

Machines Shareware Instructions Revised 1.15.99 (Beta)

CONTENTS

- I. System Requirements
- II. Quick Start
- III. Running Machines
- IV. The Menus
- V. Game Controls
- VI. Getting Started (building a base)
- VII. Know Your Constructions & Military Personnel
- VIII. Hints & Tips
- IX. Playing on Microsoft Gaming Zone
- X. Compatibility Issues & Known Bugs

*Since this is an early preview of Machines, we recommend checking our web site for any updates or patches available for this version of the Demo (Turok 2 version). We should have fixes available for a few of the compatibility issues found after the time of this release. Visit our website at www.acclaim.net

**If you want to play the Machines demo 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.

Introduction

Machines is a real-time strategy game where you control a race of Machines.

The Story

Overcrowding on Earth forces a new, worldwide push to colonize nearby planets. Light speed engines are developed but prove to be fatal to any cell-based organism attempting the journey. Instead, modified industrial robots were sent into space. These robots were sent to planets in Pods and were programmed to terraform the planet, making it suitable for human life. Pods (the controller) contain a super computer, some colonization robots and a planetary core extractor to provide a steady supply of minerals. The controllers were successful in their tasks but the humans were not; they never arrived. Years passed and one race of machines on the planet Eden 4 suffered severe damage due to electrical storms. Most of the controller's memory was damaged but the controller continued to function. The damaged machines continued to build until they exhausted all of the resources on Eden 4. The planet surface is now littered with steel and the controller decides that to further colonize, it must seed another planet. The planet they reach already is home to another race of machines, and a fierce battle for the planet's resources begins.

Demo Features

This demo will give you a taste of the firepower and depth promised in the final version. While your choice of planets, researchable machines, and weapons are restricted we think there's enough included to give you an idea of what to expect in the final Machines.

This demo features:

- 2 campaign levels (single player missions)
- 1 skirmish (1 player vs. CPU opponents)
- 1 multiplayer level (up to 4 players over LAN or Internet)

What you are missing

To keep the demo size reasonable, we had to remove voice-overs, great music, ambient sounds, FMV

sequences and in-game cut scenes. The full version will include these features plus:

- 50 unique Machines to construct (including flying machines)
- 25 different weapons to research
- 18 different constructions
- 7 different sentries (air to air, air to ground gun turrets)
- 20 Planets to explore (with Day and Night cycles)
- and more!!!

Check out our website at www.acclaim.net for a complete list of features found in the full version of Machines. There you will find any current news, updates or fixes that are available.

I. -----

SYSTEM REQUIREMENTS:

- Windows 95 or 98 w/Direct X6 installed
- Pentium 200Mhz PC or better
- **Requires** Microsoft Direct3D graphics accelerator card or 100% compatible
- 32 MB RAM, 4 X CD-ROM drive
- 85 MB free hard disk space
- Support for Aureal A3D and Microsoft DirectSound compatible soundcards

Note: It is recommended that after the game installs, make sure your hard drive has at least 100MB of free space for Windows 95/98 to operate.

II. -----

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)

- 0 -Free cam (ground camera)
- 1 -1st person view (embodied machine)
- 2 -Zenith view (overhead view)
- +/- Zoom in/out or up/down

Mouse

- Left click -selects unit or structures
- Left hold & move -drag selection box
- Right click -cancels selection
- 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*).

III. -----

RUNNING MACHINES

Press the Start button, go to Programs and look for Acclaim Entertainment, *Machines Demo*. The game will automatically choose a secondary display device if found (usually 3DFX) or the primary if no secondary is detected.

NOTE: The final version will allow you to choose which 3D accelerator to use if multiple cards are detected. For a list of supported and unsupported 3D accelerator cards see *Compatibility Issues at the end of this document*.

IV. -----

THE MENUS

Generally menus are navigated in this manner:

Left click: Accept/ Confirm Input/ Next Screen
ENTER: Confirm Input
ESC: Cancel Input/ Previous Screen

Main Menu

Single Player Begin a Single Player Game
*Multiplayer Begin/join a Multiplayer Game
Exit Exits game and return to Windows desktop.

Single Player

Campaign Play an entire roster of linked scenarios. (Demo includes 2 levels)
*Skirmish A single battle vs. the computer. (Demo includes 1 level)
Load Game Load a previously saved game and resume where you left off.
Cancel Return to the previous menu.

***MULTIPLAYER & SKIRMISH MODES**

When you select multiplayer from the main menu you go to a new screen. At this point you must decide on which connection method to use:

IPX Connection for Direct Play Play on a LAN (network)
TCP/IP Connection for Direct Play Play over the Internet
Modem Connection for Direct Play Modem to modem play
Serial Connection for Direct Play Serial cable (not tested for demo)

Current Games List Menu

Once you've selected your connection method, 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.

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 are all, click on the show games button to refresh the list. **Note: 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.

*Note: After you made 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 of your game and setup the game parameters for the style game you wish to play. 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 below).

*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 come a new screen called the lobby. It doesn't say anywhere on the screen that it's the lobby, and you can't get a newspaper there, it's just a name to describe the area and its function. You will know you are in the lobby when you see an *I'm Ready* button on the bottom of the screen. The lobby screen is where you wait for other players to join in. When players join your game their names will appear on 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 *small bar graph* and a *large solid colored bar*.

Ping meter (small bar graph)

When someone has joined your game a small bar graph will appear next to their name which represents their *Ping* to you. In other words, the small bar graph represents how good of a connection they have to the host PC. Green represents a good connection, while yellow is OK and red is generally bad. Due to the constant fluctuation of the Internet this bar may constantly change from green, to yellow, then maybe back to green again every 5-10 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 gameplay performance due to latency.

Color selection (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.**

Selecting CPU opponents

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 Menu (same as Skirmish Menu)

All players will have the ability to click on the *Settings* button while in the lobby, which will take you to a new menu. Only the Host has the ability to changes the options presented in this menu. To the left of your screen are selectable elements such as Map Size (choose Small, Medium or Large maps), Terrain Type and Scenario. *Please note you are limited to desert scenario in the demo.* The Map size selected determines what terrain is available. To the right is the settings area, from here and you'll make important decisions about these things:

Fog of War: A graphic effect that covers unexplored territory in darkness. As you and your opponent explore the current map, the Fog cover is lifted.

Resources: Set the number of resource locations

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 (you always start in the same place) starting position.

Victory Condition: Determine the conditions for victory. Settings include Default (total annihilation, completely destroy the enemy) and Destroy Pod (destroy the enemy pod to win).

Note: timed games are not functioning properly in the demo.

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.

Player Color: Choose to play as Red, Green, Blue or Yellow. (Gray is a holding area)

Number of Players: Choose from 2, 3 or 4 players. *Team play will be available in the full version.*

Mission Objectives: The objectives of the current game appear in a scrollable window at the lower left of your screen. You can access this window during a game by pressing the ESC key.

**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. When you get to this screen by choosing skirmish from the main menu, pressing OK will start the game.*

SKIRMISH

Skirmish is very similar to how you would set up and play a multiplayer game, except that all of your opponents are CPU controlled. When choosing this option from the main menu, it will take you to the *Settings Menu*, which is described above. Once you selected the game parameters, choose OK for the game to start.

V. -----

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 console 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 console display.

Corral

All currently selected machines are shown in a holding area known as the corral, which resides under the map area on the console. 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 -Removes the unit in question from the corral

*Command Menu (on the console)

When you select a machine, a command menu will appear on the console listing the actions specific to the machine highlighted. Selecting a constructor (Dozer), the command menu will show the actions available to this machine like 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 console or to use a hotkey, this is described as a smart cursor.

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

Smart Cursor

While playing the game the Cursor changes depending on what action you are requesting or performing. 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 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 patrol between two or more points.

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. 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: enemy locations, building locations or mineral deposit locations. 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 (machine, building, etc.) you can then use the command menu on the console to task a constructor or order an attack when you see the enemy (shown by dots) moving towards your position.

**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 communication constructions.*

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 selected (POD or Smelter) capacity.

Navigator Icons

Three icons appear to the right of the map area. These are 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 are not yet available appear grayed out.

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).

Squad Navigator Icon

Click on this icon to view your current squad groupings. A menu of squads (numbered 1-9) 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 9 squads at any given time. Squads can be formed for patrol, attack or recreational (just kidding) purposes. 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 and 10 metres above the ground. There is no collision detection with machines and ILFs. 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:

- Up/down arrow Translate forwards/backwards
- Left/right arrow Turn left/right
- Shift+up/down arrow Look up/down
- Pad +/- Translate up/down
- Page Up/Page down Translate up/down
- Delete/End Translate (strafe) left/right

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:

- Up/down arrow Translate north/south
- Left/right arrow Translate west/east
- Shift+left/right arrow 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 keypad 1.

- 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 ESC will exit the Machine

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

HOTKEY LIST

<u>Commands</u>	<u>Action</u>
Form a squadron	Ctrl + 0-9
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
Drop mine	Shift + M
Refill land mines	F
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	L
Scavenge	Y
Camouflage (multiplayer only)	O
Treachery	J

Misc

To menus from in game	ESC or F10
Exit 1 st person view	ESC or Dbl. right click
Hide control panel	Alt + Left Arrow
Show control panel	Alt + Right Arrow
Screen shot	Ctrl+Shift+F12
Cancel Research	Select icon + Backspace
Cancel 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 (before cycling saved cameras)	Ctrl+Shift+H

Navigator

Select all constructions	Shift+S
Select all constructions keeping what's already selected in corral	Ctrl+Shift + S
View next construction	Alt + S
Select all machines	Shift +A
Select all machines keeping what's already selected in corral	Ctrl + Shift + A
View next machine	Alt + A
Select on-screen machines	Shift+ Z
Select on-screen machines keeping what's already selected in corral	Ctrl+Shift + Z
Select on-screen constructions	Shift+X
Select on-screen constructions keeping what's already selected in corral	Ctrl+Shift + X

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)	

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	Numpad 0
Zenith Camera	Numpad 2

First Person

Numpad 1

Ground Camera motion

Forward
Backward
Rotate Right
Rotate Left
Strafe Right
Strafe Left
Look Up
Look Down
Raise Camera
Lower Camera
Slow camera motion (used in conjunction with above)

Up Arrow
Down Arrow
Right Arrow
Left Arrow
Shift+Right Arrow or End
Shift+Left Arrow or Delete
Shift+Up Arrow
Shift+Down Arrow
Page Up
Page Down
Ctrl

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

Zenith Camera motion

Forward
Backward
Rotate Right
Rotate Left
Right
Left
Zoom in
Zoom out
Slow camera motion (used in conjunction with above)

Up Arrow
Down Arrow
Shift+Right Arrow
Shift+Left Arrow
Right Arrow
Left Arrow
Page Down
Page Up
Ctrl

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

First Person

Fire
Weapon Select
Exit Machine
Forward
Backward
Look Up
Look Down
Turn Left
Turn Right
Turn Head Left
Turn Head Right
Center Head
NVG On/Off
Menus
Slow Turn Speed

Space
TAB
ESC
Up Arrow
Down Arrow
Shift+Up Arrow
Shift+Down Arrow
Left Arrow
Right Arrow
Shift+Left Arrow or right mouse
Shift+Right Arrow or right mouse
Numpad 5 or release right mouse
N
F10
Ctrl

**VI. -----
GETTING STARTED (building a base)**

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 hoards of enemy machines. To start the training levels

select Single Player, then choose training camp. Training levels are broken down into basic and advanced levels, stepping you through the basics.

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 only be obtained by mining and smelting minerals. To accomplish this, you will need:

- 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 don't have one built or it was destroyed.)

Step 1: Use a Geo Locator to Find Minerals

You must 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.

Step 2 :Build a 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 key and moving the mouse. 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 wireframe and begin construction.

Step 3:Build a Smelter (storage)

You must now construct a Smelter to convert and store minerals extracted by your Mine. Your POD can also be used as Smelter, but it cannot store as many BMUs. Use a Constructor to build a Smelter using the same procedure as was used when constructing the Mine. 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 routs. When the Transporter appears at the front of your factory, you can order it to move the ore from the Mine or to the Smelter by using the 'Transport' command. Click on the Transporter and click on the 'Transport' icon. The message at the bottom of the screen will tell you to select the Mine to be picked up from, and select the Smelter at which to drop off. This sets up a 'permanent' transport route which the Transporter will continue travelling back and forth along automatically (unless or until interrupted.)

Step 5:You' re Ready!

With this knowledge you're ready to put your base to the test. You will notice a lot of opportunities to do other things while you are doing these steps. The type of constructions you decide to do will change with the different levels and with experience.

Warfare (limited in the demo)

To protect your colony from the enemy races and attack them, you can construct Military Factories - to produce Aggressors, Administrators, Spies, APCs. Selecting the factory will show a list of machines currently available to build. Constructors can also build static defences (turrets, missile emplacements). These are built in the same way as other constructions. They will help defend your base by firing upon enemy units that move within their scanner range.

Research

Research is the key to success in Machines. Some low level machines will be immediately available to build in your factories but to be able to build higher level machines you must build a Military Research Lab and then build and place at least one Technician inside. The three levels of 'Technician' the first is the eponymous Technician; the second is the Technician Engineer; the third is the Technician Brainbox. Each advances the research in technology.

Note: There is only one level of technician available in the demo.

Technicians

All Technicians (except those already available at the start of a scenario) are built in 'Civilian Factories'. To move a Technician to a friendly lab, select the Technician, move the cursor over the Lab (it should turn into an "enter building" cursor) and click the left mouse button. You can build up an itinerary of research in a Lab without any Technicians being present as long as at least one friendly Technician exists somewhere in the world. But remember: no research will take place until a Technician is inside the Lab in question. You will be given a verbal message reminding you of this fact if you use the itinerary approach..

Clicking on a lab that houses a Technician will reveal all the research items currently available to be researched. 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 start the research into that technology. It will also cause a duplicate of that icon to appear at the bottom of the panel. 'Clicking' on further icons will result in these items being 'queued' at the bottom of the panel along with the item currently being researched. When the current research has finished the next item in the cue will start being researched. It is possible to edit the research queue by 'clicking' on one of the icons in the queue and then pressing the 'delete' / 'backspace' key.

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 doesn't have to be moved inside a lab for the new technology to be available for research, the presence of this new unit will greatly speed up research. Once items have been researched their icon disappears from the research lab and will appear in the appropriate factory ready for production. If the appropriate factory has yet to be built then the newly researched icon will not appear anywhere in the game until it has. It is important to remember that the once a higher level Technician has been manufactured, any lower level Technician can research the newly available research items, too.

Once research has been completed, you should be able to build new machines or activate new weapons. There may be other dependencies, however. Certain machines can only be built in certain types of factory, so unless you have constructed such a factory, it might appear that the research has not given you any new construction options. In this case, you should find that building the next type of military or civilian factory will allow you to build the machine you have researched. The research tree and its interdependencies with factory types has been carefully designed so that no machine can be researched far in advance of the appropriate factory to build it becoming available. Also, no scenario lets you research a technology that can't be realised in a viable factory, so there is little danger of pursuing "useless" research. What research is most useful to you will depend on the strategies you tend to employ and your personal preferences in machine types, given experience with their varying strengths and weaknesses.

VII. -----

KNOW YOUR CONSTRUCTIONS & MILITARY PERSONNEL

Seeding POD

The seeding POD (also known as the Controller) is the master computer controlling your race of machines. You *are* the Controller when you play the game. Depending on the scenario, generally you must protect the POD at all costs or your game will be over.

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 only Mine available in the demo has an extraction rate of 60 BMUs per minute and can store 150 BMUs. The extraction rate determines how quickly the mine will deliver minerals to the surface ready for collection. The storage capacity indicates how many minerals 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.

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. Two Smelters are available in the demo and both have a greater capacity for storage than the Pod. It can also be built in closer proximity to the mines, making transportation time shorter.

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.

Military & Civilian labs

Labs are required in order to advance from the low-level machines that your factories start with. In order to start research new technology in a lab you have at least 1 technician placed inside. Please note that Military and Civilian labs are separate constructions. You can only research Military units and weapons in the Military labs, and Civilian units in the Civilian labs. *See the section devoted to researching for more information*

Military Factory

The military factory builds the aggressor machines that make up your army. Level one military factories are capable of producing low-level machines without any research. When your lab finishes researching a new machine, the new machines (icon) should appear when you select the factory.

Civilian Factory

The civilian factory builds all of your non-fighting machines like transports, technicians, geo-locators and constructors (dozers). This factory operates the same way as the military factory where you need a civilian lab to advance the technology for the factory to build.

Military Personnel (aggressors)

Grunts

These should be considered the most basic infantry units in your army: cheap, low-tech, but undeniably effective if utilised correctly. Of necessity the primary offensive units at low tech levels, grunts can still provide an offensive threat in larger numbers later in the game, and can cause disruption through the employment of 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 is 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.

Flamer - with napalm

The napalm weapon on this grunt variant does not offer quite the outright damage potential for damage 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 armour. 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 Flamer if their constitution is already low.

Warrior - with twin heavy Bolters

Warriors are the slowest grunt units, but the most heavily armed and armoured, 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 Single 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 Single 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 Twin Auto Cannons

An advancement on the original Reaper, the Wraith unit carries twin Auto Cannons, thus doubling the

damage inflicted.

Wraith Reaper - with Twin Plasma Rifles

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

Enforcer

The Enforcer is the next generation Warrior Class. This tracked unit boasts superior armor and fire power than 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.

Subtypes:

Enforcer - with Twin Heavy Bolters

The Heavy Bolters sported by the Enforcer will inflict 33% more damage than the Bolters wielded by the Warrior.

Enforcer - with Twin Heavy 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 heavy Bolter version.

Knights

The Knight class aggressor sees the introduction of hover technology. 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). The protection offered by the chassis of the Knight is a slight improvement over that of the Enforcer.

VIII. -----

HINTS & TIPS

Training levels

Do not destroy or self-destruct any buildings or machines while in the training levels or you will not be able to complete them. You will have to quit the mission manually by press the ESC key.

Scenario 1 Make Contact

Remember to select the commandant to bring him with you when you go your base. If you leave him behind the game will not continue. *Note: the commandant will refer to the Military factory as the Light infantry unit during this scenario. When you are asked to build this structure look for the icon called military factory on the console.*

Scenario 2 Establish Military Base

The enemy's base has a surprise for you when you arrive. Be sure you have the firepower to handle it.

IX. -----

PLAYING ON MICROSOFT GAMING ZONE

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 design for people to meet and play their favorite multiplayer games. If you have never played at the Zone before please following this link below which will give you instruction on how to sign up and start playing.

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

Note: Machines Demo supports DirectPlay Lobbying, so follow the online instructions to run games from the ZoneLan - DirectPlay area if Machines is not listed on the games list.

****If you want to play the Machines demo 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.

X. -----

COMPATABILITY ISSUES & KNOWN BUGS

The following is a list of known compatibility issues found during the testing phase of this demo. We apologize for the inconvenience and are working hard on correcting them in time for the final release. Keep in mind that our website will have updates and/or patches available for this version of the Demo by the time you read this. You can visit our website at www.acclaim.net

Multiplayer bugs

Since this is an early preview, you may experience some problems playing Internet games. This aspect of the demo has not been fully tested or optimized yet. Four player games may have trouble keeping in sync and players might be dropped as a result. We recommend you try a 2 or 3 player game if you experience difficulties to see if performance improves. We are working hard to insure improved performance for the final release.

Training levels

Do not destroy or self-destruct any buildings or machines while in the training levels or you will not be able to complete them. You will have to quit the mission manually by press the ESC key.

Squad Icons

When you create a squad an icon should appear next to the number assigned to it on the console. The icon that appears is static but the squad functions normally.

Machines getting stuck (by constructions & in general)

When you construct a building and a machine is too close to the green hologram it will get stuck if you do not move them before the construction is finished. Sometime machines get stuck when moving across the landscape. We are working hard to improve machines pathfinding ability for the final version.

Entering an exploding building in 1st person

Doing this will cause the game to crash.

Turtle Beach Montego A3D (other brand A3D cards may experience this as well)

Although we support A3D a crash bug caught our attention the moment the game left the door. The game may crash during the load screen on owners of this sound card. Check the Turtle Beach web site for any driver updates, which may help solve the problem. If you have the latest drivers and its still not working we have a temporary fix. Go into the Windows Control Panel and select the A3D icon. Check the box that says "disable hardware acceleration" and the game should run normally. Be sure to check our website to see if there is an available fix for this problem.

Compatibility issues with certain Voodoo2 drivers:

-Voodoo2 based accelerators will sometimes have graphical glitches (clipping) on the buildings "pads" and/or shadows while in the Zenith view. Selection boxes not fully surrounding the construction or machines in all views. We are working closely with 3DFX and Voodoo2 card manufactures to fix the problem for the final release. **Check our web site for available fix.**

-Obsidian 2 boards using Beta C6 drivers showed severe glitches on the building pads and shadows while in the Zenith view. We are trying to fix the problem.

-Voodoo Rush boards shows signs of smearing or blurring on menu items and during gameplay.

You may experience other difficulties running Machines if you don't have the latest drivers from the manufacturer of your 3D accelerator card. Drivers were being changed right up to the last minute as

testing with Machines revealed small problems with various cards.

Usually, but not always, if a board is based on one of the following chipsets, Machines will run on it. Machines may also run on new chipsets not listed here. If you are unsure of what chipset your 3D card is based on see the *detailed list* below.

Supported chipsets

3Dfx Interactive Voodoo/Voodoo2 Graphics
 3Dfx Interactive Voodoo Rush/Banshee
 3DLabs Permedia2
 ATI Technologies 3D Rage Pro/ Rage128
 Matrox G series
 nVidia Riva128 / RivaTNT
 S3 savage
 Intel I740

Unsupported Cards/chipsets

NEC PowerVR
 S3 Virge
 Rendition
 Matrox Mystique

Typically, the chipset makers expect you to go to your card manufacturer for the latest drivers for their card. Although the chipset makers supply the 3D chip and driver software to card manufacturers, the manufacturer may tailor the driver to their particular board configuration, so the safest place to go for drivers for your board is the card manufacturer. In some cases, however, the chip maker also manufactures the board.

Detailed list of supported 3D accelerator cards

Chip Maker	Chipset Name(s)	3D Card Manufacture
3DFX Interactive	Voodoo 1 (TM)	Canopus Pure 3D (TM)
		Orchid Righteous 3D (TM) Diamond Monster 3D (TM)
	Voodoo 2 (TM)	Creative Blaster Voodoo2(TM) Orchid Righteous 3D II (TM) Diamond Monster 3D II (TM)
		Obsidian (TM)
		Voodoo Rush (TM) Intergraph Intense 3D (TM) Hercules Stingray (TM)
3D Labs (R)	Peremedia2 (TM)	Creative Graphics Blaster Extreme (TM) Diamond Fire GL 1000 Pro (TM)
ATI (TM)	Rage Pro (TM)	ATI XPERT@WORK (TM) ATI XPERT@PLAY (TM) ATI XPERT 98 (TM) All-in-Wonder Pro (TM)
Intel (TM)	i740 (TM)	ASUS V2740 (TM) Diamond Stealth II G460 (TM) Real3D Starfighter (TM) STB System Lightspeed 740 (TM) Hercules Terminator 2x/I (TM)
Matrox (TM)	G200 (TM)	Millenium G200 (TM) Mystique G200 (TM) Marvel G200 (TM)
nVidia (TM)	Riva128(TM)/ Riva128ZX(TM)	STB Velocity 128 (TM) ASUS 3DexPlover 3000 (TM) Canopus Total 3D 128V (TM) Canopus WitchDoctor (TM) Diamond Viper V330 (TM)
	Riva TNT (TM)	Canopus SPECTRA 2500 (TM) Diamond Viper V550 (TM) STB Velocity 4400 (TM)

Detailed list of unsupported 3D accelerator cards

Chip Maker	Chipset Name(s)	3D Cards
NEC (TM)	PowerVR/PCX2(TM)	Matrox m3D (TM) Videologic Apocalypse 3Dx(TM) Videologic Apocalypse 5D (TM)/ 5D Sonic
Matrox (TM)	Mystique	Matrox Mystique (TM)
Rendition (TM)	Verite V1000/2100/2200(TM)	Total 3D(TM) Diamond Stealth II S220 (TM) Hercules Thriller
	3D(TM)/Conspiracy(TM)	

If you still experience any difficulty running Machines, contact Customer Service at (516) 759-7800, or visit us online at www.acclaim.net to see if the Machines web site can help with available updates or answers to common problems.

Enjoy the demo!!