

ultracade™

Operation Manual





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ULTRACADE™

OPERATION MANUAL

VERSION 3.0

- Read this booklet before use.
- Keep this booklet with machine at all times.

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ULTRACADE™

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1. LEGAL INFORMATION

1.1 SAFETY NOTICES

The following safety instructions apply to all game operators and service personnel. Specific warnings and cautions will be found throughout this manual where applicable. We recommend that you read this page before preparing your ULTRACADE for game play.

Use the following safety guidelines to help protect the system from potential damage and to ensure your personal safety.

- To help avoid damage to the computer, be sure the voltage selection switch on the power supply is set to match the AC power available at the location:
 - 115 volts / 60Hz in most of North and South America and some Far Eastern countries such as Japan, South Korea and Taiwan
 - 230 volts / 50Hz in most of Europe, the Middle East and the Far East
- To help prevent electric shock, plug the system power cables into properly grounded power sources. These cables are equipped with 3-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a 3 wire cable with properly grounded plugs.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner or uninterruptible power supply (UPS).
- Be sure nothing rests on the system's cables and that the cables are not located where they can be stepped on or tripped over.
- Do not spill food or liquid on your system.
- Do not push any objects into the openings of the system. Doing so can cause fire or electric shock by shorting out interior components.
- Keep your computer far away from radiator and heat sources.
- Do not block cooling vents.

1.2 WARNINGS

- Make sure all your connections are correct prior to switching on this product.
- There are no user servicable devices in this product. Opening the case of the Graphite system will void the warranty.
- This device is static sensitive.
- Power supply is 90~250VAC 7~3A
- Monitor requirement is 4:3 Horizontal VGA

1.3 ENVIRONMENTAL CONDITIONS

ULTRACADE is intended for indoor use only. Be sure to keep dry and maintain operating temperatures of 10-40° Celsius.

1.4 FCC NOTICES (UNITED STATES)

Electromagnetic Interference (EMI) is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of a radio navigation or other safety service or seriously degrades, obstructs, or repeatedly

interrupts a licensed radio communications service. Radio communications services include but are not limited to AM/FM commercial broadcast, television, cellular services, radar, air-traffic control, pager, and Personal Communication Services (PCS). These licensed services, along with unintentional radiators such as digital devices, include computer systems, contribute to the electromagnetic environment.

Electromagnetic Compatibility (EMC) is the ability of items of electronic equipment to function properly together in the electronic environment. While this computer system has been designed and determined to be compliant with regulatory agency limits for EMI, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference with radio communications services, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Relocate the computer with respect to the receiver.
- Move the ULTRACADE away from the receiver
- Plug the ULTRACADE into a different outlet so that the computer and the receiver are on different branch circuits.

If necessary, consult a Regulatory EMC representative of HyperWare, Inc or an experienced radio/television technician for additional suggestions. You may find the FCC Interference Handbook, 1986, to be helpful. It is available from the U.S. Government Print Office, Washington, DC 20402, Stock No. 004-000-00450-7 or on the word wide web at: <http://www.fcc.gov/bureaus/compliance/www/tvibook.html>.

This device has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, and if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. Operation of this equipment in an residential area is likely to cause harmful interference, in which case you will be required to correct the interference at your own expense. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

1.5 LICENSE INFORMATION

1.5.1 JOSHUA OPERATING SYSTEM

The JoshuaOS™ is used under license from Joshua Technology, Inc. Joshua Technology, Inc. retains all rights to the code, trademarks and copyrights. By accepting and operating an ULTRACADE system, the owner/operator of each ULTRACADE system agrees to abide by all copyrights and trademarks and not to attempt to decompile or modify the operating system in

anyway. Questions regarding this operating system should be directed to technical support at www.ultracade.com or support@ultracade.com. JoshuaOS is copyrighted 2001-2002 by Joshua Technology, Inc.

1.5.2 AMIJEN PROPERTIES

AMIJEN™ and the AMIJEN properties are used under license from Gregory J Lima. Gregory J Lima retains all the rights to all properties, trademarks and copyrights. AMIJEN is Copyrighted ©1997-2002 by Gregory J Lima.

1.6 WARRANTY INFORMATION

The ULTRACADE cabinet is guaranteed from manufacturing defects. ULTRACADE parts are guaranteed for 90 days.

1.6.1 WARRANTY SERVICE

If at some point you require warranty service, contact your distributor. If you purchased direct you can contact HyperWare ULTRACADE Technical Support at 1-408-895-0331 or support@hyperware.com. If technical support staff determines that your ULTRACADE is defective, a Return Merchandize Authorization (RMA) number will be issued.

2. GAME SETUP

2.1 GAME FEATURES

Congratulations on choosing ULTRACADE. ULTRACADE is available in an upright, dedicated cabinet with 27" VGA monitor and dual player control panel or as a kit for installation in existing cabinets. ULTRACADE is powered by HyperWare's Graphite™ Arcade PC. The ULTRACADE game engine can securely store and support hundreds of games. ULTRACADE comes with a pre-installed Game Pack of thirty three classic games, licensed by HyperWare. Additional ULTRACADE Game Packs are also available, each with a collection of popular, classic games licensed from the original manufacturers.

ULTRACADE provides the following benefits to operators:

- Consistent earnings from proven, licensed games for all generations and both men and women
- Low purchase price
- Multi-game system with low-cost Game Pack add-ons
- HyperWare reliability
- Easy-to-use operator interface
- Game instructions displayed automatically as the player selects a game

2.2 PRE-GAME INSTALLATION

Remove the game from the shipping container. The 1st set of keys is in the coin return slot. The 2nd set will be hanging on the inside of the coin mech door. Refer to Figure 2-1 for specific locations of each part of the machine. Connect the wall cord to a grounded (3-terminal) AC wall outlet.



FIGURE 2-1 CABINET ASSEMBLY

#	Description
1	On / Off Switch on bottom rear of cabinet
2	Control Panel
3	Coin Mech Door and Coin Return Slots
4	Coin Box Door

TABLE 2-1 CABINET ASSEMBLY

The following precautions should be followed when installing the game:

- Avoid rough handling of the game, the picture tube is fragile.
- Install the game on a level surface.
- Avoid installing the game where it will receive excessive sunlight or heat, to protect the game from rising internal temperatures.
- Do not install in a damp or dusty location.
- For a short time after connecting the power to the game, the picture may be temporarily distorted.

The monitor's purity is affected by the Earth's magnetic field, causing a variation of color. By turning the game on for 10 or 15 seconds and then off for 20 or 30 minutes the automatic degaussing circuit applies a degaussing field around the edges of the monitor. Doing this several times will correct the problem.

Another way to correct the problem is to purchase a degaussing coil or bulk tape eraser at any electronics store. This will help to immediately demagnetize the video tube. Caution must be used with a degaussing coil so that the magnetic field of the degaussing coil is not allowed to become too intense at any one place on the picture tube, thereby causing a localized color distortion.

If you move the game to another location after degaussing the distortion may reappear. Refer to the video monitor manual for details.

2.3 GAME INSPECTION

ULTRACADE is shipped ready for operation, but a last visual check should be made to insure the game is in good condition. Please verify the following before turning the game on:

- Inspect the exterior of the game for any shipping damage, chips, dents, or broken parts.
- Open the rear service door and check for any interior damage.
- Check all major assemblies to assure they are mounted securely.
- Make sure there is no damage to the wiring and that all wires are properly connected.
- Open control panel and inspect Graphite system.
- Check for loose foreign objects, especially metal objects which may cause electrical problems.
- Open coin door and check test switch to make sure it is not damaged.

The game monitor is properly adjusted before shipping. If there are any adjustments necessary, refer to the video monitor manual. This manual contains all the manufacturers recommendations for

adjusting the video monitor.

2.4 GAME INSTALLATION

Power on the game. When the game is fully started open the coin mech door and press the red test button to enter the Operator Setup Menu. This will allow you to configure your ULTRACADE for your specific needs. For more information see section 3. OPERATOR MENU.

3. OPERATOR MENU

3.1 OPERATOR SETUP MENU

All ULTRACADE game audits, adjustments, and diagnostics are options of the Operator Setup Menu. Each option has its own submenu, listing several choices you may act upon as needed. Press the test button behind coin mech door in the cabinet to activate the Operator Setup Menu. Refer to Figure 2-1 and Figure 3-1 for locating the test button.



FIGURE 3-1 TEST BUTTON LOCATION

After you press the test button, you will see the operator setup menu which will allow you to access the following: Accounting Information, Game Configuration, Add New Games, Credits/Coin, Cabinet Setup, High Score Menu, Sound Volume, Timers Menu, and Exit.



FIGURE 3-2 OPERATOR SETUP MENU

To choose a menu option, move the arrow or cursor so that the desired option is highlighted. This is done using the player one joystick. When the desired option is highlighted press player one button one to select it and enter that submenu.

In this manual the term “highlight” will mean to position the arrow over the desired option. The term “select” will mean to press player one, button one. The exit option on all menus will always go back to a previous menu.

3.2 ACCOUNTING INFORMATION MENU

The Accounting Information Menu allows you to view and manipulate a report of current and lifetime coin totals for each game installed on your ULTRACADE:



FIGURE 3-3 ACCOUNTING MENU

3.2.1 COPY CURRENT / LIFETIME REPORT

This feature allows you to copy either the current or lifetime accounting information of each game to a disk. This allows you to track gameplay and coindrop totals on a daily, weekly or monthly basis. In addition, if you should uninstall a game and at a future date reinstall it, the game will maintain lifetime play totals in the accounting information. You will need a formatted 3.5inch floppy disk to utilize this function.

To copy accounting information to a disk, insert a formatted 3.5 inch floppy disk into the floppy drive on the Graphite rear panel. Highlight the desired copy option and select. If this action is successful, “OK” will appear in the corresponding output window to the right. If this action is unsuccessful, “FAIL” will appear in the output window. This indicates a bad disk or a drive failure. You can attempt to solve this problem by inserting a new disk.

When completed, all current or lifetime accounting information will be transferred to your disk. The accounting information text can be displayed in any text editor and easily imported into a spreadsheet application.

Note: Copying accounting information does not record the current day’s totals, it records only previous days.

3.2.2 RESET REPORT DATA

To reset current accounting data, coin bookkeeping table records, and current time reporting data; highlight Reset Report Data and select it. This will reset current game play counters and time reporting to zero (lifetime totals will remain). When this action has been successfully completed, “OK” will appear in the output window to the right.

3.2.3 SORT REPORTS BY

The operator has different options to list the games on the earnings and time reports. Highlight Sort Report By and move the joystick left or right. The output window to the right will cycle through the following options:

- **name** - sort by name
- **mnfr** - sort by game manufacturer
- **\$curr** - sort by ascending current coin drop
- **\$life** - sort by ascending lifetime coin drop
- **fcurr** - sort by current ascending freeplays
- **flife** - sort by lifetime ascending freeplays

3.2.4 VIEW EARNINGS REPORT

When you choose View Earnings Report you will be given a screen consisting of five columns. The last reset date will be listed in the window at the top of the screen. The left hand column lists the games by name. The next two columns list current coindrops and freeplays since the last reset of data respectively. The last two columns list lifetime coindrops and freeplays of each game respectively. The total earnings row (at bottom of report) lists the cumulative of each column.

The joystick can be used to scroll the window up or down if the game list is too long to display on the screen. Up and down will scroll one game at a time while left and right will scroll one page at a time. To enter a games' dipswitch settings press button 6 (Refer to 3.3.6 DIPSWITCH SETTINGS). To exit the earnings report screen press button one.

Title	9/22/02		Lifetime	
	Coin	Free	Coin	Free
1941	12	0	342	0
1942	34	0	343	0
1943	29	0	213	0
astro invader	22	0	345	0
avenging spirit	22	0	343	0
bubble bobble	33	0	234	0
commando	54	0	123	0
EDF	67	0	543	0
gunsmoke	29	0	332	0
higamaru	45	0	234	0
kram	22	0	764	0
magic sword	11	0	324	0
outzone	29	0	162	0
oja	43	0	122	0
rastan	55	0	321	0
sidearms	43	0	235	0
three wonders	21	0	334	0
Total Earnings:	553	0	5263	0

FIGURE 3-4 EARNINGS REPORT SCREEN

3.2.5 VIEW TIME REPORT

Like the earnings report, when you select this option you will be given a new screen consisting of five columns. The last reset date will be listed in the window at the top. The first column will list the games by name. The next two columns will give current time report data since the last reset. The one entitled "Average" displays the average amount of time it takes to play a game (one credit). This column displays in minutes and seconds. The column entitled "Total" displays the total amount of time that that game has been played in hours and minutes. The next two columns are reserved for the lifetime time reporting, one for the average time played and one for the total play time respectively.

The same control scheme is used in both the Earnings Report and Time Report screens. Refer to section 3.2.4 VIEW EARNINGS REPORT for instructions.

Title	9/22/02		Lifetime	
	Average	Total	Average	Total
	MIN SEC	HOUR MIN	MIN SEC	HOUR MIN
1941	3:55	3:55	3:53	23:55
1942	4:42	4:42	4:42	24:42
1943	1:43	5:43	6:43	36:43
astro invader	2:44	4:34	2:45	22:44
avenging spirit	2:55	3:54	3:53	33:55
bubble bobble	3:42	2:44	4:42	24:42
commando	5:43	4:43	6:41	36:43
EDF	2:44	3:34	2:43	32:44
gunsmoke	2:55	6:25	3:52	33:55
higamaru	2:42	4:48	4:43	44:42
kram	1:43	1:33	6:42	36:43
magic sword	5:44	3:47	2:42	22:44
outzone	1:55	2:45	3:51	13:55
oja	2:42	3:12	4:42	34:42
rastan	1:43	9:42	6:41	36:43
sidearms	3:44	7:34	2:43	22:44
three wonders	1:33	2:34	9:34	39:33
Total Times:	2:34	59:13	3:04	513:34

FIGURE 3-5 TIME REPORT SCREEN

3.2.6 INTELLIEARN™

The IntelliEarn™ option when turned on will cause the main interface to play the attract mode for games with more current (\$Curr) or lifetime (\$Life) coindrop totals more frequently than those with less coindrop totals. When turned off the main interface will cycle through game attract modes randomly.

To change the different IntelliEarn™ options move the joystick either left or right.

3.3 GAME CONFIGURATION MENU

This menu allows you to choose which games you wish to display on the main interface selection screen, to change the order of the games list, to set the dipswitch settings for each game, and to uninstall a particular game.

The game configuration menu consists of two parts. The left column contains game sorting options, and the game list. On the right is the AAMA ratings system. Use the following system for navigating this setup menu:

Joystick (Player One):

- **Up/down** moves left column cursor up or down
- **Left/right** pages left column cursor up or down

Buttons (Player One):

- **Button 1** executes choice or disables/enables a game
- **Button 2** advances AAMA ratings cursor
- **Button 3** disables/enables all games with the currently selected AAMA rating
- **Button 6** enters dipswitch menu for highlighted game



FIGURE 3-5 GAME CONFIGURATION MENU



FIGURE 3-7 DIPSWITCH SETTINGS MENU

3.3.3 SORTING OPTIONS

There are four different ways to sort the game list. Remember, this will also rearrange the sorting of the games on the main interface screen. The sorting options are as follows:

- **Sort by Name** will list the games alphabetically from top to bottom.
- **Sort by Manufacturer** will list the games alphabetically by manufacturer from top to bottom.
- **Intelli-Earn Current** will list the games by their current accounting totals from the highest at the top to the lowest at the bottom.
- **Intelli-Earn Lifetime** will list the games by their lifetime accounting totals from the highest at the top to the lowest at the bottom.

3.3.4 THE GAME LIST

The ULTRACADE game list is color coded by the AAMA rating. To check a game's exact AAMA rating highlight the chosen game and a Title Rating icon will appear on the right side over the correct sticker. To enable or disable a game simply highlight with the cursor and press button one. A game is disabled when it becomes greyed out.

3.3.5 AAMA RATINGS SYSTEM

The AAMA ratings system can be used to disable or enable a group of games with the same AAMA rating. Use button two to cycle the AAMA cursor until it is over the correct rating. Press button three to disable or enable all games installed on the ULTRACADE with that rating. A disabled icon will appear over the rating when it is currently disabled.

3.3.6 DIPSWITCH SETTINGS

Each installed game comes set to its original factory default dipswitch settings. To change a game's settings highlight it in the left column and press button six. This will enter you into that game's unique dipswitch menu. To change a dipswitch setting highlight it and move the joystick either left or right to adjust the setting. To restore the settings to factory defaults highlight factory defaults and select.

3.3.7 UNINSTALLING A GAME

Uninstalling a game from the ULTRACADE system will remove it permanently. The only way to recover the game will be to reinstall the Game Pack on which the game came. To uninstall a game, highlight it in the left hand column and press and hold the player one and two start buttons. While holding the two buttons press player one button one and the game will be removed from the list. That game has now been uninstalled.

3.4 ADD NEW GAMES MENU

The Add New Games Menu allows you to add new games to your ULTRACADE via Game Packs. When you are ready to install a new Game Pack, enter the Add Games Menu and follow these directions:

- Open the control panel and insert the new Game Pack CD
- Record the Machine ID number (MCID) in the center of the Add Game Menu.
- Call, fax, or email ULTRACADE technical support with your MCID and the CD serial number found on the back of the CD packaging. You will receive your Game Pack ID number (GPID). This number is unique to your ULTRACADE system and is essential to the successful installation of the Game Pack.
- Record the GPID and save this with your Game Pack CD. If your Game Pack ever needs to be reinstalled you will need to enter this number again.
- Enter the GPID by highlighting the appropriate letters and numbers and selecting them. When completed highlight "Use" and select it. The Game Pack will now install.
- When the install is completed you may exit the Add Game Menu. the new games will now appear in your Game Configuration game list.
- Open the control panel and remove the CD.



FIGURE 3-8 ADD GAMES MENU

3.5 CREDITS / COIN MENU

The Credits / Coin Menu is used to set how much a play on your ULTRACADE costs, to turn on or off freeplay, to turn on or off the bonus credit and to turn on or off the free menu control.



FIGURE 3-9 CREDITS / COIN MENU

3.5.1 CREDITS PER COIN MECH 1 AND 2

This option allows the operator to set the number of credits given per coin drop on each coin mech. i.e. When set to 2, a player will receive two credits for one coin drop. Move the joystick left or right to set the values.

3.5.2 CREDIT COST FOR EACH PLAY

This option allows the operator to set the price to play a game. When set to 1, it will cost one credit for each play. When set to 2, it will cost 2 credits (fifty cents or two tokens) for each play. Move the joystick left or right to set the values.

3.5.3 BONUS CREDIT

This option will give a player a fifth free credit after four consecutive coin drops.

3.5.4 FREEPLAY

Sets the game to freeplay. This will make all the games free to

play.

3.5.5 FREE MENU CONTROL

When this option is turned on players will be able to scroll through the main interface games without having to put a credit in. When turned off a player will have to put a credit in before scrolling through the main interface games.

3.6 CABINET SETUP MENU

The Cabinet Setup menu allows you to custom configure your ULTRACADE and to run a number of diagnostics.



FIGURE 3-10 CABINET SETUP

3.6.1 SCREEN ORIENTATION

This option rotates the screen by 90°. Highlight and move joystick right or left to change among the different settings.

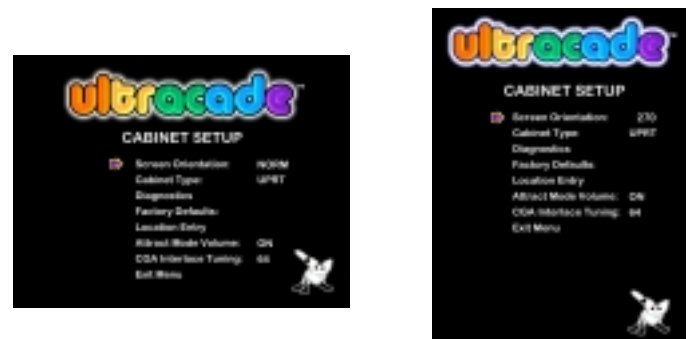


FIGURE 3-11 SCREEN ORIENTATIONS

3.6.2 CABINET ORIENTATION

This option will set what type of cabinet you have. To change the settings highlight and move the joystick left or right.

- **UPRT:** Standard upright cabinet with two joysticks. This is the default setting.
- **CKTL:** Cocktail cabinet with two joysticks and opposing players.
- **SGLE:** Standard upright or cocktail cabinet with only one joystick.

3.6.3 DIAGNOSTICS

The diagnostics option will enter you into a sub-menu displaying the different diagnostics you can run on your ULTRACADE.



FIGURE 3-12 DIAGNOSTICS SUB-MENU

3.6.3.1 CONTROL TEST

This test is used to check the functionality of the player controls. Operate each player control in turn. Each button press or joystick direction will light when activated. If any controls are not functioning, go to the trouble shooting section. To exit the control test press both player one and player two start buttons. If one or both start buttons are not working the control test screen will automatically timeout in fifteen seconds.



FIGURE 3-13 CONTROL TEST

3.6.3.2 JAMMA TEST

The JAMMA Test is similar to the Control Test but it is expanded to encompass the entire JAMMA harness and connector. Operate each player control in turn through the JAMMA Test screen and check that it lights up on the screen. This process confirms the proper working order of the test button, coin drop, and wiring features. To exit the JAMMA Test press both player one and player two start buttons or wait fifteen seconds for the test to timeout and exit.



FIGURE 3-14 JAMMA TEST

3.6.3.3 SOUND TEST

This feature tests the stereo speakers. You will hear for each test the following:

- Left Channel: You will hear the voice coming from the left speaker.
- Right Channel: You will hear the voice coming from the right speaker.
- Left & Right Channel: You will hear the voice coming from both speakers.
- High Frequency: You will hear a high pitched sound coming from both speakers.
- Low Frequency: You will hear a low pitched sound coming from both speakers.

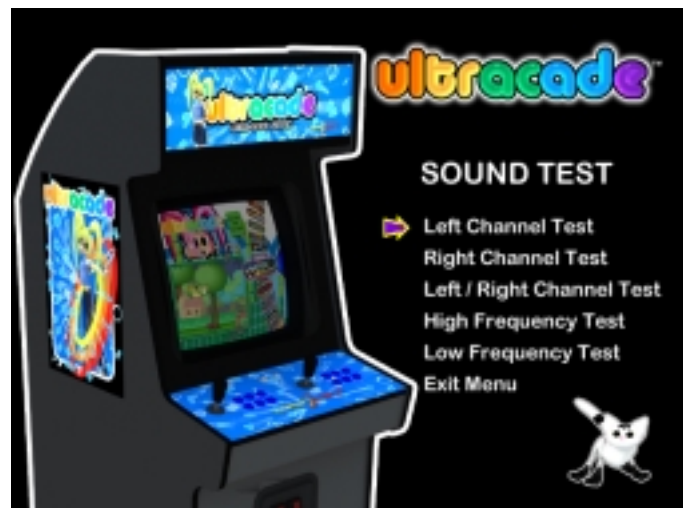


FIGURE 3-15 SOUND TEST

3.6.3.4 VIDEO TEST

This feature is a utility to use when making adjustments to the video monitor. When started, the test will cycle through the following screens:

- Red
- Green
- Blue
- Color Bars

- Pin Cushion

To advance through the test screens press button one.



FIGURE 3-16 VIDEO TEST

3.6.3.5 3D TEST

The 3D test is used to test the 3D functionality of the onboard video chip. When started, a rotating 3D cube should appear on the screen. If you do not see the cube there maybe a problem with your ULTRACADE and technical support should be contacted. To exit the test press button one.

3.6.4 FACTORY DEFAULTS

Selecting this option from the Cabinet Configuration Menu (Fig. 3-10) will reset all operator settings to their factory defaults. "OK" will appear in the Factory Defaults window when this action is completed.

3.6.5 LOCATION ENTRY

This option allows the operator to name individual cabinets for the purpose of accounting identification. When you are ready to identify your ULTRACADE cabinet, follow these instructions:

- Highlight "DEL" (delete) and select it to erase the factory naming.
- Highlight each desired letter in turn and select to spell the cabinet name.
- When completed highlight "USE" and select it to make the name change official.



FIGURE 3-17 LOCATION ENTRY

3.6.6 ATTRACT MODE VOLUME

This option allows the operator to turn the Attract Mode Volume on or off. When set to "ON" all attract mode sounds will play. When set to "OFF" the fullscreen and windowed game attract mode sounds will not play. To change the values of this option highlight Attract Mode Volume on the Cabinet Configuration Menu (Fig. 3-10) move the joystick left or right.

Note: Some games naturally do not play any sound while in attract mode.

3.6.7 CGA INTERLACING TUNING

This option allows operator to set CGA Interlacing to its most clear value. The range is 0-128. To change the setting, highlight CGA Interlacing Tuning on the Cabinet Configuration Menu (Fig. 3-10) and move joystick left or right until desired value appears.

Note: This will not work with EGA and VGA monitors.

3.7 HIGH SCORE MENU

This menu option allows you to dump all high scores to disk, get high scores from disk, and delete high scores.



FIGURE 3-18 HIGH SCORE MENU

3.7.1 DUMP HIGH SCORES TO DISK

This option allows you to dump all high scores to a floppy disk. Place a disk into the floppy drive on the Graphite rear panel. To dump scores, highlight Dump High Scores To Disk and select it. If this action is successful, "OK" will appear in the output window to the right of tab. Remove the disk from the Graphite. If this action is unsuccessful, "FAIL" will appear in this window. This indicates you have a faulty disk and will need to insert a new one.

3.7.2 GET HIGH SCORES FROM DISK

This option allows you to transfer high scores stored on a floppy disk to your ULTRACADE system. Place a disk into the floppy drive on the Graphite rear panel. To get scores, highlight Get High Scores From Disk and select it. If this action is successful, "OK" will appear in the output window to the right of the tab. Remove the disk from the Graphite. If this action is unsuccessful, "FAIL" will appear in this window. This indicates you have a faulty disk and will need to insert a new one.

Note: Dumping and retrieving high scores from disk is only possible between two ULTRACADE games with matching versions. The high scores stored on the disk are uneditable and attempting to do so may cause the files to become corrupted.

3.7.3 DELETE HIGH SCORES

This option will reset all high scores to their factory defaults. When this operation has been completed successfully "OK" will appear in the Delete High Scores output window.

3.8 SOUND VOLUME

This menu option allows you to set the Sound Volume level between one and ten. To adjust, highlight Sound Volume on the Operator Setup Menu (Fig. 3-2) and move the joystick to the left or right. Sound for the entire system can be turned off by setting the value to "OFF".

3.9 TIMERS MENU

This menu allows you to set the various timers. To adjust the various settings highlight the desired option and move the joystick left or right.



FIGURE 3-19 TIMERS MENU

3.9.1 BOOT SCREEN DISPLAY TIME

When ULTRACADE powers on it displays a boot screen and gives a software version number. This timer sets the length this screen will display.

3.9.2 EXIT GAME AFTER NO INPUT

If a game is running and no joystick or button inputs are received the game will time out to the exit menu. This sets how long the game will run without receiving any input.

3.9.3 EXIT MENU DEFAULT POSITION

The exit menu default position setting effects the exit screen which comes up when a player is exiting a game. The setting can be set to "No" or "Yes" and the arrow on the exit menu will default to the corresponding setting.



FIGURE 3-20 EXIT MENU POSITION

4. TROUBLESHOOTING

4.1 OS RE-INSTALLATION

The **ULTRACADE Operating System** comes **pre-installed** but if for any reason you need to reinstall your ULTRACADE operating system, follow these steps:

- Power ULTRACADE on.
- Open control panel and insert the system CD supplied with your ULTRACADE.
- Cycle the power (Turn off then on again).
- On reboot you will see the installation menu.
- Highlight Format and Install and select it. **Note: Do not select Upgrade Only** as this option is only for operators who wish to upgrade a previous version of ULTRACADE.
- When the install is complete open the control panel and remove the system CD.
- After the OS has been reinstalled no games will be loaded on the system. Please refer to section 4.4 ADD NEW GAMES for details on Game Pack installation.



FIGURE 4-1 INSTALLATION MENU

4.2 TECHNICAL SUPPORT

Free telephone, email and online support are provided for ULTRACADE Systems during the warranty period. In addition to helping with trouble shooting and diagnosing defective parts, technical support is prepared to help you with questions about the operation of ULTRACADE.

When you contact technical support at HyperWare, Inc. please provide the following background information to aid our technical support process:

- Your mailing address and telephone number
- A summary of the question or a description of the problem with your ULTRACADE

Technical Support is available from 9:00-5:00PST, Monday through Friday. Call 1-408-895-0331 to reach a technical support staff member. Email support is available if you email support@hyperware.com. HyperWare has online technical support resources including FAQs at <http://www.ultracade.com>.

5. SYSTEM DIAGRAMS

FIGURE 5-1 - USBLINK

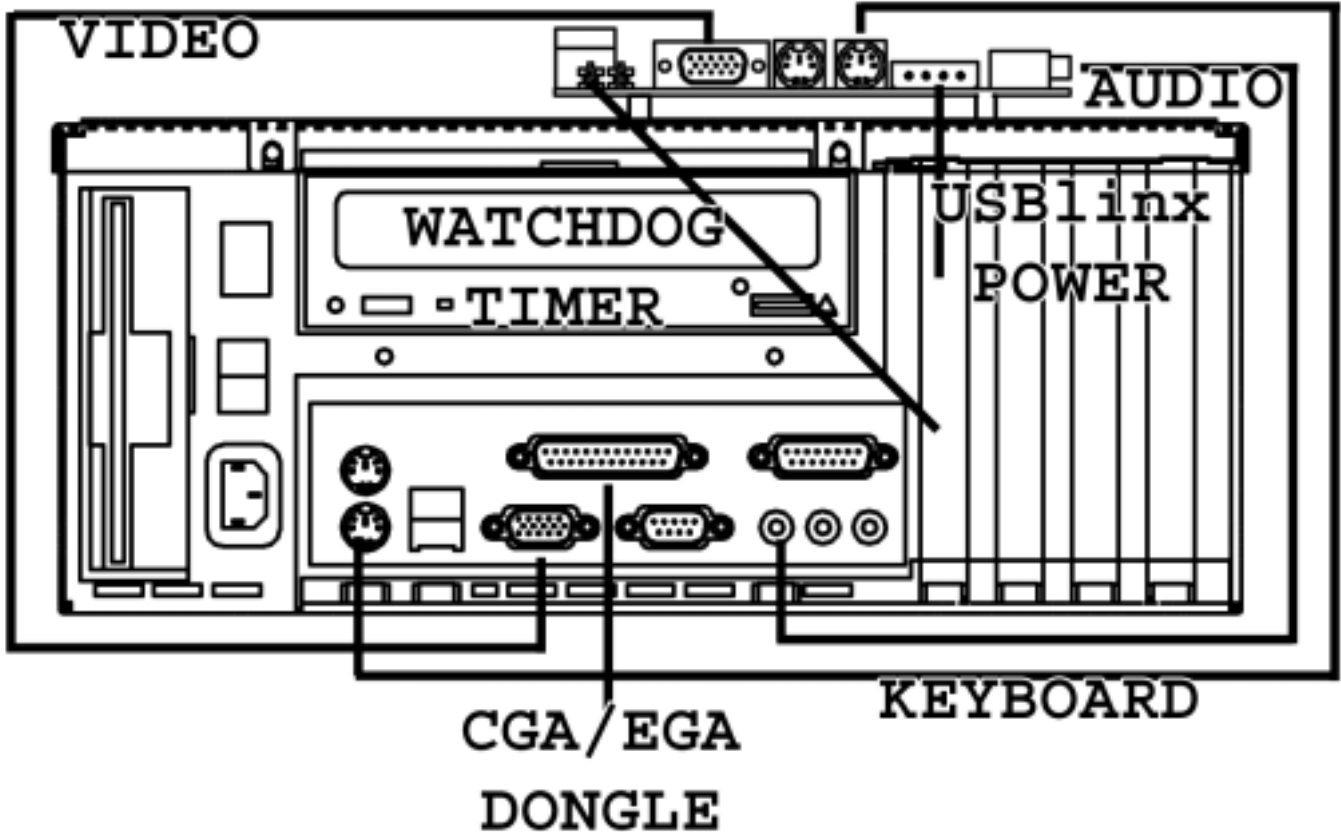
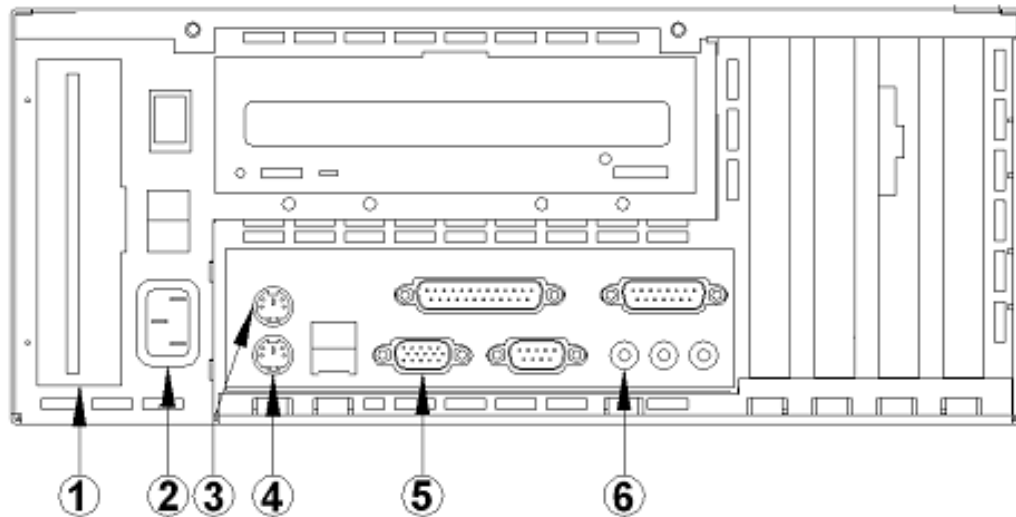


FIGURE 5-2 - GRAPHITE REAR PANEL



NUMBER	ID	DESCRIPTION
1	3.5" Floppy Drive	A: 1.44 MB
2	120V AC power	AC Power Input IEC 14
3	Mouse Port	PS2 Connector
4	Keyboard Port	PS2 Connector
5	Video Port	15 Pin Video Port
6	Audio Out	Standard Stereo Audio Port

TABLE 5-1 GRAPHITE REAR PANEL

NOTES:

NOTES:

MACHINE ID: _____

BASE PACK KEY: _____

MIDWAY #1 KEY: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____

: _____