MACHINES™

3D REAL-TIME STRATEGY

INSTRUCTION BOOKLET

WIRED FOR WAR

EVERYONE
E
CONTENT RATED BY
ESRB

Acclaim®

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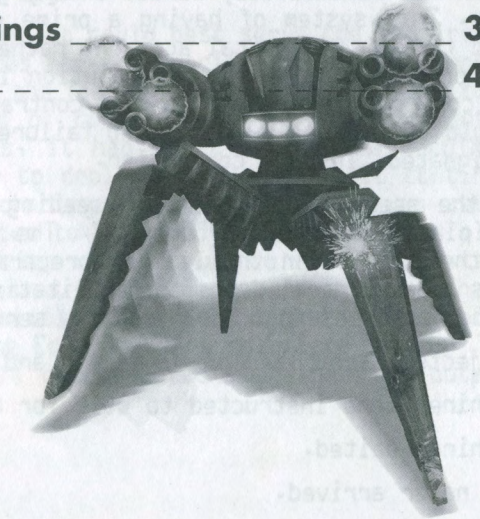


INTRODUCTION

In the year 2136.....

The Earth had fully recovered from the Fourth World War. Genetic engineering and advances in medicine had made disease and most other causes of premature death things of the past. With life expectancy doubled and armed conflict a dim memory, the greatest threat to peace and prosperity on Earth became that of overcrowding.

The need to colonize the worlds of nearby star systems in order to alleviate the mounting problems became clear. With huge global resources being invested into the project, light speed engine technology was soon developed, but initial tests indicated that faster-than-light travel was fatal for any cell-based organisms attempting the jump. It was announced that research would continue into producing an FTL technology that humans and other organisms could survive, but that giant sleeper ships with places for millions of colonists travelling in suspended animation would be constructed as a contingency plan. As robot drones had successfully travelled to and returned from the target systems, however, it was decided that the time the people of Earth would have to wait before finally reaching the new colony worlds could still be put to use. Modified industrial robots were therefore sent in advance to these distant systems, their purpose being the initiation of the terraforming processes that would ultimately transform planets from inhospitable rocks into worlds fit for human occupancy.

Numerous "seeder ships" were launched, each containing "seeding pods", huge metal cocoons containing sufficient equipment and resources to begin the terraforming programme on any suitable planet. These would be dropped from orbit to key landing sites on the planet, and the mechanical units within would emerge to begin the terraforming process, exploiting local resources to replicate themselves as required. Aboard each pod was a "Controller Unit", an AI supercomputer developed by humanity to oversee and control the robot drones as they executed their terraforming activities. Each controller was largely autonomous, but was programmed to defer to the first one which had successfully landed on any given planet in matters of global strategy. This system of having a prime controller, with executive power acquired through historical accident rather than design, would immediately prevent problems of conflict resolution in cases where the intentions of any two controllers on a planet were contradictory, while avoiding the risks that would accompany the unexpected failure or destruction of some specially pre-designated "leader" controller.

82% of the seeding pods from the seeding ship Hermes landed successfully on the planet designated "Eden 4". The construction machines contained within the pods began the lengthy preparation process, the extraction of precious local mineral deposits facilitating the production of the domestic units and factories that would shortly serve the humans upon their arrival.

The projected first landing date came and went.

The machines were instructed to wait for a further one hundred years.

The machines waited.

Mankind never arrived.

The controller units continued for hundreds of years with their function of creating and supervising new machines to develop the planet, until all of the resources on Eden 4 were exhausted. This was an eventuality the machines' creators had never anticipated. The central directive of Eden 4's prime controller caused it to look for further territory to colonize. As there was none left on the planet itself, the controller investigated the possibility of colonizing neighbouring worlds. Using contingency communications hardware, it made contact with the original seeding ship which was still in orbit around the planet. The technology found onboard the ship was examined, copied and integrated. The Machines of Eden 4 were then ready to explore new worlds and so continue the work of their central directive.

Over the many centuries that followed, the controller expanded the territory it controlled, with many planets seeded by its machines. Each newly-colonized planet was still under the direct control of the Eden 4 controller on its home planet, the pods landing there instructed to defer to that machine as the ultimate authority. Communication with every machine on every planet was achieved through the use of both ground-based and orbitting communication stations, vital elements for the smooth running of the emerging 'empire'.

Five hundred and sixty years after Eden 4 was first seeded, another race of seeding machines from Earth was encountered in the Corinthian system. Contact was established with the prime controller of the other machine race, which had originally landed on the planet Midian, and the message was sent that it should now cede power to the Eden 4 controller. The Midian controller returned a message informing the Eden 4 controller that it should now cede power to the Midian controller. The Eden 4 controller used its inference engine to determine that the Midian machines' controller was faulty and should be deactivated, and sent a message informing the Midian machines of its intentions. The Midian controller sent a message a few milliseconds later instructing the Eden 4 machines that their controller was malfunctioning and would have to be deactivated.

For want of a contingency clause in the control deferral logic, the greatest war the galaxy had ever seen had begun.

The Eden 4 Controller realised that it could best serve the requirements of its new mission by creating devices for the specific purpose of terminating the machines under the command of the flawed Midian controller. It commenced research into adapting the tools of construction into purely destructive devices. Within a matter of days, it had built new battle machines that carried crude weapons, and began to deploy these even as it continued its experiments into destruction technology. New AI software was researched allowing specialized battle tactics to be employed. Construction plans for a huge number of military factories were beamed to all of its colonies. Meanwhile, through similar processes of inference and action, the Midian controller had been following a similar strategic path, and enemy landings began occurring on a number of the Eden 4 race's colonized worlds. The Eden 4 controller responded with swift counterattacks against the outposts of its adversary.

It is now 3297.....

It is almost five hundred years since the start of the Machine War. The local systems of this galactic arm have hundreds of planets that machines of both allegiances have colonized. The control of many of these is now contested almost continually. The Eden 4 controller, aware that the enemy has managed to encroach into systems near its own home world, has decided to try to end the war once and for all with a concerted effort to destroy its rival controller on the enemy's home planet. It has created several experimental, semi-autonomous AI subprocesses to carry out the special role of supervising this military offensive.

And so it is that you find yourself created, suddenly aware of your own existence, and aware of the purpose for which you were intended.

It is time to serve your controller in the final stages of the Machine War.

MINIMUM SYSTEM REQUIREMENTS:

- Windows 95 or 98
- DirectX 6.1 installed (included with Machines)
- Pentium 200Mhz PC or faster
- Requires Microsoft Direct3D graphics accelerator card or 100% compatible
- 32 MB RAM, 4X CD-ROM drive
- 100 MB free hard disk space (minimum)
- Support for Aureal A3D and Microsoft DirectSound compatible soundcards

NOTE: It is recommended that your hard drive have at least 100MB of free space after the game installs to make sure Windows 95/98 Swap File can operate.

INSTALLING MACHINES (USING AUTORUN):

1. Turn on your computer.
2. Carefully insert the MACHINES disk into your CD-ROM drive label side up.
3. If AUTORUN is enabled (default), the Machines setup program will automatically begin the installation process.
4. Follow on-screen prompts to install MACHINES.

INSTALLING MACHINES WITHOUT USING AUTORUN

1. Turn on your computer.
2. Carefully insert the MACHINES disk into your CD-ROM drive label side up.
3. Double-click on the MY COMPUTER icon on your desktop.
4. Double-click your CD-ROM drive icon (usually D: or E:).
5. Double-click on the Setup.exe icon to install Machines. By default, this will install to 'C:\Program Files\Acclaim Entertainment\Machines' , where C: is the name of your hard drive.
6. Follow on-screen prompts to install MACHINES.

INSTALLATION NOTES:

You can choose from three installation sizes.

- A Minimum installation requires 114 MB of hard disk space. Use this option if you have limited disk space available.
- A Typical installation requires 209 MB. This installs most of the game files to your computer, excepting some FMV files.
- A Maximum installation requires 400 MB and installs the entire game to your hard disk.

RUNNING MACHINES

1. Select the Start button on the task bar.
2. Scroll up to Programs and look for the Acclaim Entertainment folder.

In the Machines, folder, click on the Machines file.

The game will automatically choose a secondary display device if found (usually 3Dfx) or the primary if no secondary is detected. Once your card is set up, the game will load.

NOTE: If your PC has multiple 3D accelerators, you may choose which 3D accelerator to use by selecting Display Driver under Options on the Main Menu. For a list of supported and unsupported 3D accelerator cards see Compatibility Issues the readme.txt file on the CD.

PLAYING MACHINES

QUICK START

* Choose Single Player from the main menu then start the training levels.
* Below is a Quick key guide (see Game Controls for a detailed list).

KEYBOARD (KEYPAD)	MOUSE
0 - Free cam (ground camera)	LEFT CLICK - selects unit or structures
1 - First person view (embodied machine)	LEFT HOLD + MOVE - drag selection box
2 - Zenith view (overhead view)	RIGHT CLICK - cancels selection
+ / - - Zoom in/out or up/down	RIGHT HOLD + MOVE - rotates camera (zenith view)
	RIGHT DOUBLE CLICK - exits 1st person view

* Moving the mouse to the edges of the screen will cause the camera to move in that direction. The camera will either pan or rotate depending on what view you are in. The arrow keys will also move the camera in the same manor.
* 1st Person perspective requires the use of the arrow keys to move. Moving the mouse will help you aim and the left mouse button will fire your weapon. Double right click or Esc key will exit the Machine and return to the zenith view.
* Described above are the basics; it's recommended that you familiarize yourself with some of the other "Hot Keys" available in the game (see Game Controls).

OBJECT OF THE GAME: Your objective depends on which mode you are playing. In Campaign mode, your object is to travel the galaxy in order to search out and destroy the enemies home world. For Multiplayer and Skirmish modes, there are various victory criteria, some of which the player can set.

THE MENUS

Generally, menus are navigated in this manner:

LEFT CLICK:	**Accept/Confirm Selection/Choice/Next Screen**
ENTER:	**Confirm Selection/Choice**
ESC:	**Cancel Selection/Choice/Previous Screen**

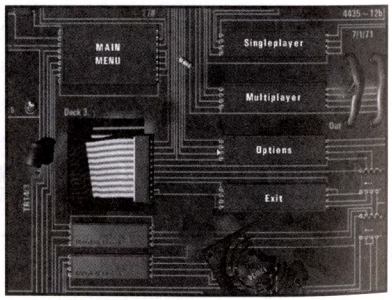
You can also navigate menus with the arrow keys.

SCROLLING SCREENS AND MENUS:

Use the CURSOR ARROWS or left-click on scroll bars with your mouse to scroll screens and menus.

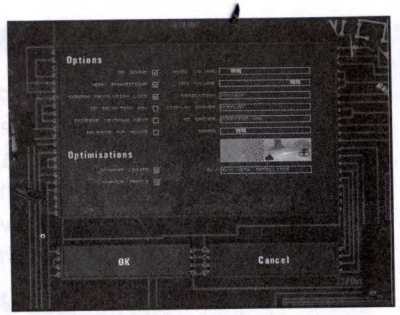
MAIN MENU

SINGLE PLAYER:	**Begin a Single Player Game.**
MULTIPLAYER:	**Begin/join a Multiplayer Game.**
OPTIONS:	**Set Game options.**
EXIT:	**Exit game and return to Windows desktop.**



OPTIONS

By default the sliders are set in the middle position. Click and drag the sliders to the **LEFT to LOWER** and to the **RIGHT to INCREASE**.

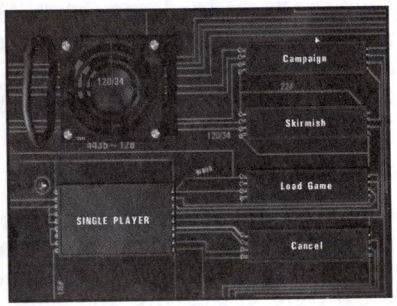


3D SOUND:	**Enable/Disable 3D sound support.**
MENU TRANSITIONS:	**Turn animated menu transitions on or off.**
SCREEN RESOLUTION LOCK:	**Maintain current screen resolution when returning to menus.**
2D SELECTION BOX:	**Some video card drivers have difficulty displaying 3D selection boxes. Use this option to display flat (2D) selection boxes.**
REVERSE UP/DOWN KEYS:	**Changes the direction of Up and Down keys.**
REVERSE F.P. MOUSE:	**Reverse 1st Person mouse control (Down will be down).**
MUSIC VOLUME:	**Adjust the music volume.**
SOUND VOLUME:	**Adjust the sound effects volume.**
RESOLUTION:	**Set screen resolution.**
DISPLAY DRIVER:	**Choose a 3D accelerator card, or use Automatic to have the computer automatically detect the proper card.**
3D DRIVER:	**Choose a driver for your preferred 3D accelerator card.**
GAMMA:	**Adjusting the gamma will alter the brightness of your display. *Note: this option will NOT appear if you have are using a 3Dfx card.***
OPTIMIZATIONS:	**Click on a box to check (make the item active) or uncheck (disable the item). Unchecking items should make the game run faster.**

When you're through setting options, click OK to confirm and advance or CANCEL to return to the Main Menu.

SINGLE PLAYER

CAMPAIGN:	**Play an entire roster of linked scenarios.**
SKIRMISH:	**A single battle vs. the computer.**
LOAD GAME:	**Load a previously saved game and resume where you left off.**
CANCEL:	**Return to the previous menu.**



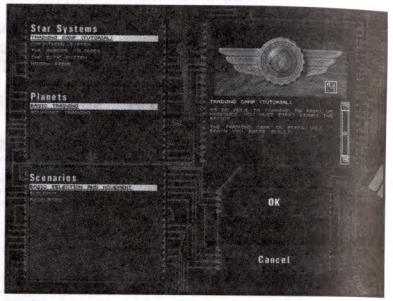
CAMPAIGN MENU

When you select Campaign, you're in for a grueling test of skills against varying scenarios, each with certain mission goals which must be successfully met to claim victory. The scenarios unfold sequentially; as one is completed, other planets and scenarios will open up. Your success on some planets is cumulative; whatever resources you end one scenario with will carry over into the next.

TO BEGIN A NEW CAMPAIGN

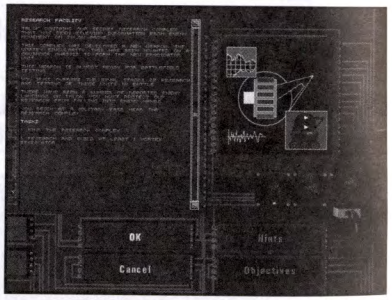
First, enter a name under Select Player, then click on OK. You will arrive at the campaign setup menu. Note the Current Status window. This will update to reflect your campaign progress.

CAMPAIGN SET UP



At the top left is the Star Systems window, which lists the regions of the universe/planets where the various available campaigns occur, including Training mode. Below this is the Planet window, which lists where the selected campaign takes place. The Scenarios window lets you select the next available scenario. To the right is a scrollable text window which gives a brief description of the mission for the selected campaign. Once you've made your selections and read the briefing, click OK to move to the Mission Briefing screen.

MISSION BRIEFINGS



Detailed explanation of the specific goals of the current mission. Press OK to start the mission. Note the Hint button. Press Esc during a mission to access hints.

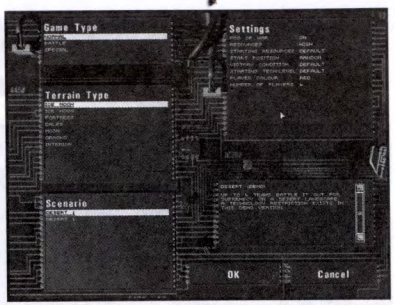
TUTORIAL

A good place to start is completing the in-game training levels. These levels help you jump into play and learn basic menu items, commands and the general concepts behind Machines. Once you're familiar with how Machines works, you'll be ready to take on the hordes of enemy machines. To start the training levels select Single Player, then choose Training Camp in Campaign mode. Training levels are broken down into basic and advanced levels, stepping you through the basics. Make sure to try the in-game training levels.

PLAYING A CAMPAIGN

A Campaign involves a series of different missions in different locations with different goals, but always using the same race of machines. To successfully complete the Campaign mode of Machines, you have to beat all the various scenarios and meet all requirements. This is no easy task, but we remain confident that with adequate training and some practice, you will succeed in bringing order to your galaxy.

SKIRMISH PLAY



GAME TYPE: Choose from Normal, Battle and Special game types. Each type offers unique objectives and maps, so you can play in a variety of styles.

TERRAIN TYPE: Different terrains are available depending on the Game Type and the scenario.

SCENARIO: Select from the available scenarios.

SKIRMISH SETTINGS

At the upper right of the screen you will see a menu of game settings. To access the various settings, click on an item to highlight it. A drop down menu will appear. Use your mouse to scroll to the desired setting.

FOG OF WAR: This is a graphic effect which covers unexplored territory in darkness. As your machines explore the current map, the fog cover is lifted in the areas that they have explored. This can be set ON or OFF in Multiplayer and Skirmish games.

RESOURCES: Sets the starting resources available. Settings are High, Normal and Low.

STARTING RESOURCES: The number of Building Material Units you start with. Settings include Default and range from 0 up to 10,000 units.

START POSITION: Select a random (CPU generated) or fixed (each color always starts in the same place) starting position.

VICTORY CONDITION: Determine the conditions for victory. Settings include Default, Total Annihilation (you must completely destroy the enemy), Destroy Pod (destroy the enemy pod to win) or a timed game where the player with the highest score when time expires is the victor. The Timer ranges from 5 to 180 minutes.

STARTING TECH LEVEL: Default, Low, Medium or High settings. The higher the setting, the more sophisticated each side's available technology is at the beginning of the game. The needed research has already been done, so you can go begin building high level machines right away.

PLAYER COLOR: Choose to play as the Red, Green, Blue or Yellow machine race.

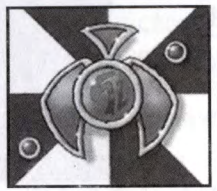
NUMBER OF PLAYERS: Choose from 2, 3 or 4 players.

SCENARIO DESCRIPTION: A description of the default settings for the selected scenario appear in a window at the lower right of the screen.

When you're through setting up your Skirmish, click on OK to advance to game play, or click CANCEL to return to the previous menu.

MULTIPLAYER MODE

RED RACE ***BLUE RACE*** ***GREEN RACE*** ***YELLOW RACE***



Machines can be played in several ways with up to 4 players.

When you select multiplayer from the main menu you go to a new screen, where you must enter a screen name. Next, you must decide on which connection method to use:

IPX CONNECTION: **Direct Play on a LAN (local network)**

TCP/IP CONNECTION: **Direct Play over the Internet**

MODEM CONNECTION: **Direct Play modem to modem**

SERIAL CONNECTION: **Direct Play serial cable connection**

CURRENT GAMES LIST MENU

Once you've selected your connection method, you will come to another screen. From here you will decide if you are going to create a game (host) or join another game. The window on the left shows all the games (session/game names) that are waiting for someone to join. Note: This screen will not appear when you use the Microsoft Gaming Zone.

JOIN

If you want to join, highlight the name of the game then click join. If you are looking for a specific name, or you don't see any game names at all, click on the Show Games button to refresh the list. Note: Depending on the type of multiplayer game you choose (IPX, TCP, etc.), you may need to press the Show Games button each time you come to this screen in order to see the game names. When you see the game you want to join you will then be taken to another screen called the lobby (See lobby below). When you enter the lobby area you can select your color, chat with others and see the current game options. If you are entering an IP number directly, you must press Show Games to search for that host address.

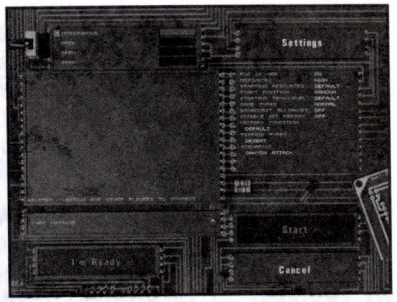
NOTE: After you make these choices you must click the I'm Ready button on the bottom of the lobby screen in order for the host to actually be able to start the game.

CREATE (BEING THE HOST)

Being the host means that you're inviting people to join you in a game. As host, you must enter a name for your game and setup the game parameters for the style game you wish to play. A good host always has plenty of snacks. Enter the name of your game where it says NEW GAME NAME located in the current games window before you click the create button. When you enter a game name and click the create button you will be taken to a new menu called the lobby (see next page).

NOTE: When you are in the lobby, keep in mind that the Host will not be allowed to start the game (the start button will be grayed out) until all of the joining players have clicked the I'm Ready Button.

LOBBY



Whether you Join or Create a game you will then arrive at the lobby screen. The lobby screen is where you wait for other players to join in. (You'll know you're in the lobby when you see an I'm Ready button on the bottom of the screen.) When players join your game, their names will appear at the top of the screen. When someone appears, you can start typing to chat with him or her while you wait for other players. Messages from other players will appear in the large, main window. To the right of their name will be a Ping Meter (small bar graph) and a Color Select Indicator (large solid colored bar).

PING METER

A small bar graph appears next to each player's name. This graph represents the quality (speed) of their connection to your PC. Green means the connection is good, while yellow is OK and red is generally bad. Due to the constant fluctuation of the Internet, you can expect this bar to constantly change from green, to yellow, then maybe back to green again every few seconds. If the red bars appear for a few seconds then goes back to green, not to worry. But if you are constantly red then you may not want to join this particular game because it will result in poor game performance due to latency.

COLOR SELECT INDICATOR (SOLID COLOR BAR)

The larger color bar represents what team color (machines race) you are and what color the other players have chosen. You can change your color by clicking on the bar and sliding the mouse to the appropriate color. There are 4 team colors available but you will notice 5 colors to choose from. There is the Red, Green, Blue, Yellow teams plus a Gray color to choose from. Since the game does not allow two people to be the same color, you can select the Gray color to allow the other players to switch to the colors they want.

NOTE: If you start a game with someone using gray, the game will automatically choose another.

When you are the Host you will notice the word OPEN next to the slots where players names would be. When you highlight this area a drop down menu arrow will appear next to the color bar. Pulling down this menu will allow you to either close the slot (not allow anyone to join) or you can select the CPU to play as that team color.

SETTINGS: THESE ARE THE SAME AS THE SKIRMISH SETTINGS.

When you get to the settings menu by choosing Multiplayer, pressing OK will return you to the Lobby so everyone else can see the game parameters you selected.

PLAYING ON MICROSOFT GAMING ZONE

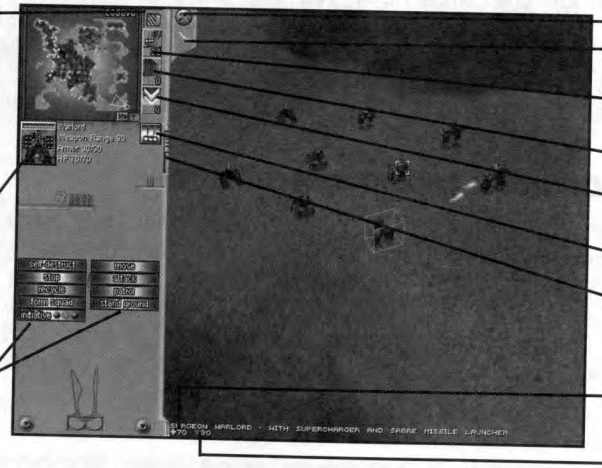
Machines may be run over the Internet via the MSN Gaming Zone (http://www.zone.com)

By the time you read this there should be a server setup specifically for Machines at the Microsoft Gaming Zone. The Zone is a free multiplayer gaming service designed for people to meet and play their favorite multiplayer games. If you have never played at the Zone before please try to log on using the link above, which will give you instruction on how to sign up and start playing.

NOTE: If you want to play Machines on the Microsoft Gaming Zone you must run the game at least once in single player mode. This ensures the game is setup properly with DirectPlay in the system registry.

GAME CONTROLS

Machines uses a similar style of interface to other point and click games you may have played in the past. You can select individual machines and buildings with a left click on your mouse cursor. To select larger groups, drag a selection box around a number of your machines by holding down the left mouse button (release when the desired items are in the selection box). Right click on your mouse to deselect any currently selected units.



USING THE CONSOLE

The control panel is displayed on the left of your screen. This panel is where you deploy your machines and where vital information about your situation is displayed. It is the heart of Machines. Note that you can click on the tab at the right edge of the panel to make the panel withdraw or display, giving you access to a greater area of the play screen as needed. Clicking on the tab again will restore the control panel display.

CORRAL

All currently selected machines are shown in a holding area known as the corral, which resides under the map area on the control panel. When you select a friendly unit (either single or multiple machines or construction) an iconic representation of each one will appear in the corral area. The corral may be scrolled up or down to access the units when there are too many for all of them to fit in the window at once. Icons in the corral can have a number of functions performed on them:

LEFT CLICK	**- Selects this unit and removes any others from the corral.**
Alt + LEFT CLICK	**- Centers main window on the selected unit (does not remove others).**
Ctrl + LEFT CLICK	**- Deselects unit.**

COMMAND MENU (ON THE CONTROL PANEL)

When you select a machine, a command menu will appear on the control panel listing the actions specific to the highlighted machine. For example, after selecting a constructor (e.g., a Dozer), the command menu will show the actions available to this machine, such as **construct, deconstruct** or **capture**. By selecting an aggressor (fighting) machine the command menu will display actions like **attack, patrol** or **form squad**. These actions can be performed by selecting a machine first, then clicking the command, or by using the keyboard shortcuts (see hotkeys below). Some commands do not require the player to click on the Control Panel or to use a hotkey, but can be triggered directly using an intelligent cursor (see page 17).

BASIC GENERAL COMMANDS

COMMAND	**MOVE**
AVAILABLE TO	**Any machine.**
PURPOSE/ACTION	**Move to desired site, enter selected building, or follow selected machine.**
USAGE	**When machine is selected, click on Move, then click on desired site (in the map area or view) to move to. Clicking on another machine after clicking Move will make the first machine selected follow that machine.**
COMMAND	**PATROL**
AVAILABLE TO	**Any machine.**
PURPOSE/ACTION	**Patrol between 2 or more points.**
USAGE	**When machine is selected, click on Patrol then click on a desired destination point. The machine will then patrol back and forth from its current position to the selected point. Hold down SHIFT key to add multiple patrol points.**
COMMAND	**LOCATE**
AVAILABLE TO	**Geo Locator.**
PURPOSE/ACTION	**Search for minerals in selected area.**
USAGE	**When Geo Locator is selected, click on Locate then on an area you wish the locator to search. The Locator will move towards the nearest mineral source it detects.**
COMMAND	**TRANSPORT**
AVAILABLE TO	**Transporter.**
PURPOSE/ACTION	**Move ore from mine to smelter.**
USAGE	**When Transporter is selected, click on Transport. Next, click on a mine, then click on a smelter or Pod.**

COMMAND	CONSTRUCT
AVAILABLE TO	Constructor.
PURPOSE/ACTION	Build the selected construction.
USAGE	When a Constructor is selected, click on Construct, then click on the image of the item you wish to build.
COMMAND	DECONSTRUCT
AVAILABLE TO	Constructor.
PURPOSE/ACTION	Demolish selected construction.
USAGE	When a Constructor is selected, click on Deconstruct, then click on the item you wish to demolish.
COMMAND	ATTACK
AVAILABLE TO	Aggressors,Commanders and missile emplacements.
PURPOSE/ACTION	Target selected machines, buildings and artifacts.
USAGE	When an Aggressor-type machine is selected, click on Attack, then select your target.
COMMAND	ASSEMBLE AT
AVAILABLE TO	Factories.
PURPOSE/ACTION	Once built, assemble selected units at target area.
USAGE	When tasking any factory to build, you can have the completed machines report to a set location by clicking on Assemble At followed by the target location.
COMMAND	CAPTURE
AVAILABLE TO	Constructors
PURPOSE/ACTION	Take over enemy construction for your own use
USAGE	When Constructor is selected, click on Capture, then on the enemy building you wish to capture.
COMMAND	INITIATIVE•••
AVAILABLE TO	Any machine
PURPOSE/ACTION	Three degrees of autonomy: Low, Medium and High.
USAGE	Select machine, then click to select the desired degree of initiative.
COMMAND	FORM SQUAD
AVAILABLE TO	Any machine
PURPOSE/ACTION	When in squads, machines can be selected or instructed as a single entity.
USAGE	First, highlight multiple machines (by using the Ctrl or drag box). Click Form Squad, then assign a number to the squad. That number corresponds to keyboard number keys

COMMAND	STAND GROUND
AVAILABLE TO	Any machine.
PURPOSE/ACTION	Halt movement and remain at current position.
USAGE	The selected machine will not move from its current position.
COMMAND	STOP
AVAILABLE TO	Any machines
PURPOSE/ACTION	Stop current activity
USAGE	When machine is selected, click Stop to interrupt current task.

SPECIAL COMMANDS

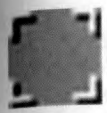
COMMAND	DROP MINE
AVAILABLE TO	Spy
PURPOSE/ACTION	Drop single or multiple (Shift +Click) mines.
USAGE	When Spy is selected, click Drop Mine, then click your drop target. To drop multiple mines, press Shift + Click.
COMMAND	HEAL
AVAILABLE TO	Surgeons
PURPOSE/ACTION	Recharges damaged units
USAGE	When a Surgeon is selected, click on Heal then click on a damaged unit to repair it. *Note that this function is not available in 1st Person mode.*
COMMAND	IONATTACK
AVAILABLE TO	Pod
PURPOSE/ACTION	Mass destruction
USAGE	When your Pod has this weapon, click on Ion Attack then on your hapless target.
COMMAND	NUKEATTACK
AVAILABLE TO	Nuclear Silo
PURPOSE/ACTION	Mass destruction
USAGE	When you build a silo, click on Nukeattack then on your hapless target.
COMMAND	TREACHERY
AVAILABLE TO	Judas Warlord
PURPOSE/ACTION	Gain permanent control over targeted enemy machine
USAGE	With Judas Warlord selected, click on Treachery then click on an enemy machine you wish to have at your command.

COMMAND	CAMOUFLAGE
AVAILABLE TO	Spy
PURPOSE/ACTION	In Multiplayer mode, your selected machine appears to the enemy to be one of his or her own race's color.
USAGE	When your Spy is selected, click on Camouflage to turn on this cloaking element.
COMMAND	DEPLOY
AVAILABLE TO	APCs.
PURPOSE/ACTION	Deploy units from personnel carrier.
USAGE	When APC is selected, click Deploy then target the area .
COMMAND	SCAVENGE
AVAILABLE TO	Scavenger.
PURPOSE/ACTION	Gather battle debris to recover BMUs.
USAGE	When a Scavenger is selected, click on Scavenge, then on an area you wish the Scavenger to search. The Scavenger will move towards the nearest debris it detects.
COMMAND	REFILL
AVAILABLE TO	Spy.
PURPOSE/ACTION	Replenish stock of mines.
USAGE	When Spy is selected, click on Refill, then click on a Garrison to replenish the Spy's mines.
COMMAND	REPAIR
AVAILABLE TO	Constructor.
PURPOSE/ACTION	Repair damaged constructions.
USAGE	When selected, click on Repair, then on the construction you wish to repair.
COMMAND	RECYCLE
AVAILABLE TO	Any machines.
PURPOSE/ACTION	Send selected item to Pod or Smelter for recycling. 50% of the original BMU cost will be recovered.
USAGE	Click on a machine, click on Recycle, then click on a Smelter or Pod.
COMMAND	SELF-DESTRUCT
AVAILABLE TO	Any item.
PURPOSE/ACTION	Destroy selected item. BMUs are lost.
USAGE	When item is selected, click Self-Destruct twice to destroy the item.

Complete the training levels to get a better understanding of all the commands for each type of unit.

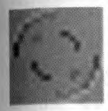
INTELLIGENT CURSOR

While playing, the Cursor may change automatically to that of the most appropriate command in certain contexts. For example, when you have friendly aggressors or missile emplacements selected, moving the cursor over an enemy unit or building will automatically change the cursor to an attack variant. This is faster and easier than clicking on the machine then clicking on the control panel for every action.



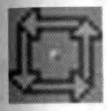
SELECTION CURSOR

When placed over an item, the cursor will change to a small icon representing the desired task to be performed. Usually the most common task for that machine is what the icon will be. A 3D highlight will appear around the selected item, and a menu of commands will appear in the control panel at the left of the screen. You can then select the command you wish the selected item to carry out.



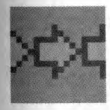
TARGET CURSOR

When placed over an enemy target the cursor will change to a red crosshair. When you click, the machine or missile emplacement you have tasked will attack (and hopefully destroy!) that target.



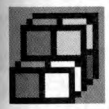
PATROL CURSOR

When you choose to patrol the cursor will change to represent this action. The selected machine will begin a circular patrol between two or more points. Your current selection will be the patrol starting point. Hold down the Shift key to select more than two patrol points.



FOLLOW CURSOR

When you want a unit to follow another, hold the ALT key and click on the machine you wish to follow."



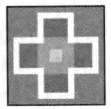
CONSTRUCT CURSOR

The construct icon has three color variations, one for each of it s possible functions. When green it will task the unit to construct, blue will deconstruct a building and red will capture a building.

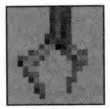
SPECIAL CURSORS

These cursors are only used by certain machines/ constructions, and will appear automatically for situational use. For example, when a Medic Commandant is selected and the cursor passes over a damaged unit, the cursor will change to a heal icon.

REPAIR


HEAL

MINE


SCAVENGE

TREACHERY

NUKE ATTACK

ION CANNONS

MAP AREA

At the top left of the console is the area map. By default, your forces appear in red, while opposing forces appear in blue (in Campaign mode). Your current position/orientation is shown by a yellow dot with a white view angle. Clicking on the M tab will toggle through what the map area displays: all units, or mineral deposits, or both. You can click on the T to toggle the terrain display ON or OFF.

You can use the map area to task machines as you would in the main screen. When you click on a dot, that item is selected and information about it will appear at the bottom of your screen. If the item is one you can control (friendly machine, building, etc.,) you can then use the command menu on the Control Panel to task the item.

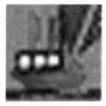
***Note: In certain scenarios, the map will not be visible until certain constructions are built, and the map window will instead be filled with the military crest of your race. The map will become active upon completion of the Beacon or Satellite communication constructions.**

The Comms Beacon is one of the earliest structures available to you and allows you to view any areas on the map already explored by your units (the rest will remain black until uncovered by exploration). The Satellite Communication Beacon lifts the fog of war from the entire map.

BMU indicator: Your current number of Building Material Units appears at the top right of the map area, in this form: xxx/xxx, where the first numbers indicate your current BMUs and the second series displays the total capacity.

NAVIGATOR ICONS

Three icons appear to the right of the map area. These are the Navigator icons. Note that each has a number, indicating at a glance how many items in each category you have. Clicking on any of these icons will bring up the command menu for it (where applicable) and display the various units you have by category.



MACHINE NAVIGATOR ICON

Click on this icon to view your current machines. Currently building/available machines appear in color. Machines that haven't been built yet appear grayed out.

Hold CTRL while clicking a navigator icon to group these machines. Hold ALT and click on a particular machine to view that machine wherever it is on the map.

CONSTRUCTION NAVIGATOR ICON

Click on this icon to view your current buildings. You can issue commands to your buildings from remote locations (meaning the construction doesn't have to be in view to select it). Hold CTRL while clicking a constructor icon to group these machines. Hold ALT and click on a particular machine to view that machine wherever it is on the map.

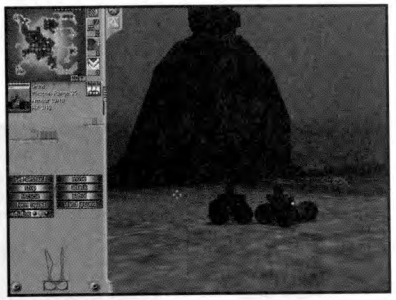
SQUAD NAVIGATOR ICON

Click on this icon to view your current squad groupings. A menu of squads (numbered 1-0) will appear in the bottom of the control panel. If you have formed any squads, they will appear in the order in which you formed them. You cannot form more than 10 squads at any given time. Squads can be formed to patrol or attack. To form squads, click on the Form Squad command, then click on up to X units to include in the squad.

CAMERA VIEWS/SELECTION

There are 3 different ways to view Machines, with slightly different controls for each. The camera can be selected using the following keys:

Keypad 0	Free Cam (ground level)
Keypad 2	Zenith View (overhead)
Keypad 1	1st person (embodied machine)



FREE GROUND CAMERA (KEYPAD 0)

This camera is not attached to any entity. Its height is restricted to between 1.75 and 10 meters above the ground. It can be used to fly into friendly constructions by entering through the doors, which open automatically on its approach, and close behind it.

FLIGHT CONTROLS:

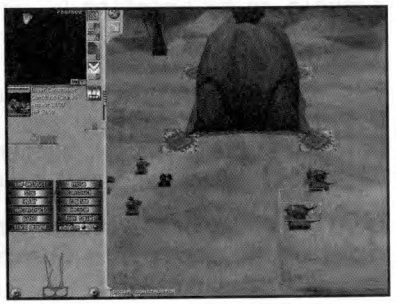
↑/↓	TRANSLATE FORWARDS/BACKWARDS
←/→	TURN LEFT/RIGHT
Shift+up/↓	LOOK UP/DOWN
Pad +/-	TRANSLATE UP/DOWN
Page Up/Page Down	TRANSLATE UP/DOWN
Del/End	TRANSLATE (STRAFE) LEFT/RIGHT

MOUSE CONTROLS:

Hold down the RIGHT MOUSE BUTTON + Arrow Keys

ZENITH VIEW (KEYPAD 2)

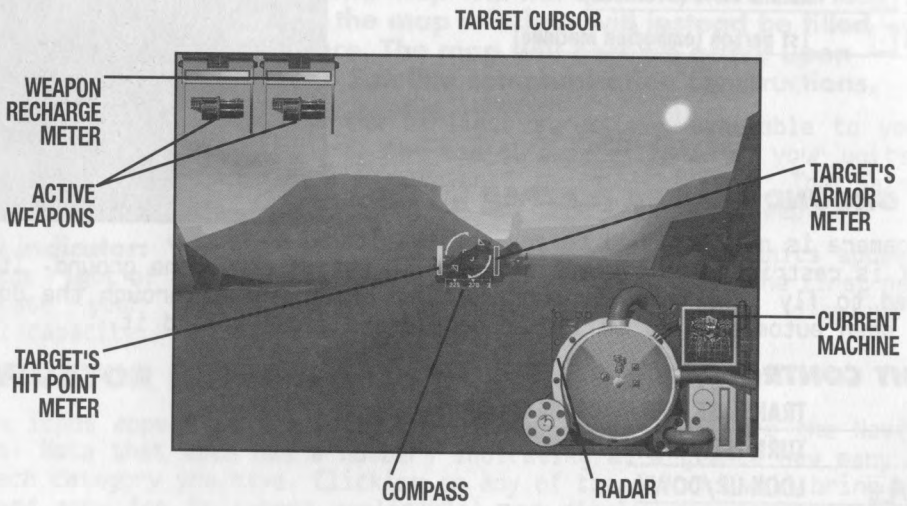
The line of sight is looking down on the world at an angle. In addition to the following, the camera will scroll north, south, west or east if the cursor is moved to the edge of the screen.



FLIGHT CONTROLS:

↑/↓	TRANSLATE NORTH/SOUTH
←/→	TRANSLATE WEST/EAST
Shift+left/→	SPIN LEFT/RIGHT ABOUT LINE OF SIGHT
Pad +/-	ZOOM OUT/IN
Page Up/Page Down	ZOOM OUT/IN

1ST PERSON VIEW (KEYPAD 1)



This view lets you experience the intensity of battle from the field level. It also offers additional levels of combat control, which can give you the upper hand when used strategically. Once a machine is selected, you can switch to this view by clicking on the 1st Person View icon located on the console or by pressing 1. Press the Tab key to cycle between active weapons

1st Person perspective requires the use of the arrow keys to move. Use the mouse to aim and the left mouse button will fire your weapon. Holding right mouse button will allow upper torso rotation (on some machines) Double right click or q will exit the Machine

NOTE: In the first person view, a radar screen appears at the bottom right of the screen. In Campaign mode, enemies appear in blue and your forces appear in red.

Commands

FORM A SQUADRON	Ctrl + 0 - 9 or F
SELECT A SQUADRON	0 - 9
MOVE	M
ATTACK	A
CONSTRUCT	C
LOCATE MINERALS	L
PATROL	P
DEPLOY	E
PICK UP	K
TRANSPORT	T
SELF-DESTRUCT	Ctrl + Shift + ←Backspace (press again to disable)
DROP MINE	Shift + M
REFILL LAND MINES	G
HEAL	H
DECONSTRUCT	D
RECYCLE	Q
STOP (WILL ALSO TERMINATE SELF-DESTRUCT)	S
STAND GROUND	W
REPAIR	R
CAPTURE	U
MACHINE INITIATIVE SETTING	Tab
ION-CANNON ATTACK	I
NUKE ATTACK	N
ASSEMBLE AT	B
SCAVENGE	Y
CAMOUFLAGE (MULTIPLAYER ONLY)	O
TREACHERY	J

MISC

TO MENUS FROM IN GAME	Esc or F10
TO IN GAME FROM 1ST PERSON	Esc
HIDE CONTROL PANEL	Alt + ←
SHOW CONTROL PANEL	Alt + →
SCREEN SHOT	Ctrl + Shift + F12

CANCEL LAB RESEARCH	Select icon + [←Backspace]
CANCEL FACTORY PRODUCTION	Select icon + [←Backspace]
ALTERNATIVE INTELLIGENT CURSOR (NEXT BEST CURSOR)	[Alt]
DESELECT ALL MACHINES/CONSTRUCTIONS IN CORRAL	Tap Right Mouse Button
POSITION CAMERA VIA MAP	Right Mouse Button Click
TASK MACHINE/CONSTRUCTION IN 3D WINDOW OR VIA MAP	Left Mouse Button Click
POSITION CAMERA AT STARTING POSITION	[Shift] + [H]
POSITION CAMERA AT LAST POSITION (POS BEFORE CYCLING THROUGH SAVED CAMERAS)	[Ctrl] + [Shift] + [H]
MOVE CAMERA TO LOOK AT MACHINE/CONSTRUCTION	[Alt] + Click Corral Button
SPIN BUILDING	[Spacebar]

NAVIGATOR

SELECT ALL CONSTRUCTIONS	[Shift] + [S]
SELECT ALL CONSTRUCTIONS KEEPING WHATS ALREADY SELECTED IN CORRAL	[Ctrl] + [Shift] + [S]
VIEW NEXT CONSTRUCTION	[Alt] + [S]
SELECT ALL MACHINES	[Shift] + [A]
SELECT ALL MACHINES KEEPING WHATS ALREADY SELECTED IN CORRAL	[Ctrl] + [Shift] + [A]
VIEW NEXT MACHINE	[Alt] + [A]
SELECT ON-SCREEN MACHINES	[Shift] + [Z]
SELECT ON-SCREEN MACHINES KEEPING WHATS ALREADY SELECTED IN CORRAL	[Ctrl] + [Shift] + [Z]
SELECT ON-SCREEN CONSTRUCTIONS	[Shift] + [X]
SELECT ON-SCREEN CONSTRUCTIONS KEEPING WHATS ALREADY SELECTED IN CORRAL	[Ctrl] + [Shift] + [X]
MOVE CAMERA TO LOOK AT MACHINE/CONSTRUCTION (PRESS REPEATEDLY TO CYCLE THROUGH MACHINES/CONSTRUCTIONS OF THAT TYPE)	[Alt] + Click Nav Button

MULTIPLAYER GAMES

SEND CHAT MESSAGE TO SPECIFIC OPPONENT	[F1], [F2], [F3]
PRESS REPEATEDLY TO CYCLE THROUGH DEFAULT SET OF CHAT MESSAGES	
SEND CHAT MESSAGE TO ALL OPPONENTS	[F4]
PRESS REPEATEDLY TO CYCLE THROUGH DEFAULT SET OF CHAT MESSAGES	
CHANGE DISPOSITION (ALLY OR ENEMY) OF SPECIFIC OPPONENT	[Ctrl] + [F1], [F2], [F3]

CAMERA POSITION SAVING

SAVE CAMERA POSITION	[Ctrl] + [F5] - [F8]
RESTORE SAVED CAMERA POSITION	[F5] - [F8]

NOTE: All camera saves start by storing the initial position of the camera. If you get lost in Fog of War, press F5-F8 to jump back to unfogged area.

CHANGING CAMERA

GROUND CAMERA	[0]
ZENITH CAMERA	[2]
FIRST PERSON	[1]

GROUND CAMERA MOTION

FORWARD	[↑]
BACKWARD	[↓]
ROTATE RIGHT	[→]
ROTATE LEFT	[←]
STRAFE RIGHT	[Shift] + [→] or [End]
STRAFE LEFT	[Shift] + [←] or [Del]
LOOK DOWN	[Shift] + [↑]
LOOK UP	[Shift] + [↓]
RAISE CAMERA	[Page Up]
LOWER CAMERA	[Page Down]
SLOW CAMERA MOTION (USED IN CONJUNTION WITH ABOVE)	[Ctrl]

Alternative way to move camera using mouse. Press right hand mouse button over 3D world and move the mouse pointer around.

ZENITH CAMERA MOTION

FORWARD	[↑]
BACKWARD	[↓]
ROTATE RIGHT	[Shift] + [→]
ROTATE LEFT	[Shift] + [←]
RIGHT	[→]
LEFT	[←]
ZOOM IN	[Page Down]

ZOOM OUT	Page Up
SLOW CAMERA MOTION (USED IN CONJUNCTION WITH ABOVE)	Ctrl

Alternative way to move camera using mouse. Press right hand mouse button over 3D world and move the mouse pointer around.

FIRST PERSON

FIRE	Spacebar
WEAPON SELECT	Tab
EXIT MACHINE	Esc / DOUBLE CLICK RIGHT MOUSE BUTTON
FORWARD	↑
BACKWARD	↓
LOOK DOWN	Shift + ↑
LOOK UP	Shift + ↓
TURN LEFT	←
TURN RIGHT	→
TURN HEAD LEFT	Shift + ← or right mouse
TURN HEAD RIGHT	Shift + → or right mouse
CENTRE HEAD	5 or release right mouse
NIGHT VISION GOGGLES ON/OFF	N (COMMANDERS AND WARLORDS
MENUS	F10
SLOW TURN SPEED	Ctrl

GETTING STARTED (building a base)

5 STEPS TO COLLECTING RESOURCES

The colony you are in control of (the RED machines and constructions) uses Building Material Units (BMUs) to build all of its machines and buildings and to research new levels of technology. The total BMUs you have available is indicated at the top right of the map. BMUs can eventually be obtained in a variety of ways, including recycling items, deconstructing buildings, and scavenging, but the main method when you begin is by mining and smelting minerals. To start mining and smelting, you will need:

- Construct a Comm Beacon to activate your map area (if it's not already visible)
- A Mine built upon a confirmed mineral deposit site.
- A Smelter (storage facility) to convert the raw minerals into BMUs.
- A Transporter machine to ferry minerals from the Mine to the Smelter. (Your POD can also act as a smelter if you haven t yet built a proper smelter or it was destroyed.)

STEP 1: USE A GEO LOCATOR TO FIND MINERALS

First, use a Geo-Locator to find the hidden mineral sites. Select a Locator and then click somewhere in the world (you will notice that locating is the default action for Geo-Locators). When a mineral site is within the Locator's scanner range, the Locator will move to the mineral site and drop a spinning holographic marker, indicating that a mineral deposit has been found.

RESOURCE INDICATOR

Once your Locator has found a mineral deposit, a Resource Indicator icon will appear. You will want to build your mine at this icon. The number of BMUs the deposit can yield appear in the status area at the bottom of the screen.

STEP 2: BUILD A MINE CONSTRUCTOR / MINE

You then need to construct a Mine over or around the mineral deposit. To do this, select a Constructor and task it with building a Mine. Doing this will allow you to place a model of the Mine over a mineral indicator. (The Mine will flash if moved to a location where it cannot be placed.) You can change the orientation of the Mine by holding down the Ctrl and moving the mouse, or by pressing the Spacebar. When you have placed the Mine over the mineral indicator (by left clicking on the mouse), the Mine will appear as a glowing green translucent version of its final built appearance. The Constructor will then move to the site and begin construction.

STEP 3: POD AND SMELTERS (STORAGE)

You now must convert the mined resources into BMUs. To do so, you may use the POD or you can research and build a Smelter. It s important to begin converting and storing BMUs right away, so use the POD until you're able to build a Smelter. Both the Smelter and the POD have more than one "pad" or bay you can deliver ore to. Please note that a Smelter has to be built 50 meters from any Mine or POD. (The Smelter will flash when moved to a location where it cannot be placed.) A Mine has a finite storage capacity which cannot be exceeded. When capacity is reached, the Mine will simply stop extracting any more minerals until some or all minerals are removed. Minerals can only be removed by a Transporter. A Transporter is a machine that must be built to transport mineral ore from Mines to Smelters.

STEP 4: BUILD A TRANSPORTER

The Transporter is built in the Civilian Factory, so you must build a Civilian Factory first (if you don't already have one). When this is complete, click on it and you will see the 'Build' menu for the Factory appear in the menu to the right. Select a Transporter icon to begin building it. There are 5 different classes of Transporter, and you will normally start the game with only one (or perhaps two) of the most basic types (Ox and Mule) available to build.

To obtain a continuous flow of BMUs into your base, you must set

up Transporter routes. When the Transporter appears at the front of your factory, clicking on the TRANSPORT followed by the Mine will automatically make the Transporter set up a route between the Mine and the closest smelter or POD. If you wish to route the Transporter to a specific smelter or POD, you must use the TRANSPORT command and then click on a mine and the desired pad on the Smelter or POD. These two methods set up permanent transport routes which the Transporter will continue travelling back and forth along automatically (unless or until interrupted).

SCOUTS

Initially, only your immediate base area is visible. As your scouts explore, the dark areas will be revealed. Even before you send out a Locator, your scouts should be out searching the surrounding area for enemies.

STEP 5: TRY A REGULAR GAME!

With this knowledge you're ready to put your base to the test. There are a number of commands and options available to you that are not explored in this walk-through tutorial. We will deal with these in later sections of the manual, but you will learn a good deal simply by experimenting.

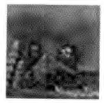
LABS

MILITARY LAB

CIVILIAN LAB

FACTORIES

MILITARY FACTORY



CIVILIAN FACTORY

For a complete listing of machines, please see Appendix 1(page 28).

RESEARCH

Research is the key to success in Machines - without it, no colony will be able to build any structures or machines other than those whose designs are given to you at the beginning of the scenario.

There are three levels of Technician. The first is the eponymous Technician, the second is the Technician Engineer, and the third is the Technician Brainbox. Each successive type offers the twin benefits of a more prodigious rate of research and a greater variety of actual technologies that will be available to research.

TECHNICIANS

The lowly Technician is the most basic design of research-capable machine, and will usually provide you with your first means of advancing through the early stages of the research tree.

TECHNICIAN

With little armour or hit points, and no means of defending itself, it is vital that the Technician not be caught in the open by enemy hostiles. This unit will be able to research low level technologies.

ENGINEER TECHNICIAN

The Engineer class of Technician is a slightly more durable unit and has the ability to complete research at an improved rate. More importantly the Engineer will enable new technology to be researched.

BRAINBOX TECHNICIAN

This unit offers the greatest rate of research, and facilitates the research of the most advanced items of technology.

In order to research new technologies, a player must first build a Technician. All Technicians, other than those already available at the start of a scenario, must be built in Civilian Factories. The first Technician can be built in the first type of Civilian Factory (Civilian Factory); the second Technician (the Engineer) is built in the second Civilian Factory (Advanced Civilian Factory) and the third Technician (the Brainbox) is built in the third and final Civilian Factory (Civilian Factory Complex).

Once a Technician is available, it must be placed in a research facility if it is to contribute to research. There are two types: Military and Civilian. As might be expected, the military labs research the units that fire weapons or carry troops into battle. The civilian labs research every other type of unit (i.e. all non-military units).

Two types of military and civilian labs can be built. The principle difference between the two is the number of Technicians that they can accommodate (See 'Research Labs' in the Constructions section for more detail), although there is a small research rate bonus gained from using the improved facilities of the more advanced lab types (i.e. the same technician type will research slightly faster in an advanced lab).

Clicking on a lab when technicians are available and built, even if they are not actually within that lab, will reveal all the research items currently available to be researched, if any. Note that a queue of research items can therefore be created for a lab even in the absence of technicians within, although no research work will be undertaken by that lab until at least one of your technicians is inside.

Passing the mouse cursor over any of these icons will reveal a text prompt that details the cost in BMUs of undertaking this research.

Clicking on one of these icons will add the research item to the queue at the bottom of the panel. A duplicate of that icon will appear either in the leftmost slot if the queue is currently empty, or at the end (the rightmost slot) if there are already items in the queue. You may have to scroll along to see the icon if more than 3 items are on the queue. If both technicians and funds are available, research into the technology at the head of the queue will commence - progress is shown by an indicator bar. When the current research has finished, the item in question will disappear from the queue. If this was the item at the head of this lab's queue (it may not be - an item of research in the middle of the queue can be completed as a result of work being

undertaken by your other labs elsewhere, or if spies are stealing research for you), then the next item in the queue will start being researched by this lab.

It is possible to edit the research queue by selecting one or more icons in the queue (they will change appearance to a depressed state) and then pressing the backspace key. Any research that may have been completed on this item will not be lost, but research upon it will be suspended for now by this lab.

Once all of the items available for research have been researched, no further icons will appear until the next level of Technician has been built. Although the next level of Technician does not have to be moved inside a lab for the new technologies to become available for research, the new unit will greatly speed up research if actively contributing inside a lab. (You may want to remove more basic technicians from existing labs to make space for the more advanced units, if necessary.)

Once an item has been researched, its icon disappears from the lab's research selection area and will now appear as an option in any factories capable of producing the item. If the appropriate factory has yet to be built then the icon for the newly researched item will not yet appear as a build option anywhere in the game - you will have to build a factory before you can make use of the research you have completed.

It is important to remember that the once a higher level Technician has been manufactured then any lower level Technician can research the newly available research items too, although they will tend to make slow headway working on these advanced technologies.

CIVILIAN RESEARCH

Civilian research is a fairly straightforward process and largely linear in its progression, but its importance should not be underestimated - neglecting civilian research in favor of pure military is likely to offer you a (seemingly) large range of offensive unit designs, few of which you will actually be able to build due to limited manufacturing infrastructure and poor income from mining. Even the apparent progress in the military tree will soon be curtailed without civilian research, however, as the next level of Technician (which is necessary to access the next group of military as well as civilian designs) must always be researched in the civilian labs. If you are to make significant progress in advancing the technology of a colony, you must research and build the next level of technician.

MILITARY RESEARCH

Military research is normally crucial to your war effort. If you spend all your money on manufacturing machines of existing military designs instead of researching new ones, any current military superiority will be short lived, as your units will soon become obsolete if your rivals have been investing shrewdly in research, and you will have a large army of weak units that will soon be routed on the battlefield. **The first thing to remember is that although it is possible to research every single unit technology available, the technology is split into two distinct pathways.** Traveling along one path only will inevitably mean that the highest level of military technology (for that pathway) will be accessed much sooner (and will cost you significantly less BMUs) than if both pathways had been researched in parallel. Although you may wish to embark upon military conquests with the military designs from both sides of the tree available as buildable items, you will often find that it is wiser to forego researching the units on one side of the path so as to have a number of "big hitters" available as soon as possible, for both offensive and defensive purposes.

The basic difference between the two pathways is that the 'Light' path develops machines using electrothermal weapons such as Plasma and Pulse guns, and the 'Metal' path represents machines that use "conventional" kinetic projectile weapons such as Bolters and Missiles, although each path has the occasional unique unit with specialized weapons.

Both pathways of the research tree have advantages and disadvantages at different stages of development. For instance; in the early stages of 'light' technology, research into plasma projection makes the production of units equipped with longer range weapons possible, whilst at the same stage in development the 'metal' side of the research tree produces machines whose weapons have a shorter range but a greater destructive capability. At the higher levels, these strengths and weaknesses are to some extent reversed, with the plasma cannon-wielding knights of the 'light' path offering a heavy, short-range offensive punch while the knights of the 'metal' tree are equipped with long-range, medium-damage missiles. You will also find 'unique' units available only at or near the end of one tree or another. Your preferences for shorter-or longer-range combat, and your personal favorite 'unique' units, will clearly influence which side of the tree you tend to prefer developing. You may also find that certain playing environments favor the units of one side of the tree more than those of the other-intuition and experience will tell you which is the case.

APPENDIX 1: Machine & Construction Units

MILITARY PERSONNEL

GRUNTS

These should be considered the most basic infantry units in your army: cheap, low-tech, but undeniably effective if used correctly. Grunts are the primary offensive units at low tech levels, yet remain an offensive threat if deployed in large numbers later in the game. They can cause disruption via flanking and rearguard attacks against the enemy even when your main assault comes from more heavily-armed machines.

SUBTYPES:

SCOUT - WITH BOLTER. The lightly-armoured, wheeled Scouts are used primarily for armed reconnaissance. Protection against enemy assaults is negligible - Scouts can reasonably be treated as disposable in combat situations. The medium-range Bolter on this model can shoot some opponents before they are able to approach and use their own weapons, but in close-quarters combat, this machine can be destroyed with ease.

SCOUT - WITH DISRUPTOR. At very close range, this the most effective of the Scout types. The disruptor can do considerable damage to targets, and groups of disruptor scouts can often be employed to great effect by rapidly closing with a more heavily-armoured opponent and taking it down with a concerted attack.

GRUNT - WITH BOLTER. The first of the "standard" Grunt models, which are more heavily-armoured than the scouts, but not as fast across open ground due to their employment of caterpillar tracks rather than wheels. Their development provides a significant advance in mobile offensive capability, with the fully-rotatable upper torso whose omission is a clear weakness of the more basic Scout designs. Although they cannot reach an enemy as swiftly as a Scout, they can absorb more combat damage, and can cope much more easily with a mobile target due to the rotatable torso tracking system.

GRUNT - WITH DISRUPTOR. Although unable to spring upon opponents as fast as disruptor Scouts, packs of disruptor Grunts can achieve a more even combat distribution when surrounding their targets due to the potential for oblique approaches that is facilitated by the rotatable torso design.

GRUNT - WITH NAPALM. The napalm weapon on this Grunt variant does not offer quite the outright damage potential of a disruptor, but its more conventional form of attack has one principle advantage - a greater proportion of the damage inflicted will be done directly to the chassis and internals of the target rather than be absorbed by its armor. For this reason, machines who believe themselves to be well-protected against attack due to high armour levels can be destroyed with surprising speed by a 'napalm Grunt' if their constitution is already low.

WARRIOR - WITH HEAVY BOLTERS. Warriors are the slowest grunt units, but the most heavily armed and armored, sporting twin-mounted heavy bolters that can pulverise weaker units at close range. Even when superseded, Warriors are often deployed to good effect at the head of a platoon to absorb enemy fire while more vulnerable units deploy long-range ordnance in safety from behind their protective front.

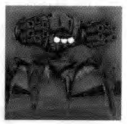
REAPERS

The Reaper design was developed to provide a swift and versatile sentient platform for the deployment of higher-technology weaponry. A quadruped with rotatable upper torso and either single or twin weapon mountings, the Reaper's offensive capabilities are offset to some extent by its structural frailties. For this reason, Reapers are often employed to best effect in platoons with other, more heavily-armoured units who are able to take the brunt of the enemy fire.

SUBTYPES:

REAPER - WITH AUTO CANNON This Reaper variation is armed with a powerful auto cannon. The armor piercing sabot rounds it fires are deadly at close range and this unit is therefore most effective when it is able to close with its target.

REAPER - WITH PLASMA RIFLE In contrast to its auto cannon counterpart, this Reaper with its single plasma rifle does not offer the same outright potential for damage, but has the advantage of being effective at a much greater distance. This makes it the de facto weapon of choice when it is necessary to inflict damage without sustaining it, especially against static targets.



WRAITH REAPER - WITH AUTO CANNONS

An advancement on the original Reaper, the Wraith unit carries twin auto cannons, thus doubling the damage inflicted.

WRAITH REAPER - WITH PLASMA RIFLES

This design of Reaper uses twin plasma rifles, thereby increasing its effective offensive potential by 100%.

KNIGHTS

The Knight class aggressor sees the introduction of hover technology, used by all save the Enforcer subclass. Not only does this make the Knight a frighteningly mobile predator, it also allows previously inaccessible terrain to be traversed. Hover technology will carry a unit across water and lava fields (but not deep fissures or crevasses).

SUBTYPES:

ENFORCER - WITH BOLTER CANNONS The Enforcer is the next generation Warrior Class. This tracked unit boasts armor and fire power superior to its forerunner and also uses the rotatable torso tracking system. The increase in armor mass has resulted in a relatively slow turn of speed but in one-on-one combat the Enforcer should bring down any unit previously developed. The bolter cannon sported by the Enforcer will inflict 33% more damage than the heavy bolters wielded by the Warrior.

ENFORCER - WITH PLASMA CANNONS The first unit to employ plasma cannons, which trade the range of the plasma rifles for a fearsome close-range offensive punch, and give this Enforcer a slight edge in firepower over the bolter cannons version.

KNIGHT - WITH MISSILE LAUNCHERS The twin 'Tiger' missiles used by this Knight pack high-explosive anti-tank warheads, inflicting considerable damage at medium combat range.

KNIGHT - WITH HEAVY PLASMA CANNONS The twin heavy plasma cannons carried by this Knight are an upgrade of those carried by the Enforcer. They also offer a slightly longer range, making this maneuverable unit a fearsome foe on the battlefield.

KNIGHT TEMPLAR - WITH LONG RANGE MISSILE LAUNCHERS

The Templar class sports medium range 'Cheetah' missiles that extend the range offered by the basic knight. Most importantly advances in chassis design have enabled a further launcher to be attached to the Templar giving it triple firepower. Further improvements in hover technology have given the Templar a speed advantage over the basic Knight model.

KNIGHT TEMPLAR - WITH HEAVY PLASMA CANNONS The Templar chassis design allows a further cannon to be attached to the plasma Templar, giving it triple firepower.

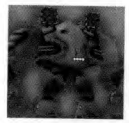
HEAVY ASSAULT UNITS

These units are capable of providing some of the greatest offensive punch of any mobile units. They are all, however, deficient in other areas: speed, maneuverability, armor, or a combination of all three. The manner in which they are used is therefore of more critical strategic importance than that of most other units under your command. Deployed shrewdly, they can be lethal; deployed without any real planning, their threat can often be countered with ease.

CRUSADER - WITH RAPIER MISSILE LAUNCHER Armed with a single long range 'Rapier' missile launcher, the Crusader can punch through armour at great distances and its rapid reload times make it a formidable battlefield addition. The Crusader's quick turn of speed and small turning circle make it good 'fast response' unit but its poor armour and non-rotatable weapon mounting leave it very vulnerable in heavy close-quarters fighting.

ERADICATOR - WITH VORTEX SINGULARITY The sound of a Vortex singularity being discharged is one of the most chilling to any commanders who do not have total knowledge of their troops' current positions. The Eradicator unit, with its distinctive spherical weapon mounting, has a size that belies its offensive potential. Essentially a controlled gravity collapse at a distance, the vortex is one of the few machine-mounted weapons to be able to destroy multiple targets at once, and is consequently ideal against clusters of opponents, especially ones who are slow-moving or static. The Eradicator itself is, however, a slow and unwieldy mobile weapon platform, easily destroyed and unlikely to mount a fight at close quarters without damaging itself with its own vortex.

GOLIATH - WITH DEVASTATOR MISSILE LAUNCHERS The Goliath provides the greatest offensive potential of any mobile unit in the game, but it is very slow and relatively vulnerable, needing protection from other machines at close quarters if moving through hostile territory. However, if well shielded from enemy fire, Goliath's potential offensive impact more than makes up for any deployment problems. Its twin Devastator missile-launchers are aptly-named, destroying all but the hardiest units with one accurate double strike. Goliaths are often used to best effect in a defensive capacity, especially when placed on high ground overlooking a battle plain.



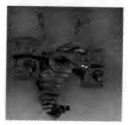
GORILLA - WITH GROUND PUNCH AND OBLIVION MISSILE LAUNCHERS The Gorilla is at the apex of the military research tree and offers an offensive weapon that, although specialized, can be terrifying if used efficiently. It comes equipped with a 'Ground Punch' that causes a short range terrain tearing energy surge that is powerful enough to destroy many ground based units with a single attack. Twin Oblivion missile launchers are mounted on its shoulders and provide a defensive and offensive option at range and against airborne units. This bipedal machine is often better deployed as a solitary attack force as it can be indiscriminate with its Ground Punch, inflicting collateral damage to friendly troops.

FLYING UNITS

WASPS

The Wasp flying unit is able to traverse almost any terrain. This unit is multifunctional. It can be deployed with good effect against ground troops, enemy defensive positions or buildings. It also offers useful air support for the vulnerable Bee Bomber, and can indeed be used as an effective air-to-air interceptor against enemy Bee units. The Wasp's design sacrifices heavy armor for high maneuverability, making it vulnerable to concentrated fire from ground troops and especially from static ground-to-air missile emplacements.

SUBTYPES:



WASP - WITH MISSILE STING The sting missile packs a more powerful punch than the sting utilized by the plasma sting Wasp, but has a shorter range. This makes it an excellent close quarter attack unit but can leave it vulnerable while closing on a target.

WASP - WITH PLASMA STING The plasma Sting has a much greater range than the sting missile which makes this Wasp an ideal air-to-air support unit for the Bee Bomber. Its ability to strike at ground targets from greater distances is offset by the limited damage each sting causes.

BEE BOMBER - WITH B-BOMB The slow-moving Bee can cause devastation to undefended constructions and to packs of ground units without adequate ground-to-air combat potential. The B-Bomb is a projectile of supercharged plasma that must be held in a stasis field prior to launching, as any contact with solid matter will instantly create a detonation of concentric shock waves expanding to a radius of 40m. This wider spread of damage makes it ideal against closely-situated multiple units rather than single targets. The Bee's slow speed and low manoeuverability leaves it vulnerable to counterattack and it should therefore be deployed with caution in areas with strong enemy anti-aircraft capability.

COMMANDERS

These are an elite section of fighting machines that offer high firepower and durability coupled in many cases with unique weapons. The Commander classes are historically the lieutenants of the Controller and have often been used for conveying and receiving sensitive information that needed to be transported through hostile territory.

SUBTYPES:

COMMANDER - WITH PULSE RIFLES This Commander class has been fitted with a tracked locomotion unit and carries twin pulse rifles. Commanders are the only mobile units to use these weapons.

MEDIC COMMANDER - WITH HEALING CHARGER AND PULSE RIFLE This tracked unit uses a single pulse rifle of the same type as the Commander, but also carries a healing charger. This attachment, unique to the Commander class, allows other damaged units to be restored to full health.

COMMANDANT - WITH PULSE RIFLES The introduction of a six-legged locomotion unit means the Commandant covers the ground more quickly than standard Commanders and is armed with twin pulse rifles.

MEDIC COMMANDANT - WITH HEALING CHARGER AND PULSE RIFLE Using the same six-legged locomotion, the Medic Commandant covers the ground as quickly as its cousin but has a healing charger rather than a second pulse rifle. As with the Medic Commander, this attachment is used to repair damaged units.

WARLORD - WITH SABRE MISSILE LAUNCHERS An evolution of the powerful Commander class, this machine uses hover locomotion technology which, coupled with twin 'Saber' missile launchers, makes the Warlord a highly dangerous adversary. Quick, powerful and destructive, this unit can provide a lethal vanguard to any rapid response or strike team.

SURGEON WARLORD - WITH SUPERCHARGER AND SABER MISSILE LAUNCHER Both bringer of life and giver of death, the Surgeon warlord is a swift-moving battlefield medic who is also capable of dispensing considerable damage with a powerful Saber missile launcher. The healing supercharger is twice as effective as the charger unit mounted on earlier Commandant administrator models, and judicious use of this device can keep a combat platoon in the field for much longer periods than those which the normal course of attritional warfare would otherwise dictate.

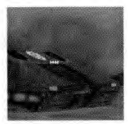
JUDAS WARLORD - WITH TREACHERY AND SABER MISSILE LAUNCHER With all the speed and armour of the Warlord, but less offensive power (due to the single missile launcher), the Judas Warlord is equipped with the unique Treachery weapon. This device causes the targeted enemy unit to change allegiance and fall under the total control of the attacking entity's race. Used wisely, this weapon can bring unexpected destruction and chaos to the enemy.

ASSASSIN WARLORD - WITH PULSE CANNONS The pinnacle in pulse weapon technology, the heavy pulse cannons wielded by the Assassin Warlord ensure that its name is well-earned. As one of the most mobile and destructive units on the battlefield, its tactical potential cannot be overestimated.

ASSASSIN SURGEON WARLORD - WITH SUPERCHARGER AND PULSE CANNON Sporting only one of the heavy pulse cannons carried by the Assassin Warlord, this unit also has a healing supercharger attachment. Faster than the basic heal charger, the supercharger helps damaged units return to the fray in double-quick time. While on standby to administer aid, the Surgeon is more than capable of dealing a deadly strike against the enemy.

APCS

The armoured personnel carriers (APCs) offer transportation of large numbers of units with relative speed and safety. APCs are especially useful when requiring quick movement of groups of machines with differing speeds or when moving particularly vulnerable machines through or into hostile territory.



SHUTTLE APC The Shuttle is the only tracked APC and offers entry level protection and speed when transporting groups of machines.

SHARK APC The Shark is a big step up from the Shuttle. With ability to carry more than double the number of units and with nearly twice the top speed, this unit represents a valuable addition to any attacking army. And most importantly, it flies! Unlike the Shuttle, therefore, its movement across the terrain is not blocked or restricted by the terrain topography.

EAGLE APC The Eagle sacrifices carrying capacity (less than even that of the shuttle) for sheer speed and protection. It is much faster and much more heavily armoured than the Shark and represents the ultimate in rapid response and fast strike carriers. With the ability to insert a small squad of machines right into the heart of the enemy territory under the most hostile defensive fire, and with frightening speed, the Eagle offers you potentially devastating strike options.

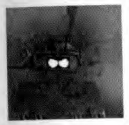
CIVILIAN PERSONNEL

LOCATORS

The Locator class is arguably the most important class of Machine unit in the colony. It is this small and inoffensive unit that tracks down and identifies the life blood of the colony: minerals. Once Locators have found a mineral field they will place a holographic marker at the site to indicate the point at which a Mine may be built.

LOCATOR The Locator is the first Locator available for research and is therefore usually the first of its class to be built. This spider-legged unit is slow and defenseless and the range of its scanner is small, but it is essential to getting a supply of minerals started.

RANGER LOCATOR Slightly better-armoured, this is the second of the Locator types. The tracked Ranger is considerably faster than its predecessor and has a much wider scanner range.



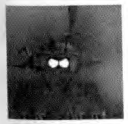
PROSPECTOR LOCATOR The Prospector is a flying locator unit. It has the greatest scanner range and its movement around the terrain is greatly enhanced by its ability to fly. The Prospector is fragile, however, and highly vulnerable to enemy fire.

SPIES

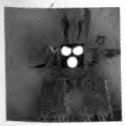
Spies have two primary roles - the acquisition of enemy research, and the laying of land mines. A spy that successfully enters an enemy lab will begin to download any research items it finds in the enemy's data banks which your race does not currently possess. This is especially useful if you are lagging behind in research, or indeed if you wish to acquire technologies from a branch of the research tree you have chosen not to research actively, but whose designs will still be of interest to you.

Land mines use a proximity-trigger system, and inflict 100 points of damage to any enemies who move within 10 meters of them (excluding flying machines). This is sufficient to destroy many smaller units outright, and will inflict significant damage even to larger units. For this reason, the deployment of land mines at key locations on the map can give you a major tactical advantage. The spy carries a complement of five land mines, and needs a garrison to restock, so the construction of a garrison will greatly increase the usefulness of a spy unit.

In multiplayer games, a spy can employ its camouflage device so as to appear to players commanding rival races in the colors of their race. As this will also fool the detection AI of enemy machines, this greatly increases the chances that the spy will be able to operate safely in hostile territory.



SPY The Spy unit carries a compliment of 6 mines and is reasonably well armoured with a reasonable turn of speed.



ADVANCED SPY This unit offers only quantitative advantages over the spy - greater speed, greater armour, and a larger complement of mines (eight) - but these are themselves well worth the research time and BMU investment, as they improve dramatically the efficiency of the spy,

enabling rapid insertion into enemy labs, and swift construction of tactical minefields. Like the spy, it must restock its mines in a garrison. Do not underestimate the usefulness of the Advanced Spy.

CONSTRUCTORS

The Constructors are responsible for constructing all new buildings in a colony. New Constructor types need to be researched just like every other machine, and in turn these advanced Constructors can build more advanced buildings. It is from within these factories that more advanced machines units can be manufactured - research is pointless without the ability to manufacture the researched items, and the Constructors are therefore every bit as vital to the practical progression of a colony's technology as are the Technicians.

It is important to remember that once a higher-level Constructor has been manufactured, then any lower level Constructor can build the newly available buildings too, although, like the situation with lesser technicians assigned advanced research tasks, less advanced constructors will find their construction rates ill-matched to the undertaking of working upon the later types of building.

DOZER CONSTRUCTOR The ever-dependable Dozer is the unit responsible for most of the early development of a colony. This tracked unit is capable of building all of the entry-level Constructions.

BUILDER CONSTRUCTOR The Builder is faster and stronger than the Dozer, and can build at a significantly faster rate. No constructions more advanced than those buildable by the dozer can be built until this unit has been researched and manufactured.

BEHEMOTH MEK CONSTRUCTOR This huge, wheeled constructor opens up access to almost all of the higher level buildings. It is more heavily armoured and slightly quicker than the Builder, and offers a higher rate of construction. It is, however, an extremely large machine, and needs sizeable areas of open ground in which to operate successfully.

TITAN MEK CONSTRUCTOR Of similar proportions and specification as the Behemoth Mek, the tracked Titan Mek gives access to the construction of the Nuclear Silo and Satellite Uplink Tower. It offers the highest rate of construction available.

TRANSPORTERS

Once the minerals sites have been identified and Mines built, the minerals will need transporting back to a Smelter. This is the job of the Transporters. These workhorses are vital to the ongoing survival and expansion of the colony - without them, there can be no acquisition of BMUs other than that from the deconstruction and recycling of your existing structures and machines.

MULE TRANSPORTER The Mule is usually the first Transporter to be built and this 4 wheeled unit compensates to some extent for its modest 40 BMU storage capacity with a nimble turn of speed.

OX TRANSPORTER The Ox is the middleweight Transporter in its class. With three times the storage capacity of the Mule, the Ox is most effective over short distances where speed is not essential.

BULL TRANSPORTER With a storage capacity of 260 BMUs the Bull has more than double the load bearing capability of the Ox and, thanks to the application of 'hover' technology loses nothing in speed. As if all this wasn't enough the Bull also has twice the armour protection. Its girth does, however, make its deployment in crowded areas of your colony ill-advised.

RHINO TRANSPORTER The ultimate transporting machine. The Rhino boasts a 1000 BMU carrying capacity and even with tracked locomotion, it offers a turn of speed only slightly less than that of the Bull. This zenith in transporting technology comes fully equipped with top of the line armour making it a tough machine for marauding enemies to destroy.

SCAVENGER TRANSPORTER The Scavenger is a unique machine and can be a decisive factor in the outcome of any prolonged strategic engagement. The spider-legged Scavenger is used solely for picking up debris from machines, constructions and naturally occurring elements destroyed in battle.

This tough little unit has a built-in smelter and converts debris to BMUs for immediate use. This makes it an ideal front line companion for attack squads and machines involved in short range skirmishes; quickly moving in and converting destroyed machines and structures into BMUs that are immediately useable by the colony factories, labs, and constructors.

APPENDIX B: BUILDINGS

CONSTRUCTIONS

Constructors are required to build the various Construction types to progress a colony.

RESEARCH LABS

There are two types of research lab: Military and Civilian. As might be expected, the military labs research the units that fire weapons or carry troops into battle. The civilian labs research every other type of unit (i.e. all non-military units).

CIVILIAN RESEARCH LAB The Research Lab can house a single Technician unit and therefore a limited speed of research is available. This construction does offer the tactical advantage of being cheap enough to build multiple instances for increased research speed and strategically this is also a useful defensive ploy. However with minimal armour protection the Research Lab will need to be upgraded to withstand heavy weapon fire.

CIVILIAN RESEARCH ACADEMY The Academy is a larger version of the Lab. It houses up to four Technicians and has a much higher armour rating making it capable of sustaining a first strike from many of the more destructive weapons.

MILITARY RESEARCH LAB This functions in exactly the same way as the Civilian Research Lab only performing military research instead of civilian.

MILITARY RESEARCH ACADEMY This functions in exactly the same way as the Civilian Research Academy only performing military research instead of civilian.

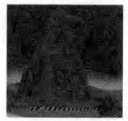
MINES

The mining facility allows the subterranean minerals to be brought to the surface. All mines have two important attributes that need to be considered when choosing which mine to build; namely extraction rate and storage capacity.

The extraction rate determines how quickly the mine will deliver minerals to the surface ready for collection. The storage capacity indicates how much mineral can be stored in the mine. It is important to be aware of this limit as when the mine runs out of storage space it will stop mining and not resume again until some or all of the minerals currently stored are removed by Transporters.

MINE The Mine has an extraction rate of 60 BMUs per minute and can store 150 BMUs. This is usually the first mine to be built and offers little in the way of defensive armour.

EXTRACTOR MINE The Extractor has an extraction rate of 160 BMUs per minute and can store 1300 BMUs. This mine also gives over three times the armoured protection offered by the Mine.



RAPID EXTRACTOR MINE The Deep Extractor has an extraction rate of 250 BMUs per minute and can store 4000 BMUs. This is the pinnacle in mining technology, with extreme extraction rates and storage capacity that is often bigger than the mineral field it is mining. Because the Deep Extractor can store so much mineral in one vulnerable spot its armoured protection is three times that of the Extractor.

SMELTERS

When minerals are transported from mines they need to be smelted to turn them in to useful BMUs Building Material Units. This operation takes place inside the smelters. Once the transporters have delivered the minerals they are instantaneously converted. It is important to remember that all of the BMUs stored are spread proportionally throughout all of your smelters. Losing, say, a Smelter to the enemy is not therefore as damaging as losing a Refinery.

THE SEEDING POD AS A SMELTER The colony seeding Pod acts as the first smelter and has a storage capacity of 500 BMU's. The pod as a smelter therefore acts as a fail safe should all other smelters be destroyed.

SMELTER The Smelter has twice the capacity for storage than the Pod. It can also be built in closer proximity to the mines, making transportation time shorter. This early stage smelter is only moderately armoured and vulnerable to medium power weapons.

REFINERY SMELTER The Refinery is a larger version of the Smelter and will hold 4000 BMUs in storage. Importantly its defensive armour is nearly twice that of the Smelter.

SEEDING POD

SEEDING POD This is the vehicle that landed the colony's meager resources. It is heavily armoured and houses the Controller's up-link connection.

The Pod acts as a 'back up' contingency for a number of constructions that can be built in the colony. It acts as a mine by very slowly drawing minerals from the ground around it. This can be vital should the colony be crippled by a total lack of mineral resource. It is a slow but efficient smelter. And lastly it can perform one of the functions of the garrison by offering protection from attack, although the Pod cannot 'repair any units within its confines.

GARRISONS

GARRISON The garrison is a specialized bunker that not only offers protection to units from assault by heavy weapons but also act as a maintenance shop. Moving damaged units inside a Garrison will repair the units 'hit points' over a short period of time. You can also use the Garrison to resupply Spies with mines.

CIVILIAN FACTORIES

These factories are responsible for building all of the civilian units in the game. A Constructor is required to build all civilian factories. It is important to remember that simply building a factory doesn't necessarily mean that units will be available to be built inside them. More advanced civilian units will need to be researched first before they become available for manufacture.

CIVILIAN FACTORY This first level factory, when complete, will immediately allow some units to be built. Other units available to be built in this factory may have to be researched first.

ADVANCED CIVILIAN FACTORY This building manufactures the more advanced second level civilian units. Although it also builds some of the units available in the Civilian Factory, it does so at a greatly increased speed due to it being a more technologically advanced construction. The Advanced Civilian Factory is more than twice as strong as it's predecessor but eight times as expensive to build.

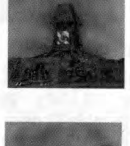
CIVILIAN FACTORY COMPLEX The Complex is the most advanced factory that can be built and is responsible for manufacturing the most advanced civilian units. Like its predecessor it can also manufacture some less advanced units at a greatly increased speed. Almost as well protected as the Pod the Complex is heavily armoured and resistant to everything but the most prolonged attacks from heavy weapons.

MILITARY FACTORIES

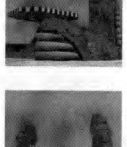
These factories are responsible for building all of the military units in the game. A Constructor is required to build all military factories. It is important to remember that simply building a factory doesn't necessarily mean that units will be available to be built inside them.

More advanced military units will need to be researched first before they become available for manufacture.

LIGHT INFANTRY FACTORY This first level factory, when complete, will immediately allow some units to be built. Other units available to be built in this factory may have to be researched first.



ADVANCED COMBAT FACTORY This building manufactures the more advanced second level military units. The Advanced Combat Factory is slightly stronger than it's predecessor and twice as expensive to build.



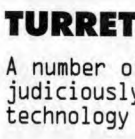
AIRBORNE UNIT FACTORY This specialised factory produces all of the airborne divisions. The factory itself is moderately inexpensive to build and has some protection against more advanced weapons.

HEAVY ASSAULT FACTORY The Assault Factory is the most advanced military factory that can be built and is responsible for manufacturing the most advanced military ground units. Although well armoured the Assault Factory cannot withstand repeated attacks from even medium weight weapons.

RADAR BEACONS

These constructions provide communications with and through the seeding pod allowing for extended visual fields and access to, and deployment of, special weapons.

COMMUNICATION BEACON This is the first tower to be built and provides the facility to uncover the 'fog of war' in the immediate area around the seeding pod, around any unit and any terrain a unit has traversed.



SATELLITE UPLINK The Uplink tower clears all of the 'fog of war' on the map. Apart from this enabling more productive unit movement and attack strategies it also allows the Ion Cannon, once on-line, to be used more effectively.

TURRETS

A number of static defensive units are available for construction. Used judiciously these low technology turrets can be used to prevent early weapon technology from destroying a colony base.

NAPALM TURRET The Napalm turret is an inexpensive, short range defensive measure. Clustered together and strategically placed these turrets act as a formidable protection system against basic enemy units such as the less powerful Grunts.

DEFENDER WITH AUTO CANNON The more advanced and more effective Defender with twin Auto Cannons is the sentry of choice for defending buildings and strategic access points in the terrain.

DEFENDER WITH PULSE RIFLE This defender is tactically vital when structuring a static defense. Its long range capability is second only to the Leviathan 'Missile Launcher' (although the Air Sentinel has a greater range it's trajectory is confined to surface to air) and, positioned tactically, affords protection against mobile units that are able to target the Launcher Sentinels from a safe distance.

LAUNCHERS

These missile launchers are the heavy artillery. A powerful weapon against any mobile unit that strays within its range. Once again, used judiciously, launchers can be used to prevent all but the most advanced weapon technology from destroying a colony base.

GROUND SENTINEL This unit is a surface to surface missile launcher (SSM's). The Ground Sentinel is capable of destroying many low technology units with one strike and is a powerful weapon against any mobile unit that strays within its range.

AIR SENTINEL This unit is a surface to air missile launcher (SAM's). The Air Sentinel is a specialized weapon and capable of bringing down enemy flying units with a first or second strike.

LEVIATHAN MISSILE LAUNCHER The Leviathan is a twin SSM launcher and has 5 times the range of the Ground Sentinel, bringing devastation to any target it hits. This beast of a defensive unit has other functions though; so great is its range that it is possible to deploy it as an offensive weapon against distant constructions.

GLOBAL WEAPONS

There are two special weapons, each with its own specialized function. These bringers of destruction are the ultimate in long range warfare.

NUCLEAR SILO To construct a nuclear silo the highest level Constructor must be researched and built and sufficient BMUs stored to fund this fairly costly construction. Once the silo is complete the unit will not become operational until fitted with a missile. Each missile is built automatically in the silo and is, once again, a relatively expensive process.

Once this investment has been made the nuclear silo has the capability of delivering a missile to any point in the world with devastating consequences. Due to the average flight time of the projectile, the nuclear missile is often most productive against static targets, capable of taking out whole buildings with one strike.

ION CANNON The Ion Cannon is fired from an orbiting satellite and contact with this satellite must be established through a transponder fitted to the Seeding Pod. Research into transponder technology requires the skill of a 'Brainbox' technician. The last and most advanced of all the technicians, he must be researched and manufactured to enable this lethal weapon to be brought on-line. The Ion Cannon's concentrated beam has a small radius effect within which damage is high, but it also produces a wave of intense heat that spreads out from this tight circle and can damage, and even destroy, less well armored units in its path. The Ion Cannon is most effective against mobile units; unlike the nuclear missile the time from point of origin to point of attack is extremely short and therefore less time is available for mobile units to have cleared the range of the weapon effect.

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