LRM has a range of 3,200 meters and carries a medium payload which delivers 10 points of damage and 2 points of heat for every missile. The missile bays for the LRM are auto-loading but significantly slower than the SRM. Used correctly, in open terrain and at

long distances, these weapons are deadly. At close range or in cluttered terrain they are virtually useless.

Hellfire Launcher

The Hellfire launcher (HFL) is a specialized close-range weapon that is mounted only on the Dragon. It fires concentrated napalm, making it devastating. It has the ability to bring any cyborg's core temperature to a critical level. The HFL has a range of 80 meters and can add 12 points of heat for every burst. The HFL is extremely effective in city terrains where close-range fighting is impossible to avoid.



Neutrino Cannon

The neutrino is the smallest particle known to man and travels faster than light. The neutrino cannon (NC) emits highly charged neutrino particles.

This burst of energy is extremely dense and carries a force equivalent to several metric tons. On contact, the NC brings both devastating damage and heat to its target. The NC has a range of 700 meters, equal to the

heavy laser, and inflicts 20 points of damage and 10 points of heat for every burst. It is considered the best all-around weapon and is deadly in any terrain. However, it must be used with caution in hot terrains as it adds 4 heat to its host for every burst. The NC is powered through the central core of the cyborg so it can be fired indefinitely.

Weapon Data Table

WEAPON	RANGE	DAMAGE	HEAT (IMPACT)	HEAT (FIRING)	RATE OF FIRE	PROJECTILE SPEED
LL	250m	1	1	1	fast	very fast
HL	700m	3	4	1	slow	very fast
LAC	350m	4	0	0	fast	slow
HAC	350m	10	0	0	fast	slow
SRM	400m	16	2	0	slow	slow
LRM	3,200m	10	2	2	very slow	fast
HFL	80m	0	12	1	very fast	very slow
NC	700m	20	10	4	medium	very fast

QUESTIONS OR PROBLEMS?

Our main business number is (408) 737-6800. If you encounter disk or system related problems you can call our Technical Support Staff at (408) 737-6850 between 11 a.m. and 5 p.m., Pacific Time, Monday through Friday, holidays excluded. NO GAME PLAYING HINTS WILL BE GIVEN THROUGH THIS NUMBER. You can write to us for hints at: Hints, Strategic Simulations, Inc., 675 Almanor Avenue, Suite 201, Sunnyvale, CA 94086 (include a stamped self-addressed envelope for reply).

IBM COMPATIBLE COMPUTER INFORMATION:

Many of our games will work on IBM compatible computers. If you own an IBM compatible computer we suggest that you consult with our Technical Support Staff at (408) 737-6850 between 11 a.m. and 5 p.m., Pacific Time, Monday through Friday, (holidays excluded) to see if an SSI game you're considering purchasing is compatible with your computer. If we have insufficient data to determine compatibility, you may wish to purchase the game and test for compatibility yourself. If the game proves to be incompatible, you may return it within 14 days with your dated receipt and we will refund your money. Or, if you return the game within 30 days, you may exchange the game for another.

CREDITS

SILICON KNIGHTS

Design Team	Silicon Knights (Denis Dyack, Rick Goertz)
Amiga Programming	Silicon Knights Kevin Hoare
MS-DOS Programming	Silicon Knights Andy Brownbill
Artwork and Graphics	Silicon Knights Rob Chapman Paul Dobson
Soundtrack and FX	Silicon Knights Richard Joseph Joanne Abramek
Special Mention	Andy Summerfield Bob McInerney Tracy Furnival Dave Collie
Licensed By	Gray Matter Millennium

STRATEGIC SIMULATIONS, INC.

Producer	George MacDonald
Associate Producer	Bill Dunn
Editors	Eileen Matsumi André Vrignaud Al Brown
Editing Support	Sean House
Playtesters	John Boockholdt Dan Collins Jason Ray Steven Okano Don McClure
Artists	William Yeatts Paul Barton Tom Wahl
Test Support	Kym Goyer
Special Thanks to	Keith Brors Graeme Bayless Al Marengo Jim Jennings James Young
Art, Graphic Design, and Desktop Publishing	Louis Saekow Design
Pre-press Production	Louis Saekow Design
Printing	A&a Printers and Lithographers, Inc.

Sail the Solar Winds!

Advanced Dungeons & Dragons

SPELLJAMMER



PIRATES OF REALMSPACE.

Captain your own Spelljammer space ship in a spectacular AD&D® adventure unlike any before!

Recruit officers and crew to man your magic-powered ship. Soar into the ether, explore the planets of Realmspace and embark on exciting missions. Engage exotic pirate vessels such as neogi snail warships in real-time combat from a first-person, flight simulator viewpoint. Fire

huge bolts from your ship's ballista and bring the enemy to heel. Boarding combat is true AD&D phased battle using weapons and magic. Point-and-click your way through the game. Superb graphics and sound effects heighten the drama. With so many planets to visit and missions to fulfill, every adventure will be different from the last! Three levels of play make this game ideal for the novice *and* the experienced space mariner.

IBM & AMIGA – \$59⁹⁵

TO ORDER:

VISA/MC – call 1-800-245-4525 (USA & Canada). By mail – send check or money order for \$59.95 plus \$4.00 shipping & handling to: Electronic Arts, P.O. Box 7530, San Mateo, CA 94403

CA residents add applicable sales tax. Specify computer format. Allow 1-3 weeks for delivery.



ADVANCED DUNGEONS & DRAGONS, SPELLJAMMER, AD&D and the TSR logo are trademarks owned by and used under license from TSR, Inc.

©1992 TSR, Inc. ©1992 Strategic Simulations, Inc. All rights reserved.

TSR