

ADJUSTMENT, DIAGNOSTIC & AUDIT MENUS

ADJUSTMENT, DIAGNOSTIC & AUDIT MENUS

MENU SYSTEM

WHAT IS THE MENU SYSTEM?

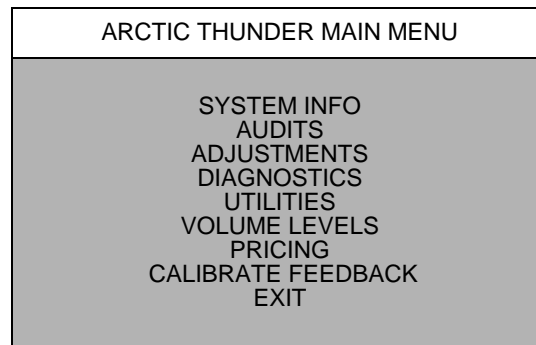
The game's Menu System is a series of auditing, game adjustments and diagnostic screens. You can easily access and apply these screens to optimize game performance. For instance...

- Use game audit screens to assess game performance.
- Use adjustment screens to help you customize game performance. For example, you can restore factory default game settings. You can also calibrate player controls for player accuracy.
- Use diagnostic screens to verify proper equipment operation.

ACCESSING THE MENU SYSTEM

Open the coin door. Locate and press the TEST button. The game system will exit game Attract Mode and enter Diagnostic Mode. The Main Menu, which is the opening screen of the Menu System, will appear.

Game audits, adjustments and diagnostics are a few examples of line items you can expect to see in the Main Menu. Selecting a line item opens its submenu, and each submenu presents at least one option that you may act upon.



TYPICAL MAIN MENU SCREEN

MENU LAYOUT

Observe that each menu screen basically uses the same layout.

- The block at the top of each screen displays the current menu title.
- Data, such as menu items and video reports, etc., appears in the center of the screen.
- Messages, for example explanations and active control functions, etc., appear at the bottom of the screen.

MENU NAVIGATION TOOLS

Use the operator control buttons located inside the coin door to navigate menus. Press the Volume Up or Volume Down button to scroll through and select menu options.

Press the Test button to select the option highlighted and access the next menu level. **NOTE:** Only one highlighted option can be selected at a time.

To return to play mode from the Main Menu, select Exit and press the Test button. To return to the Main Menu or to play mode from a submenu, select Return to Previous Menu and press the Test button. Repeat as necessary until you return to desired screen or menu.

Main Menu, continued**System Information Menu****SYSTEM INFORMATION MENU**

To verify the game's software version, reset information, or to clear reset information, select System Information Menu from the Main Menu, then press the Test button. Select and perform desired function.

SYSTEM INFORMATION MENU
SOFTWARE VERSION BACK TO PREVIOUS MENU

To return to Main Menu, select Back to Previous Menu and press the Test button.

Main Menu, continued**System Information Menu****Software Version****SOFTWARE VERSION**

To verify game software version, select System Version from the System Information Menu. Observe screen for desired information.

SOFTWARE VERSION	
ARCTIC THUNDER/SNOW.EXE	1.0.0.0
ARCTIC THUNDER/DIAGDLL.DLL	1.0.0.0
ARCTIC THUNDER/GOBJ.DLL	1.0.0.0
ARCTIC THUNDER/GOOSE.DLL	1.0.0.0
DIAGNOSTICS/DIAG.EXE	1.0.0.0
WINCSM/WINCSM.EXE	1.0.0.0
WINCSM/MAGICBUS.DLL	1.0.0.0

To return to the submenu, press the Test button; to return to the Main Menu select Back To Previous Menu and press the Test button.

Main Menu, continued**Audits Menu****AUDITS MENU**

To view a game's play statistics, select Audits Menu from the Main Menu, then press the Test button. Use the Volume buttons to scroll to desired audit item, then press the Test button. Follow on-screen instructions where necessary.

The left-hand side of an audit table displays the name of the audit item; the right-hand side shows the amount of play for that item as either a percentage, an average, or as elapsed time. *Please note*, record these statistics prior to performing any service or repairs.

Main Menu, continued
Audits Menu, continued

AUDITS MENU
GENERAL GAME AUDITS
WASHINGTON, D.C.
SWISS ALPS
CHERNOBYL
HIMALAYAN
ALASKAN PIPELINE
HAUNTED FOREST
COIN AUDITS
CREDIT AUDITS
SYSTEM AUDITS
WATCHDOG AUDITS
CLEAR ALL
BACK TO PREVIOUS MENU

To return to submenu while viewing an audit table, press the Test button; to return to the Main Menu select Back To Previous Menu and press the Test button.

Main Menu, continued
Audits Menu
General Game Audits

GENERAL GAME AUDITS

To view game audits, press the Volume Up or Volume Down button to select General Game Audits from the Audits Menu, then press the Test button. Observe screen for desired information.

GENERAL GAME AUDITS				
TOTAL UPTIME	2DAYS 09:09:11	WILLIE QUINN SELECTED	(X/X)	0.0%
TOTAL PLAYTIME	2DAYS 02:23:10	PONZO SELECTED	(X/X)	0.0%
PERCENTAGE PLAYTIME	(9/32) 25%	CANDY ICE SELECTED	(X/X)	0.0%
GAMES STARTED	32	SLED 1 SELECTED	(X/X)	0.0%
AVERAGE GAME TIME	2DAYS 01:12:15	SLED 2 SELECTED	(X/X)	0.0%
PERCENTAGE FREE GAMES	0.0%	SLED 3 SELECTED	(X/X)	0.0%
TOTAL TIME-OUT PERCENTAGE	0.0%	SLED 4 SELECTED	(X/X)	0.0%
GAME CONTINUES PERCENTAGE	(X/X) XX%	SLED 5 SELECTED	(X/X)	0.0%
INITIALS ENTERED	(X/X) XX%	SLED 6 SELECTED	(X/X)	0.0%
1 PLAYER GAME	(X/X) XX%	WASHINGTON, DC SELECTED	(X/X)	0.0%
2 PLAYER GAME	(X/X) XX%	SWISS ALPS SELECTED	(X/X)	0.0%
3 PLAYER GAME	(X/X) XX%	CHERNOBYL SELECTED	(X/X)	0.0%
4 PLAYER GAME	(X/X) XX%	HIMALAYAN SELECTED	(X/X)	0.0%
5 PLAYER GAME	0.0%	ALASKAN PIPELINE SELECTED	(X/X)	0.0%
6 PLAYER GAME	0.0%	HAUNTED FOREST SELECTED	(X/X)	0.0%
7 PLAYER GAME	0.0%	PLAYER WIPE-OUTS AVERAGE	(X/X)	0.0%
8 PLAYER GAME	0.0%	PUP BOOST AVERAGE	(X/X)	0.0%
PERCENTAGE ATTACK USED	0.0%	PUP MISSILE AVERAGE	(X/X)	0.0%
PERCENTAGE NO DRONES	0.0%	PUP SHIELD AVERAGE	(X/X)	0.0%
PERCENTAGE NO CATCH-UP	0.0%	PUP SUPER ATTACK AVERAGE	(X/X)	0.0%
DIRTY MCKURDY SELECTED	(X/X) 0.0%	PUP HEALTH AVERAGE	(X/X)	0.0%
MAI ZHOU LIN SELECTED	(X/X) 0.0%	PUP TRICK AVERAGE	(X/X)	0.0%
AGENT 5 SELECTED	(X/X) 0.0%			
RETURN CLEAR				

Main Menu, continued
Audits Menu
General Game Audits, continued

To reset audit table, select Clear located at the bottom of screen, then press the Test button. To leave table as it is, select Return located at the bottom of screen, then press the Test button. Please note, be sure to record any values prior to clearing table.

To return to the submenu, press the Test button; to return to the Main Menu select Return and press the Test button.

Main Menu, continued
Audits Menu
Washington, D.C. Audits (All track audits)

WASHINGTON, D.C. AUDITS

To observe the audits screen for any one of the featured tracks, use the Volume Up or Volume Down button to select the desired audit, then press the Test button.

Observe screen for desired information. Please note, each sled track listed in the Audit Menu contains information identical to information shown in the table below.

To reset audit table, select Clear located at the bottom of screen, then press the Test button. To leave table as it is, select Return located at the bottom of screen, then press the Test button. Please note, be sure to record any values prior to clearing table.

ARCTIC THUNDER: WASHINGTON, DC.					
TRACK SELECTED	(X/X)	0.0%	TIMED AT 90 PERCENTAGE	(X/X)	0.0%
TRACK SINGLE PLAYER	(X/X)	0.0%	TIMED AT 95 PERCENTAGE	(X/X)	0.0%
FREE GAME AWARD	(X/X)	0.0%	TIMED AT 100 PERCENTAGE	(X/X)	0.0%
TIME-OUT	(X/X)	0.0%	TIMED AT 105 PERCENTAGE	(X/X)	0.0%
PLACED 1ST	(X/X)	0.0%	TIMED AT 110 PERCENTAGE	(X/X)	0.0%
PLACED 2ND	(X/X)	0.0%	TIMED AT 115 PERCENTAGE	(X/X)	0.0%
PLACED 3RD	(X/X)	0.0%	TIMED AT 120 PERCENTAGE	(X/X)	0.0%
PLACED 4TH	(X/X)	0.0%	TIMED AT 125 PERCENTAGE	(X/X)	0.0%
PLACED 5TH	(X/X)	0.0%	TIMED AT 130 PERCENTAGE	(X/X)	0.0%
PLACED 6TH	(X/X)	0.0%	TIMED AT 135 PERCENTAGE	(X/X)	0.0%
PLACED 7TH	(X/X)	0.0%	TIMED AT 140 PERCENTAGE	(X/X)	0.0%
PLACED 8TH	(X/X)	0.0%	TIMED AT 145 PERCENTAGE	(X/X)	0.0%
RETURN CLEAR					

To return to the submenu, press the Test button; to return to the Main Menu select Return and press the Test button.

Main Menu, continued
Audits Menu
Coin Audits

COIN AUDITS

To view coin audits use the Volume Up or Volume Down button to select Coin Audits from the Audits Menu, then press the Test button. Observe screen for desired information.

To reset audit table, select Clear located at the bottom of screen, then press the Test button. To leave table as it is, select Return located at the bottom of screen, then press the Test button. Please note, be sure to record any values prior to clearing table.

COIN AUDITS	
LEFT SLOT COINS	X
RIGHT SLOT COINS	X
BILLS	X
CENTER SLOT COINS	X
EXTRA SLOT COINS	X
SERVICE CREDIT	X
TOTAL PAID CREDIT	X
TOTAL	\$X.XX
RETURN CLEAR	

To return to the submenu, press the Test button; to return to the Main Menu select Return and press the Test button.

Main Menu, continued
Audits Menu
Credit Audits

CREDIT AUDITS

To view credit audits use the Volume Up or Volume Down button to select Credit Audits from the Audits Menu, then press the Test button. Observe screen for desired information.

To reset audit table, select Clear located at the bottom of screen, then press the Test button. To leave table as it is, select Return located at the bottom of screen, then press the Test button. Please note, be sure to record any values prior to clearing table.

CREDIT AUDITS	
CREDIT AVAILABLE	X
RETURN CLEAR	

To return to the submenu, press the Test button; to return to the Main Menu select Return and press the Test button.

Main Menu, continued**Audits Menu****System Audits****SYSTEM AUDITS**

To view system audits, use the Volume Up or Volume Down button to select System Audits from the Audits Menu, then press the Test button. Observe screen for desired information.

To reset audit table, select Clear located at the bottom of screen, then press the Test button. **NOTE:** Be sure to record any values prior to clearing table. *To leave table as it is*, select Return located at the bottom of screen, then press the Test button.

SYSTEM AUDITS	
GAME STARTUPS	X
GAME RESTARTS	X
CSM STARTUPS	X
GAME NE'S	X
GAME AE'S	X
GAME IF'S	X
GAME UPTIME	X DAYS 00:00:00
SYSTEM UPTIME	X DAYS 00:00:00
RETURN CLEAR	

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Return and press the Test button.

Main Menu, continued**Audits Menu****Watchdog Audits****WATCHDOG AUDITS**

To either view or clear information about the watchdog use the Volume Up or Volume Down button to select Watchdog Audits from the Audits Menu, then press the Test button. Observe screen for desired information.

To reset audit table, select Clear located at the bottom of screen, then press the Test button. **NOTE:** Be sure to record any values prior to clearing table. *To leave table as it is*, select Return located at the bottom of screen, then press the Test button.

WATCHDOG AUDITS
VIEW WATCHDOGS
CLEAR WATCHDOGS
BACK TO PREVIOUS MENU

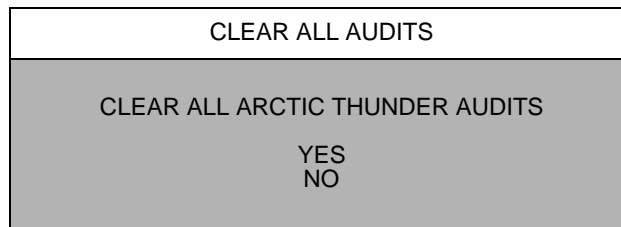
To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Return and press the Test button.



CLEAR ALL AUDITS

To clear all game audits use the Volume Up or Volume Down button to select Clear All Audits from the Audits Menu, then press the Test button.

Use the Volume buttons to select desired answer, then press the Test button. Observe a confirmation box appears on-screen to verify a selection was made.



To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

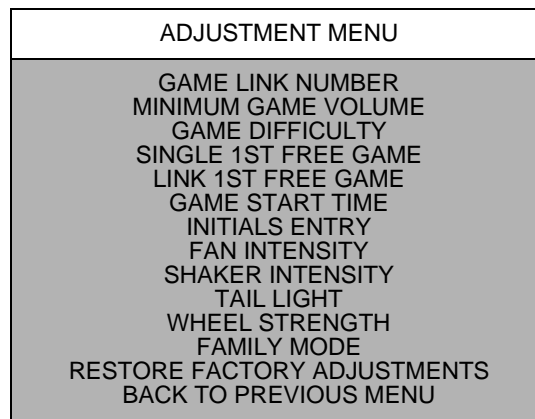


ADJUSTMENTS MENU

To optimize game performance and earnings or to change the look or sound of the game, use the Volume Up or Volume Down button to select Adjustment Menu from the Main Menu, then press the Test button.

The Adjustments Menu enables customization of Attract Mode, fan and seat shaker intensity, game difficulty, as well as a whole host of other features. *Please note*, individual Game Adjustments are explained in more detail on the following pages.

To select a menu option in Adjustments use the Volume buttons to select it, then press the Test button.



Main Menu, continued

Adjustments Menu, continued

Many line items in the Adjustments Menu provide multiple setting choices, a few of which are followed by a confirmation box as shown below to verify your selection prior to completing the request.

Be sure to read each option carefully, use the Volume buttons to select YES or NO, then press the Test button to lock in the setting. Selecting NO cancels any changed values and returns the previous values to memory.

ARE YOU SURE YOU WANT TO SELECT THIS SETTING?	
YES	NO

TYPICAL CONFIRMATION BOX

Main Menu, continued

Adjustments Menu

Game Link Number

GAME LINK NUMBER

Allows the game link number to be set. The setting range is:

- Maximum: 4
- Minimum: 1
- Factory Setting: 1**

Main Menu, continued

Adjustments Menu

Minimum Game Volume

MINIMUM GAME VOLUME

Selects the minimum allowable setting for volume. The setting range for this adjustment is:

- Minimum: 0
- Maximum: 255
- Factory Setting: 20**



GAME DIFFICULTY

Determines level of difficulty during game play. The setting range is:

- Easiest
- Easy
- Normal
- Hard
- Hardest
- No Change
- Factory Setting: Normal**



SINGLE FIRST FREE GAME

Enables the single play “free game for first place” option. The setting choices are:

- Enable (Award free game)
- Disable
- No Change
- Factory Setting: Enable**



LINKED FIRST GAME FREE

Awards free game to top player in a 2, 3, 4 or more player race. The setting choices are:

- Off (Does not award a free game in linked games)
- Must Beat All Drones (In a game with one or more linked players, a free game is only awarded if each of the drones and linked players lose)
- Two Players (In a game with at least two linked players, a free game is only awarded if the other linked player loses)
- Three Players (In a game with at least three linked players, a free game is only awarded if the other linked players lose)
- Four Players (In a game with at least four linked players, a free game is only awarded if the other linked players lose)
- No Change
- Factory Setting: Off**



GAME START TIME

Adjusts the game start time. The setting choices are:

- Minimum: 45
- Maximum: 90
- Factory Setting: 55**



INITIALS ENTRY

Enables players to enter their initials upon earning a high score, and displays high scores during attract mode. The setting range is:

- Enable
- Disable
- No Change
- Factory Setting: Disable**



FAN INTENSITY

Determines fan speed during game play. The setting range is:

- Easy
- Medium
- Hard
- Off
- No Change
- Factory Setting: Medium**



SHAKER INTENSITY

Determines shaker rate during game play. The setting range is:

- Easy
- Medium
- Hard
- Off
- No Change
- Factory Setting: Medium**

<i>Main Menu</i>
<i>Adjustments Menu</i>
Tail Light

TAIL LIGHT

Enables tail light illumination. The setting choices are:

- Enable
- Disable
- No Change
- Factory Setting: Enable**

<i>Main Menu</i>
<i>Adjustments Menu</i>
Wheel Strength

WHEEL STRENGTH

Selects degree of wheel strength to be used for racing. The setting range is:

- Very Light
- Light
- Normal
- Heavy
- Very Heavy
- No change
- Factory Setting: Very Heavy**

<i>Main Menu</i>
<i>Adjustments, continued</i>
Family Mode

FAMILY MODE

Changes appearance of female character seen on logo screen. The setting range is:

- Disable (Lewd appearance)
- Enable (Conservative appearance)
- No change
- Factory Setting: Disable**

<i>Main Menu</i>
<i>Adjustments, continued</i>
Restore Factory Adjustments

RESTORE FACTORY ADJUSTMENTS

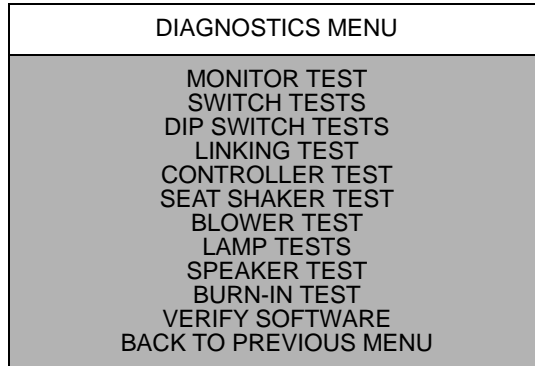
Allows operator to restore all game settings to the original factory default settings. The setting range is:

- Yes
- No
- Factory Setting: No**

Main Menu, continued**Diagnostics Menu****DIAGNOSTIC MENU**

To verify condition of the electrical and electronic hardware in the game use the Volume Up or Volume Down button to select Diagnostics Menu from the Main Menu, then press the Test button.

Diagnostic tests assist in checking and adjusting the game's major systems. It is important to periodically run diagnostics to improve and maintain game performance and player satisfaction.



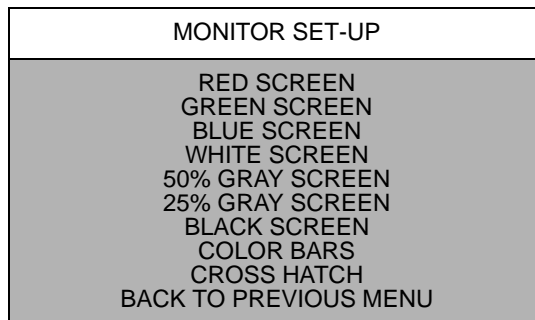
Use the Volume buttons to select desired Diagnostic Menu option, then press Test button to enter.

To return to the Main Menu select Back To Previous Menu and press the Test button.

Main Menu**Diagnostic Menu, continued****Monitor Setup****MONITOR SET-UP**

To verify color clarity of the monitor use the Volume Up or Volume Down button to select Monitor Setup at the Diagnostic Menu, then press the Test button.

Within the Monitor Set-up menu use the Volume buttons to select desired monitor setting, then press the Test button. Observe screen displays desired information and then automatically returns to the Monitor Set-Up Menu.



Main Menu
Diagnostic Menu, continued
Monitor Setup, continued

COLOR BARS. Observe 4 color bars in different shades appear on-screen as aids in adjusting the green, blue, and red color levels. Each color should appear sharp and clear. Check video brightness and contrast.

The **CROSSHATCH PATTERNS** test fills the screen with a series of dots within a grid. Observe the dots are perfectly round and that both the grid and dots are clear. Inspect monitor convergence, linearity, and screen size.

The single color screens, **RED SCREEN, BLUE SCREEN, GREEN SCREEN**, etc., fill the screen with a single color to be observed for complete saturation and clarity.

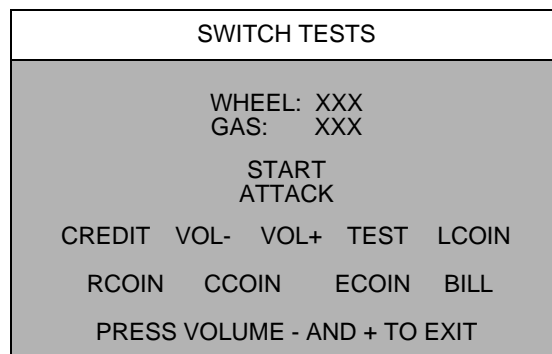
If any of the tests show a need for CRT adjustment, use the proper knobs on the Monitor Controls board.

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

Main Menu
Diagnostic Menu, continued
Switch Tests

SWITCH TESTS

To verify proper operation of game switch and button inputs use the Volume Up or Volume Down button to select Switch Test at the Diagnostic Menu, then press the Test button.



Press any switch on the control panel or coin door to cause the corresponding indicator on the screen to illuminate. Each illuminated square represents one completed switch circuit.

Press both Volume buttons simultaneously to return to the submenu; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

<p><i>Main Menu</i></p> <p><i>Diagnostic Menu, continued</i></p> <p>DIP Switch Test</p>
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DIP SWITCH TEST

To verify proper DIP switch setting use the Volume Up or Volume Down button to select DIP Switch Test at the Diagnostic Menu, then press the Test button.

The current settings will appear on-screen. The default switch position for switch one through 8 is OFF for standard operation. For information about DIP Switch settings refer to Chapter 5: Wiring.

DIP SWITCH TEST		
S2		
1	OFF	BOOT GAME
2	OFF	UNUSED
3	OFF	UNUSED
4	OFF	UNUSED
5	OFF	UNUSED
6	OFF	UNUSED
7	OFF	UNUSED
8	OFF	UNUSED
PRESS ENTER TO EXIT		

S2 DIP SWITCH SCREEN

<p><i>Main Menu</i></p> <p><i>Diagnostic Menu, continued</i></p> <p>Linking Test</p>

LINKING TEST

To verify communications between a game machine and others linked to it use the Volume Up or Volume Down button to select Linking Test at the Diagnostic Menu, then press the Test button.

LINKING TEST
<p>LINK 1: THIS GAME</p> <p>LINK 2: 0 PACKETS</p> <p>LINK 3: 0 PACKETS</p> <p>LINK 4: 0 PACKETS</p> <p>RETURN TO PREVIOUS MENU</p>

This diagnostic runs automatically and will display results on-screen.

To return to the submenu, select Return to Previous Menu and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

Main Menu
Diagnostic Menu, continued
Controller Test

CONTROLLER TEST

To verify the proper directional movement of the controller assembly use the Volume Up or Volume Down button to select Controller Test at the Diagnostic Menu, then press the Test button.

Please note, avoid contact with controller assembly when conducting any of the controller tests because the controller automatically turns on its own.

Use the Volume buttons to select desired controller test option, then press Test button to enter.

CONTROLLER TEST
CALIBRATE FEEDBACK CONTROLLER CENTER CONTROLLER LEFT CONTROLLER RIGHT CONTROLLER INFO BURN-IN TEST RETURN TO PREVIOUS MENU

Observe and follow the on-screen instructions when conducting a test. A message will appear on-screen to indicate a completed test. Press the Test or Start button to exit test once this message appears.

CALIBRATE FEEDBACK performs a complete calibration sequence which turns the controller to the left, center, and to the right at a variety of speeds. This is the most complete test for the controller.

The **CONTROLLER CENTER, CONTROLLER LEFT, AND CONTROLLER RIGHT** are individual controller tests and will perform only the test specified by the name.

The **CONTROLLER INFO** test does not automatically turn the controller and requires operator input to complete the test.

BURN-IN TEST performs the same tests as the Calibrate Feedback option, except it does so in a complete, uninterrupted cycle. To exit this test mode the game machine must be powered off.

Main Menu
Diagnostic Menu, continued
Seat Shaker Test

SEAT SHAKER TEST

To verify the proper functionality of the shaker assembly use the Volume Up or Volume Down button to select Seat Shaker Test at the Diagnostic Menu, then press the Test button.

Use the Volume buttons to select desired shaker test, then press the Test button. *Please note*, the seat shaker is immediately and automatically engaged once the Test button is pressed.

<i>Main Menu</i>
<i>Diagnostic Menu, continued</i>
Seat Shaker Test, continued

SEAT SHAKER TEST
SHAKER ON BURN-IN RETURN

The **SHAKER ON** test performs a complete shaker vibration sequence at a variety of speeds. This is the most complete test for the seat shaker. Observe seat vibration.

The **BURN-IN TEST** performs the same tests as the Shaker On option, except it does so in a complete, uninterrupted cycle. To exit this test mode the game machine must be powered off. Observe seat vibration.

To end seat shaker test, press the Test button. To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

<i>Main Menu</i>
<i>Diagnostic Menu, continued</i>
Blower Test

BLOWER TEST

To verify the proper functionality of the fan assembly use the Volume Up or Volume Down button to select Blower Test at the Diagnostic Menu, then press the Test button.

Use the Volume buttons to select desired blower test, then press the Test button. The fan blower is immediately and automatically engaged once the Test button is pressed.

BLOWER TEST
BLOWER ON BURN-IN RETURN

BLOWER ON performs a complete blower sequence at a variety of speeds. This is the most complete test of the blower. Observe breeze emitted from fan blower located in the center of the back-lit marquee.

BURN-IN TEST performs the same tests as the Blower On test option, except it does so in a complete, uninterrupted cycle. To exit this test mode the game machine must be powered off. Observe breeze emitted from fan blower located in the center of the back-lit marquee.

To end fan blower test, press the Test button. To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

<i>Main Menu</i>
<i>Diagnostic Menu, continued</i>
Lamp Test

LAMP TEST

To detect intermittent or faulty incandescent bulbs use the Volume Up or Volume Down button to select LAMP TEST at the Diagnostic Menu. This test ensures that the incandescent bulbs critical to game operation function properly.

LAMP TEST
CYCLE ALL ON BURN-IN RETURN

Use the Volume Up or Volume Down button to select desired Lamp Test and press the Test button. During the test observe the Lamp(s) turn ON according to the option selected.

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

<i>Main Menu</i>
<i>Diagnostic Menu, continued</i>
Speaker Test

SPEAKER TEST

To verify the proper functionality of the speaker assemblies use the Volume Up or Volume Down button to select Speaker Test at the Diagnostic Menu, then press the Test button.

SPEAKER TEST
RIGHT CHANNEL LEFT CHANNEL 1 KHZ SOUND 100HZ SOUND PLAY TUNE RETURN

RIGHT CHANNEL. Tests the functionality of the speaker located on the right-hand side of the game cabinet by emitting an audible voicing of the word “right.”

LEFT CHANNEL. Tests the functionality of the speaker located on the left-hand side of the game cabinet by emitting an audible voicing of the word “left.”

The **1KHz** and **100Hz Sound** tests are audible tones emitted from both speakers on the game cabinet.

Play Tune test option emits audible music from the game using both speakers on the game cabinet.

Main Menu

Diagnostic Menu, continued

Burn-In Tests

BURN-IN TESTS

To properly diagnose intermittent problems with linking, steering, speakers, lamps, the seat shaker, or blower use the Volume Up or Volume Down button to select Burn-In Test at the Diagnostic Menu, then press the Test button. Select the desired test from the Burn-In Test menu.

A Burn-In test cycles non-stop through while diagnosing a problem. If an error is detected the Burn-In Test will stop and an error message will display on-screen.

Inputs from the control buttons are ignored during Burn-In. The Burn-In Test cannot be halted from the menus. To halt the test, switch off power to the game machine and then reboot game machine.

Main Menu

Diagnostic Menu, continued

Verify Software

VERIFY SOFTWARE

To perform software verification use the Volume Up or Volume Down button to select Verify Software at the Diagnostic Menu, then press the Test button.

The test diagnostic will automatically check the software in the span of a few minutes and then report the outcome as pass or fail. Observe screen for test results.

To return to the submenu, press any button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

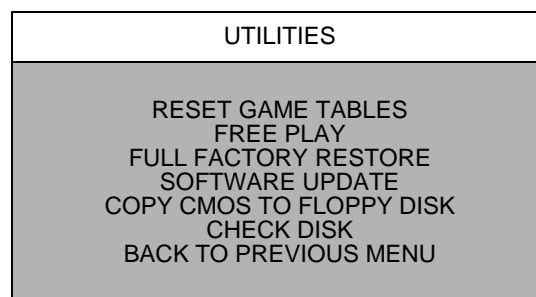
Main Menu

Utilities

UTILITIES

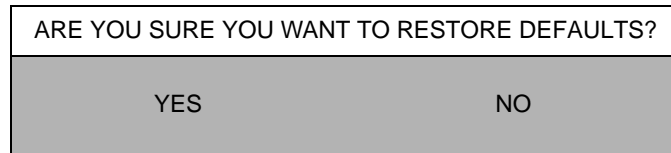
To make adjustments to a variety of bookkeeping memory banks use the Volume Up or Volume Down button to select Utilities from the Main Menu, then press the Test button.

To select desired Utilities option use the Volume Up or Volume Down button, then press the Test button.





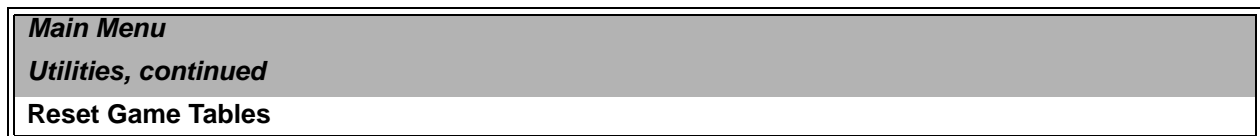
Several options under Utilities offer multiple setting choices in which you must select a value. Use the Volume buttons to change the value setting and observe a confirmation box as shown appears.



TYPICAL CONFIRMATION BOX

Press the Volume Up or Volume Down button to select YES or NO, then press the Test button to lock in the setting. Selecting NO cancels any changed values and returns the previous values to memory.

To return to the Main Menu select Back To Previous Menu and press the Test button.



RESET GAME TABLES

To reset game data --for example high scores-- use the Volume Up or Volume Down button to select Reset Game Tables at the Utilities screen, then press the Test button.

Use the Volume buttons to select desired function, then press the Test button.

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.



FREE PLAY

To adjust free play --which does not require credits or tokens for game play-- use the Volume Up or Volume Down button to select Free Play at the Utilities screen. Use the Volume buttons to select desired function, then press the Test button. The setting range is:

- Disable
- Enable
- No change
- Factory Setting: **Disable**

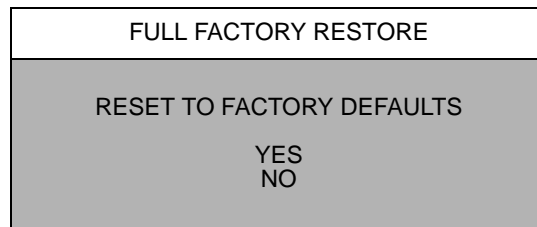
To return to the Main Menu scroll to Back To Previous Menu and press the Test button.



FULL FACTORY RESTORE

To return all game variables to the original factory setting use the Volume Up or Volume Down button to select Full Factory Restore from the Utilities screen, then press the Test button.

Use the Volume Up or Volume Down button to select desired answer, then press the Test button to complete selection. Observe a confirmation box appears on-screen to verify a selection was made.



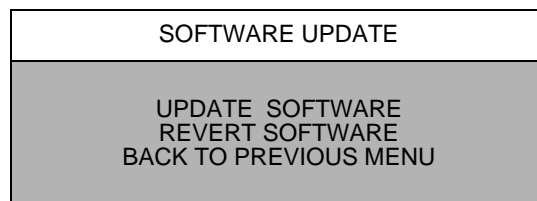
To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.



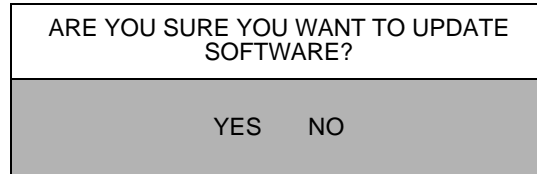
SOFTWARE UPDATE

To aid installation of software use the Volume Up or Volume Down button to select Software Update at the Utilities screen, then press the Test button.

This option aids the process of either updating game software to the latest version or reverting to the previous version, if desired. Please note



Either Software Update option offers multiple setting choices in which you must select a value. Use the Volume buttons to change the value setting and observe a confirmation box as shown on the next page appears.



Press the Volume Up or Volume Down button to select YES or NO, then press the Test button to lock in the setting. Selecting NO cancels any changed values and returns the previous values to memory.

Follow on-screen instructions to complete version selection. *Please note*, software update option exits the game Diagnostic menus.



COPY CMOS TO FLOPPY DISK

To copy the system CMOS file onto a floppy disk use the Volume Up or Volume Down button to select Copy CMOS To Floppy Disk at the Utilities screen, then press the Test button.

Follow on-screen instructions to complete selection. To return to the Main Menu scroll to Back To Previous Menu and press the Test button.



CHECK DISK

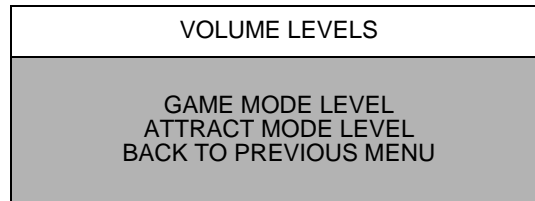
To check integrity of the disk use the Volume Up or Volume Down button to select Check Disk at the Utilities screen, then press the Test button to enter.

Follow on-screen instructions to complete selection. *Please note*, this option will cause the game machine to reboot.

Main Menu**Volume Levels****VOLUME LEVELS**

To select a desirable volume level use the Volume Up or Volume Down button to select Volume Level from the Main Menu, then press the Test button.

Remember that the minimum sound level is set by using the Adjustments Menu.

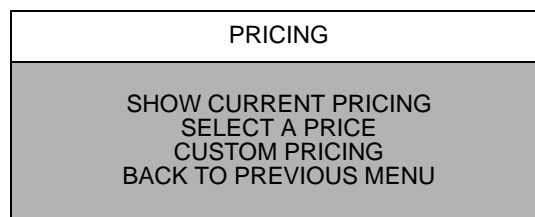


Press the Volume Up button to increase sound level or the Volume Down button to decrease the sound level of the game. Press the Test button to lock the volume level at the selected value.

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

Main Menu**Pricing****PRICING**

Use Pricing to specify pricing settings other than the ones listed in the Pricing Table, to select the amount of credits required to start a game, and the amount of credits required to continue a game. Use the Volume Up or Volume Down button to select Pricing from the Main Menu, then press the Test button.



Use the Volume Up or Volume Down button to select desired selection, then press the Test button.

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.



SHOW CURRENT PRICING

Use the Show Current Pricing option to view the pricing options currently selected for game play. Remember pricing is used to select the amount of credits required to start a game, as well as to continue a game.

Press the Test button to return to main pricing menu; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.



SELECT A PRICE MENU

Use the Select a Price Menu to select preset price settings on a continental, or country by country basis, as outlined in the Pricing Table that follows.

Pricing can also be used to select the amount of credits required to start a game and the amount of credits required to continue a game.

Use the Volume buttons to select country, then press the Test button. Use the Volume buttons to further navigate selections listed within a desired country. Press the Test button to save selection.

CONTINENTAL PRICING TABLE
ASIA
AUSTRALIA
CUSTOM
EUROPE A - H
EUROPE I - Z
NORTH AMERICA
SOUTH AMERICA
BACK TO PREVIOUS MENU

To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.

Pricing Table

Use the Pricing Table illustrated below as a guide to select and/or verify the desired coin credit setting(s).

NAME	START	CONTINUE	CREDITS/COIN	COIN 1	COIN 2	COIN 3	COIN4	BILL
ANTILLES	2	2	1/25¢, 4/1G	.25¢	1G			
AUSTRALIA 1	2	2	1/3X20¢, 2/\$1.00	.20¢	\$1.00			
AUSTRALIA 2	1	1	1/5X20¢, 1/\$1.00	.20¢	\$1.00			
AUSTRIA 1	2	2	1/5Sch, 2/10Sch	5 Sch	10 Sch			
AUSTRIA 2	2	2	1/2X5Sch, 3/2X10Sch	5 Sch	10 Sch			
BELGIUM 1	2	2	1/20BF	20BF	20BF			
BELGIUM 2	2	2	3/20BF	20BF	20BF			
BELGIUM 3	2	2	2/20BF	20BF	20BF			
BELGIUM ECA	2	2	1/20BF	5BF	20BF	50BF		
CANADA 1	2	2	1 / 2 x 25¢, 3 / \$1	25¢	25¢			
CANADA 2	2	2	1 / 2 x 25¢, 3 / \$1	25¢	\$1.00			
CANADA 3	2	2	3 / \$1.00, 6 / \$2.00	\$1.00	\$2.00			
CANADA ECA	2	2	1 / 2 x 25¢, 3 / \$1	25¢		\$1.00	\$2.00	
DENMARK	2	2	3/5DKr, 7/10DKr	5DKr	10DKr			
FINLAND	2	2	1/1Fmk	1Fmk	5Fmk			
FRANCE 1	2	2	2/5Fr, 5/10Fr	5Fr	10Fr			
FRANCE 2	2	1	2/5Fr, 4/10Fr	5Fr	10Fr			
FRANCE 3	2	1	1/5Fr, 3/10Fr	5Fr	10Fr			
FRANCE 4	2	1	1/5Fr, 2/10Fr	5Fr	10Fr			
FRANCE 5	2	1	2/5Fr, 5/10Fr, 11/2 X 10Fr	5Fr	10Fr			
FRANCE 6	2	1	2/5Fr, 4/10Fr, 9/2 X 10Fr	5Fr	10Fr			
FRANCE 7	2	1	1/5Fr, 3/10Fr, 7/2 X 10Fr	5Fr	10Fr			
FRANCE 8	2	1	1/5Fr, 2/10Fr, 5/2 X 10Fr	5Fr	10Fr			
FRANCE 9	2	1	1/3 X 1Fr, 2/5Fr	1Fr	5Fr			
FRANCE 10	2	1	1/2 X 1Fr, 3/5Fr	1Fr	5Fr			
FRANCE 11	2	1	1/3 X 1Fr, 2/5Fr, 5/2 X 5Fr	1Fr	5Fr			
FRANCE 12	2	1	1/2 X 1Fr, 3/5Fr, 7/2 X 5Fr	1Fr	5Fr			
FRANCE ECA 1	1	1	2/5Fr, 5/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 2	1	1	2/5Fr, 4/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 3	1	1	1/5Fr, 3/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 4	1	1	1/5Fr, 2/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 5	1	1	2/5Fr, 5/10Fr, 11/20Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 6	1	1	2/5Fr, 4/10Fr, 9/20Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 7	1	1	1/5Fr, 3/10Fr, 7/20Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 8	1	1	1/5Fr, 2/10Fr, 5/20Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 9	1	1	1/3 X 1Fr, 2/5Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 10	1	1	1/2 X 1Fr, 3/5Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 11	1	1	1/3 X 1Fr, 2/5Fr, 5/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 12	1	1	1/3 X 1Fr, 3/5Fr, 7/10Fr	1Fr	5Fr	10Fr	20Fr	
FRANCE ECA 13	1	1	1/10Fr, 2/20Fr, 4/30Fr	1Fr	5Fr	10Fr	20Fr	
FREE PLAY	--	--	--	None	None	None	None	None
GERMANY 1	2	2	1/1DM, 6/5DM	1DM	5DM			
GERMANY 2	2	1	1/1DM, 7/5DM	1DM	5DM			
GERMANY 3	2	1	1/1DM, 8/5DM	1DM	5DM			
GERMANY 4	2	1	1/1DM, 5/5DM	1DM	5DM			
GERMANY 5	2	1	1/1DM, 6/5DM	1DM	5DM			
GERMANY ECA 1	2	2	1/1DM, 2/2DM, 6/5DM	1DM	2DM	5DM		

CHAPTER 2 DIAGNOSTICS

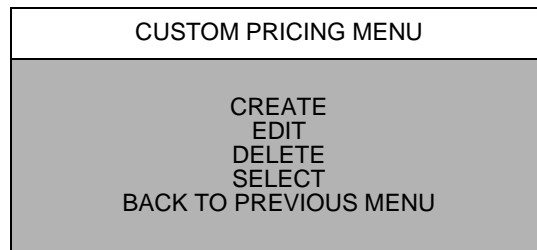
NAME	START	CONTINUE	CREDITS/COIN	COIN 1	COIN 2	COIN 3	COIN4	BILL
GERMANY ECA 2	2	1	1/1DM, 2/2DM, 6/5DM	1DM	2DM	5DM		
GERMANY ECA 3	1	1	1/1DM, 2/2DM, 6/5DM	1DM	2DM	5DM		
HUNGARY	2	2	1/2X10Ft, 3/2X20Ft	10Ft	20Ft			
ITALY	2	2	1/500Lit	500Lit	500Lit			
JAPAN 1	2	2	1/100Yen	100 Yen	100 Yen			
JAPAN 2	2	2	2/100Yen	100 Yen	100 Yen			
JAPAN 3	1	1	1/100Yen	100	100			
JAPAN 4	1	1	2/100Yen	100	100			
JAPAN 5	1	1	4/100Yen	100	100			
JAPAN 6	1	1	1/2X100Yen	100	100			
NETHERLANDS	2	2	1/1HFI, 3/2.5HFI	1HFI	2.5HFI			
NEW ZEALAND 1	1	1	1/\$1	\$1	\$2			
NEW ZEALAND 2	1	1	2/\$1	\$1	\$2			
NORWAY	2	2	3/5Nkr, 6/10Nkr	5Nkr	10Nkr			
SPAIN 1	2	2	1/100Pta, 6/500Pta	100Pta	500Pta			
SPAIN 2	2	2	1/100Pta, 5/500Pta	100Pta	500Pta			
SWEDEN	2	2	1/3X1SKr, 2/5SKr	1SKr	5SKr			
SWITZERLAND 1	2	2	1/1SFr, 6/5SFr	1SFr	5SFr			
SWITZERLAND 2	2	2	1/1SFr, 7/5SFr	1SFr	5SFr			
SWITZERLAND 3	2	2	1/1SFr, 8/5SFr	1SFr	5SFr			
UK ECA 1	1	1	1/50p, 3/£1.00, 6/£2.00	£1.00	50p	20p	10p	£2.00
UK ECA 2	1	1	1/50p, 2/£1.00, 4/£2.00	£1.00	50p	20p	10p	£2.00
UK ECA 3	1	1	1/30p, 2/50p, 5/£1.00	£1.00	50p	20p	10p	£2.00
UK 4	1	1	1/50p, 3/£1.00	£1.00	50p			
UK 5	1	1	1/50p, 2/£1.00	£1.00	50p			
UK ECA 6	1	1	1/30p, 2/50p, 4/£1.00	£1.00	50p	20p	10p	£2.00
UK ECA 7	1	1	3/£1.00	£1.00	50p	20p	10p	£2.00
UK ECA 8	1	1	1/50p, 2/£1.00, 4/£2.00	£1.00	50p	20p	10p	£2.00
USA1	2	2	1/25¢	25¢	25¢			\$1.00
USA2	2	1	1/25¢	25¢	25¢			\$1.00
USA3	1	1	1/25¢	25¢	25¢			\$1.00
USA4	1	1	1/50¢, 3/\$1.00	25¢	25¢			\$1.00
USA5	2	1	1/50¢, 4/\$1.00	25¢	25¢			\$1.00
USA6	1	1	1/50¢	25¢	25¢			\$1.00
USA7	1	1	1/50¢, 3/\$1.00	25¢	25¢			\$1.00
USA8	2	2	1/50¢	25¢	25¢			\$1.00
USA9	3	2	1/25¢	25¢	25¢			\$1.00
USA10	3	3	1/25¢	25¢	25¢			\$1.00
USA11	4	2	1/25¢	25¢	25¢			\$1.00
USA12	4	3	1/25¢	25¢	25¢			\$1.00
USA13	4	4	1/25¢	25¢	25¢			\$1.00
USA ECA	2	2	1/25¢, 4/\$1.00	\$1.00	25¢	10¢	05¢	\$1.00
USA DC 1	2	2	1/25¢	25¢	\$1.00			\$1.00
USA DC 2	2	1	1/25¢	25¢	\$1.00			\$1.00
USA DC 3	1	1	1/25¢	25¢	\$1.00			\$1.00
USA DC 4	3	2	1/25¢	25¢	\$1.00			\$1.00
USA DC 5	3	3	1/25¢	25¢	\$1.00			\$1.00
USA DC 6	4	2	1/25¢	25¢	\$1.00			\$1.00
USA DC 7	4	3	1/25¢	25¢	\$1.00			\$1.00
USA DC 8	4	4	1/25¢	25¢	\$1.00			\$1.00



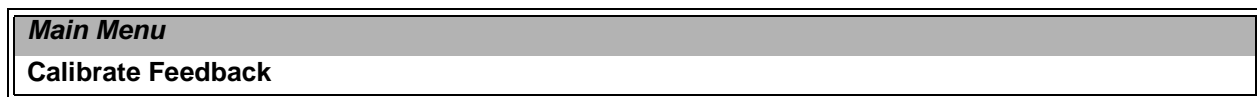
CUSTOM PRICE MENU

Use the Custom Pricing Menu to create, edit, delete, or select a desired price setting other than one listed in the Select a Price menu option and the Pricing Table. Use the Volume Up or Volume Down button to select Custom Pricing Menu from the Main Menu, then press the Test button.

Use the Volume buttons to make desired selection, then press the Test button. Use the Volume buttons to further navigate selections. Press the Test button to save selection.



To return to the submenu, select Return and press the Test button; to return to the Main Menu scroll to Back To Previous Menu and press the Test button.



CALIBRATE FEEDBACK

To calibrate controller assembly use the Volume Up or Volume Down button to select Calibrate Feedback from the Main Menu. This test performs a complete calibration sequence by turning the controller to the left, the center, and to the right at varying speeds.

Feedback diagnostic test is the most complete test for the controller. *Please note*, keep hands and other objects clear of controller assembly during the calibration sequence because the controller automatically turns on its own.

Use the Volume Up or Volume Down button to select Calibrate Feedback then press the Test button.

Observe and follow the on-screen instructions when conducting a test. Upon test completion, a message indicating a completed test appears on-screen. Press the Test or Start button to exit test once this message appears.

NOTES