# SPORTSTATION™

# DIAGNOSTIC, AUDIT & ADJUSTMENT MENU SYSTEM
## FOR *NBA SHOWTIME* GAMES

| | |
|---|---|
| 👉 | **NOTICE:** Information in this manual is subject to change without notice. Midway reserves the right to make improvements in equipment as progress in engineering warrants. |
| 👉 | **NOTICE: GAME-SELECTION SWITCH.** Select *NBA Showtime* or *NFL Blitz 2000 Gold Edition* by flipping switch 8 at DIP bank U13. Then power down and up again. The Attract Mode for the game you select will appear. *The player can still play either game.* |

# MENU SYSTEM

## WHAT IS THE MENU SYSTEM?

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

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

## ACTIVATING THE MENU SYSTEM

Open the coin door. Find the TEST MODE switch inside. Press TEST MODE to invoke the Menu System. The game system responds by exiting Game Mode and entering Diagnostic Mode.
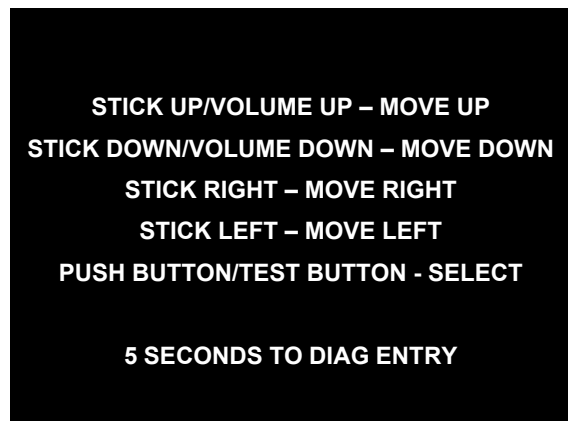
### AUTOMATIC TESTS

In Diagnostic Mode, the Power-On Self-Test (POST) activates. This routine runs automatically. It can detect faults that cause game or Menu System malfunctions. POST usually takes less than a minute. The test doesn't display anything. Instead, the system boot loader indicates the software revision number and serial numbers. The system boot loader also displays a sound-loading message and other useful information.

At the end of POST, the system displays the Control Functions Menu.

## CONTROL FUNCTIONS

The Control Functions Menu is purely informational. It appears for five seconds. Then the Menu System automatically displays the Dual Game Adjustment Menu.

The Control Functions Menu introduces the menu navigation controls. The key point is that you can use either player or diagnostic controls to navigate menus. Diagnostic control switches are particularly helpful when you must troubleshoot player switches. This manual discusses the controls in more detail in this chapter's *Main Menu* section. Also see the page on the menu that interests you.

```
STICK UP/VOLUME UP – MOVE UP
STICK DOWN/VOLUME DOWN – MOVE DOWN
STICK RIGHT – MOVE RIGHT
STICK LEFT – MOVE LEFT
PUSH BUTTON/TEST BUTTON - SELECT


5 SECONDS TO DIAG ENTRY
```

**CONTROL FUNCTIONS MENU**

## DUAL GAME ADJUSTMENT MENU

The Dual Game Adjustment Menu is another informational, read-only menu. It appears until you choose to exit. This menu reminds you that some *NFL* settings also affect *NBA* game play. Press any button to exit to the Main Menu.

```
                    ATTENTION!
    ─────────────────────────────────────

    ANY CHANGES TO THE FOLLOWING ADJUSTMENTS
         UPDATE BOTH NBA AND NFL
                 PRICING
                FREE PLAY
              VOLUME LEVEL
         DISCOUNT PRICE / CREDITS
        ATTRACT MODE SOUND ON / OFF


    THIS ALSO INCLUDES DEFAULT ADJUSTMENTS
                   AND
        FULL FACTORY RESTORE FUNCTIONS.
    ┌─────────────────────────────────────┐
    │     PRESS ANY BUTTON TO EXIT.        │
    └─────────────────────────────────────┘
```
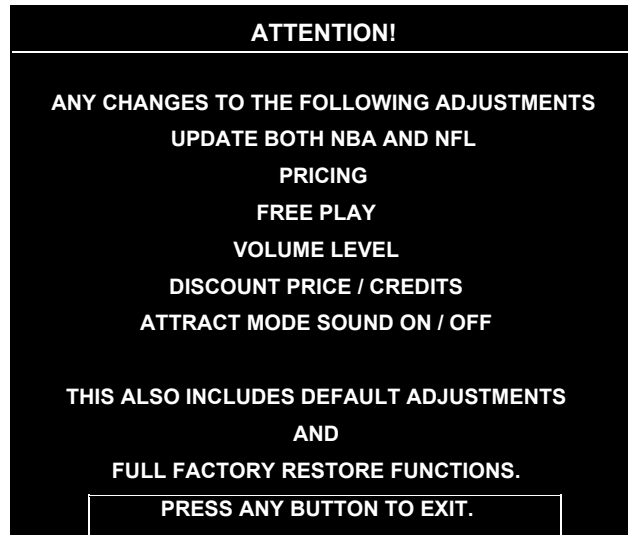
**DUAL GAME ADJUSTMENT MENU**

## MAIN MENU

The Main Menu offers you access to the game machine's test, bookkeeping and programmable features. Game audits, adjustments and diagnostics are line items on the Main Menu. Selecting an item opens its submenu. Every submenu presents various options that you may act upon.

```
              NBA MAIN MENU
    ─────────────────────────────────

              DIAGNOSTICS
                AUDITS
              ADJUSTMENTS
             VOLUME LEVEL
          ATTRACT VOLUME LEVEL
               UTILITIES
            NFL MAIN MENU
             EXIT TO NFL
             EXIT TO NBA
```

**MAIN MENU**

### MENU LAYOUT

Menus differ, but related information tends to occupy the same screen locations.
* The block at the top, center of each screen displays the current menu title.
* Data (menu items, video signals, statistics, reports, etc.) appears in the center of the screen.
* Messages (explanations, control functions, revision levels) display at the bottom of the screen.

### MENU NAVIGATION CONTROLS

Use any player panel joystick to highlight a desired menu item. *You can only select one highlighted item at a time.* To select a highlighted item, press any player panel button. Operator control buttons inside the coin door serve as backup menu navigation controls. Press VOLUME UP or VOLUME DOWN buttons to highlight a menu item. Press TEST MODE to select a highlighted item.

### EXIT OPTIONS

To exit the NBA menus and simultaneously enter the NFL menus, choose NFL MAIN MENU. To return the game to play, highlight either EXIT TO NFL or EXIT TO NBA. Your choice determines the game that will boot. Next, press any button.
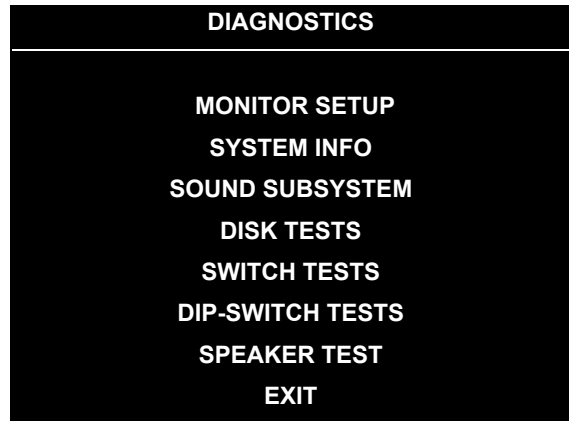
# DIAGNOSTICS MENU

Select DIAGNOSTICS at the Main Menu. Diagnostic tests allow you to verify the condition of the electrical and electronic hardware in the game.

Highlight a test with any player panel joystick. Select the option with any player panel button.

```
                    DIAGNOSTICS


               MONITOR SETUP
               SYSTEM INFO
             SOUND SUBSYSTEM
                 DISK TESTS
                SWITCH TESTS
             DIP-SWITCH TESTS
                SPEAKER TEST
                    EXIT
```

**DIAGNOSTICS MENU**

Diagnostic tests assist you in checking and adjusting the game's major systems. By running diagnostics, you can gain an insight into both system hardware and game software. Periodically running diagnostics is a crucial part of maintaining game performance and player satisfaction. Sometimes you can improve game performance by running a diagnostic test and making appropriate adjustments.
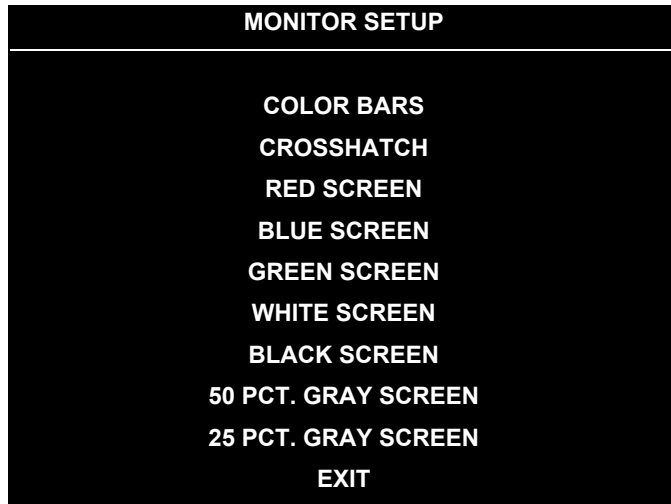
## MONITOR SETUP MENU

Select MONITOR SETUP at the Diagnostics Menu. The Monitor Patterns routine provides test screens to verify monitor performance or make adjustments.

If tests indicate a need for adjustment, use controls on the Monitor Remote Adjustment Board.

Highlight an option with any player panel joystick. Select the option with any player panel button.

```
                    MONITOR SETUP
    ───────────────────────────────────────

                    COLOR BARS
                    CROSSHATCH
                    RED SCREEN
                    BLUE SCREEN
                    GREEN SCREEN
                    WHITE SCREEN
                    BLACK SCREEN
                50 PCT. GRAY SCREEN
                25 PCT. GRAY SCREEN
                        EXIT
```

**MONITOR SETUP MENU**

**Color Bars** fills the screen with colored stripes. Use the color bars to help you to check or adjust monitor brightness and contrast. The color bars also expose defects in horizontal linearity. Each color bar consists of 32 intensity levels. On a properly adjusted monitor, the top 31 of these levels are visible. Each bar should appear sharp, clear and distinct from bars on either side. Incorrect adjustment can cause missing detail at the top or bottom of a bar. Bent bars indicate horizontal linearity flaws, such as pie crust, pincushion or barrel distortion. *(Correct color bar colors, left to right: Red, Green, Blue, Black, White, Cyan, Yellow, Violet.)* Set controls as follows: 1. Adjust BRIGHTNESS and CONTRAST to minimum. 2. Turn up BRIGHTNESS until the pixels in the black stripe begin to glow (turn dark gray). 3. Bring up the CONTRAST control until you can see 31 bars.

**Crosshatch Patterns** fill the screen with a grid and a series of dots. Crosshatch Patterns help you to check or adjust several monitor parameters: These include convergence, linearity, active viewing area and dynamic focus. The grid and the dots should be all white in color, with no fringes or parallel images. The lines should be straight and the dots round. For more detail on these adjustments, consult service piterature from the monitor manufacturer.

**Color Screen** tests fill the screen with 100% of the chosen color at normal intensity. The Color Screen tests help you to check or adjust monitor intensity, black level, blanking and color purity. Each screen should be absolutely uniform from top to bottom and side to side. No retrace lines or noise should be visible. Color Screens may not hold their uniformity if the monitor degaussing circuit is defective.

**White, Gray and Black Screens** fill the screen with black, gray or white at various intensities. These monochrome screens help you to check or adjust monitor convergence, purity, contrast and intensity. These screens also simplify black level and color gun control settings. The screens should be uniform with no color tints or distortion. No retrace lines or noise should be visible.
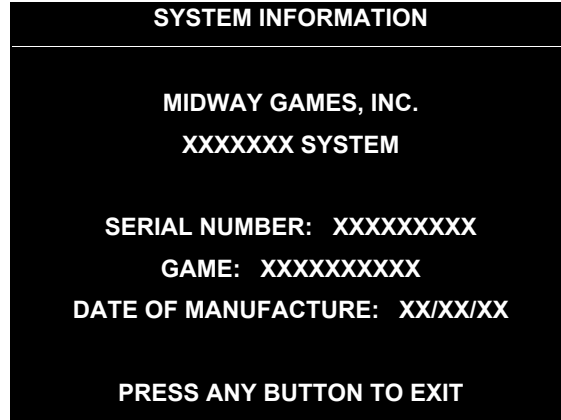
4-6

| Main Menu *(continued)* |
| Diagnostics Menu *(continued)* |
| System Information Screen |

**SYSTEM INFORMATION SCREEN**

Select SYSTEM INFO at the Diagnostics Menu. The System Information Screen provides the current version numbers of this game's hardware and software. Use these numbers to describe the system during parts replacement, service calls, etc.

```
        SYSTEM INFORMATION
   _____


           MIDWAY GAMES, INC.
           XXXXXXX SYSTEM


      SERIAL NUMBER:  XXXXXXXXX
          GAME:  XXXXXXXXXX
    DATE OF MANUFACTURE:  XX/XX/XX


        PRESS ANY BUTTON TO EXIT
```

**SYSTEM INFORMATION MENU**

The System Information screen reports information, but doesn't permit you to make changes. The Title line identifies the manufacturer of this game and the electronic board set used in this product. The Serial Number, Game and Date of Manufacture identify the game name and production run.

## SOUND SUBSYSTEM TEST

Select SOUND SUBSYSTEM at the Diagnostics Menu. Sound Subsystem Tests verify that audio components are connected and operate properly.

Highlight an option with any player panel joystick. Select the option with any player panel button.

```
             SOUND SUBSYSTEM TEST
         ────────────────────────────

           BOOT VERSION:  XX.XX
           SDRC VERSION:  XX.XX
           PORT STATUS:  GOOD
             CHECKSUM:  XXXX
                 SRAM:  OK
                 DRAM:  OK
           TONE STATUS:  GOOD
            OS VERSION:  XX.XX


           PRESS ANY BUTTON TO EXIT
```
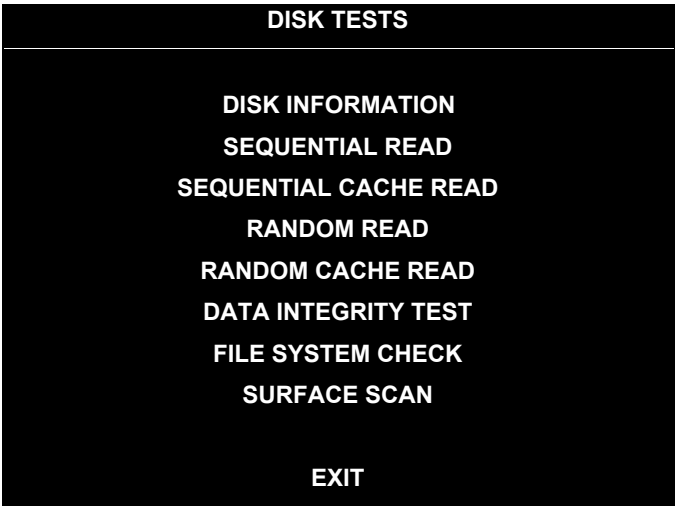
**SOUND SUBSYSTEM TEST MENU**

**Version, Status, Checksum and RAM Reports** are diagnostic routines. These routines analyze the digital sound circuits and can detect sound memory problems. Test results appear as numbers or messages. Sounds may also accompany some tests. Reports other than GOOD or OK indicate a problem.

## DISK TESTS MENU

Select DISK TESTS at the Diagnostics Menu. Disk Tests allow you to verify proper operation of the hard disk drive assembly.

Highlight an option with any player panel joystick. Select the option with any player panel button.

```
                    DISK TESTS
────────────────────────────────────────────

                 DISK INFORMATION
                 SEQUENTIAL READ
              SEQUENTIAL CACHE READ
                  RANDOM READ
               RANDOM CACHE READ
               DATA INTEGRITY TEST
                FILE SYSTEM CHECK
                  SURFACE SCAN


                      EXIT
```

**DISK TESTS MENU**

**Disk Information.** The Disk Information routine verifies the interface between the CPU Board Assembly and hard disk drive. The processor requests disk information. Data cannot be retrieved successfully if there is a problem.

**Sequential Read.** This routine tries to access every bit of data in the order it is stored directly on the disk. The hard disk drive media may be defective if this routine cannot be completed successfully.

**Sequential Cache Read.** This routine tries to access every bit of data in the order it is stored in the temporary disk memory cache. If this test is not successful, the memory circuits may be faulty.

**Random Read.** This routine tries to access every bit of data in no particular order directly from the disk. This test may detect problems with ability to position the drive heads accurately over the requested data.

**Random Cache Read.** This routine tries to access every bit of data in no particular order from the temporary disk memory cache. If the cache fails this test, memory circuits may contain a fault.

**Data Integrity Test.** This test analyzes the data on the disk drive. The test determines if corrupted data is on the disk. Bad data can cause the program to falter even though the hard disk operates correctly.

**File System Check.** This routine performs a file-by-file check of the data stored on the hard disk.

**Surface Scan.** The magnetic material on the disk can become damaged, causing data to be unreadable. This routine locates unusable areas on the disk and marks them for future reference.

## SWITCH TESTS SCREEN

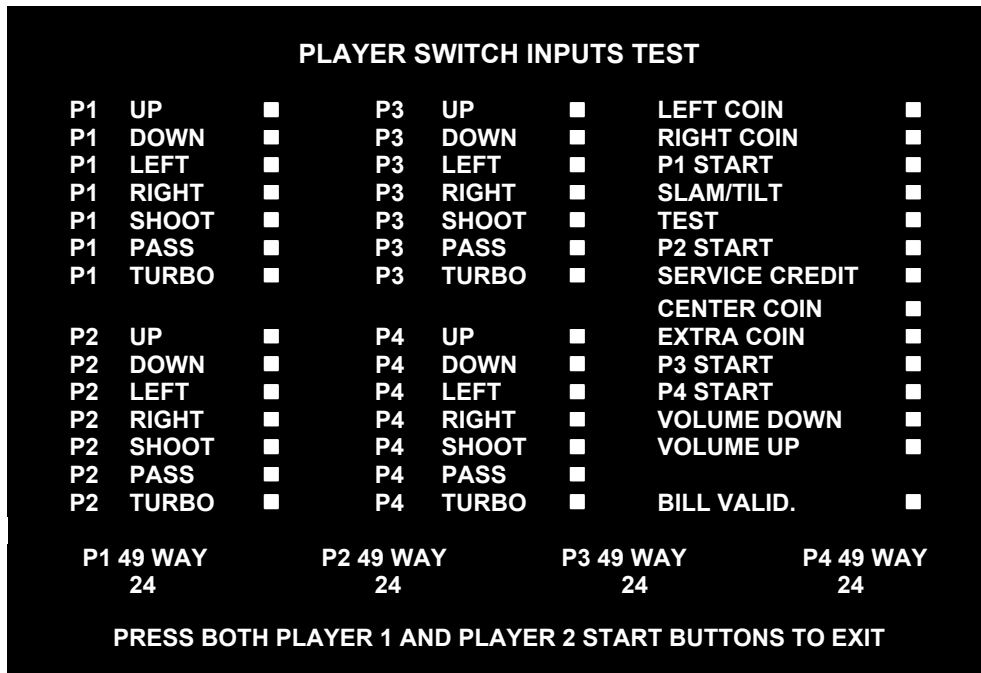Select SWITCH TESTS at the Diagnostics Menu. Switch Tests verify proper operation of the game's switches, including buttons and joystick switches. Use Switch Tests to locate crossed wires, intermittent conditions and stuck switches.

Activate each switch, and the indicator on the screen changes state. Release the switch and the indicator returns to its previous, normally open or closed condition. You can test any combination of switches together. To exit the test, simultaneously press the middle two control buttons inside the coin door. The Switch Test Screen refers to these buttons as "volume buttons."

```
                    PLAYER SWITCH INPUTS TEST

     P1   UP      ■      P3   UP      ■      LEFT COIN        ■
     P1   DOWN    ■      P3   DOWN    ■      RIGHT COIN       ■
     P1   LEFT    ■      P3   LEFT    ■      P1 START         ■
     P1   RIGHT   ■      P3   RIGHT   ■      SLAM/TILT        ■
     P1   SHOOT   ■      P3   SHOOT   ■      TEST             ■
     P1   PASS    ■      P3   PASS    ■      P2 START         ■
     P1   TURBO   ■      P3   TURBO   ■      SERVICE CREDIT   ■
                                            CENTER COIN      ■
     P2   UP      ■      P4   UP      ■      EXTRA COIN       ■
     P2   DOWN    ■      P4   DOWN    ■      P3 START         ■
     P2   LEFT    ■      P4   LEFT    ■      P4 START         ■
     P2   RIGHT   ■      P4   RIGHT   ■      VOLUME DOWN      ■
     P2   SHOOT   ■      P4   SHOOT   ■      VOLUME UP        ■
     P2   PASS    ■      P4   PASS    ■
     P2   TURBO   ■      P4   TURBO   ■      BILL VALID.      ■

      P1 49 WAY        P2 49 WAY        P3 49 WAY        P4 49 WAY
         24               24               24               24

        PRESS BOTH PLAYER 1 AND PLAYER 2 START BUTTONS TO EXIT
```

**SWITCH TESTS SCREEN**

**Switches** appear on the screen as colored boxes. Red boxes indicate an open state. Green indicates closed. Any other color indicates a fault condition. A single indication on the menu screen should exactly duplicate a button or joystick change. You'll notice a unique number for a switch recognized by game electronics.

| | **NOTICE:** Some switches may not be used with this game. If you can't find one of the listed switches, check the wiring diagram. |
|---|---|

## DIP-SWITCH TESTS MENU

Select DIP-SWITCH TESTS at the Diagnostics Menu. Two 8-position DIP switch banks reside on the SIO Board. DIP-Switch Tests allow you to check the position of the 16 switches in these banks. You can change the setting of any DIP switch without removing the circuit board cage.

The screen displays an illustration of each switch block and the current settings. You can change DIP-switch positions with power on. Set any switch, and then check the screen to verify that the new setting is enabled.

Refer to the charts for assistance in choosing switch positions. (* indicates factory defaults.) To exit the DIP-switch Test, press the left control button (inside the coin door).

**Attract Mode Selection Switch.** You can change which Attract Mode sequence the game displays. Select *NBA Showtime* or *NFL Blitz* by flipping switch 8 at DIP bank U13. Then power down and up again. Players can still play either game.

| DIP Switch 1 (U13) | | SW1 | SW2 | SW3 | SW4 | SW5 | SW6 | SW7 | SW8 |
|---|---|---|---|---|---|---|---|---|---|
| Coinage Control | DIP Switch | Off | | | | | | | |
| | CMOS | On* | | | | | | | |
| USA1   Ger1   Fr ECA1   UK1 | | | Off* | Off* | Off* | | | | |
| USA2   Ger2   Fr ECA2   UK2 | | | On | Off | Off | | | | |
| USA3   Ger3   Fr ECA3   UK3 | | | Off | On | Off | | | | |
| USA4   Ger4   Fr ECA4   UK4 | | | On | On | Off | | | | |
| USA5   Ger5   Fr ECA5   UK5 | | | Off | Off | On | | | | |
| USA6   Ger6   Fr ECA6   UK6 | | | On | Off | On | | | | |
| USA7   Ger7   Fr ECA7   UK ECA | | | Off | On | On | | | | |
| USA ECA / Ger ECA / Fr ECA8 | | | On | On | On | | | | |
| Free Play (All Countries) | | | On | On | On | | | | |
| Country | USA | | | | | Off* | Off* | | |
| | France | | | | | On | Off | | |
| | Germany | | | | | Off | On | | |
| | UK** | | | | | On | On | | |
| Unused | -- | | | | | | | Off* | |
| | -- | | | | | | | On | |
| Game | NBA Showtime | | | | | | | | Off* |
| | NFL Blitz | | | | | | | | On |

**Except Free Play, which is "on" for SW2 through SW6.

| DIP Switch 2 (U12) | | SW1 | SW2 | SW3 | SW4 | SW5 | SW6 | SW7 | SW8 |
|---|---|---|---|---|---|---|---|---|---|
| Joystick Type | 8-Way | Off | | | | | | | |
| | 49-Way | On* | | | | | | | |
| Monitor Resolution | Medium Res | | Off* | | | | | | |
| | Low Res | | On | | | | | | |
| Unused | -- | | | Off* | | | | | |
| | -- | | | On | | | | | |
| Unused | -- | | | | Off* | | | | |
| | -- | | | | On | | | | |
| Unused | -- | | | | | Off* | | | |
| | -- | | | | | On | | | |
| Player Panel Type | 2-Player | | | | | | Off | | |
| | 4-Player | | | | | | On* | | |
| Power Up Test | Active | | | | | | | Off | |
| | Inactive | | | | | | | On* | |
| Operating Mode | Game Mode | | | | | | | | Off* |
| | Test Mode | | | | | | | | On |

## SPEAKER TEST MENU

Select SPEAKER TEST at the Diagnostics Menu. The Speaker Test provides audio signals to test the loudspeakers.

Use tests on the Speaker Test menu to verify operation of audio system components. Highlight an option with any player panel joystick. Select the option with any player panel button.

```
                    SPEAKER TEST


                    LEFT CHANNEL
                  CENTER CHANNEL
                   RIGHT CHANNEL
                    100 HZ TONE
                    1 KHZ TONE
                    PLAY TUNE
                       EXIT
```
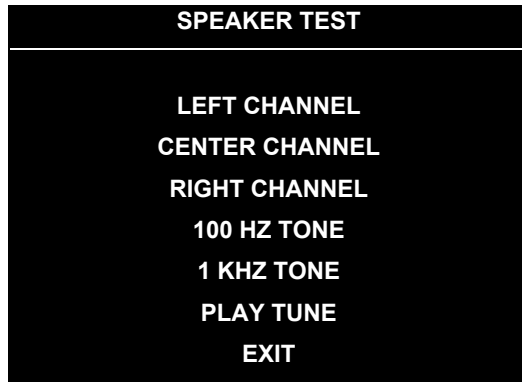
**SPEAKER TEST MENU**

**Channel and Tone Tests.** The channel subtests employ voice announcements to verify speaker locations. Use the 100 Hz tone to check the speakers' bass response. Small speakers with weak magnets or poor baffles may cause poor bass response.

**Play Tune** repeats a series of game sounds. Use PLAY TUNE to check speaker operation and fidelity. If your game has stereo speakers, run PLAY TUNE and test speaker phasing. Muddy, weak or distorted sound during this test may indicate crossed wires or out-of-phase speaker connections. Missing sounds may indicate audio cabling errors.

**NOTICE:** Check the volume setting before testing. To test the speakers thoroughly, increase the volume level. Before returning to Game-Over Mode, reset the volume level to its original setting.

# AUDITS

Select AUDITS at the Main Menu. The Audits menus permit you to review game play statistics. Additional menus give detailed reports for each player position on game starts, ends, cabinet abuse, fault conditions, etc.

Highlight an option with any player panel joystick. Select the option with any player panel button. The screen displays a list of the statistics available to you. Select an item to view the detailed report.

```
                    AUDITS
    _____

                 COIN AUDITS
                CREDITS AUDITS
                 GAME AUDITS
                 TEAM STATS
                GAME FEATURES
               EXCEPTION DUMP
                CLEAR AUDITS
                     EXIT
```

**AUDITS MENU**

Data in the Audits menus helps you to keep records of the game's popularity and earning potential. Use the highlight bar to select the desired subject on the Audits Menu. Each entry on the Audits Menu is the subject for an entire screen of bookkeeping information. On these screens, you can track favorite teams, frequently used offensive and defensive plays, etc.

Some audits menus also include histograms. Histogram screens allow graphical analysis of statistics. This permits visual comparisons between games. Histograms have no bar graphs until the system acquires enough data to plot.

Examine and record all game audit values before performing game service or repairs.

| | **NOTICE:** Be careful when clearing audit information. Once you clear data, you cannot restore it. |
| --- | --- |

**COIN AUDITS**

Select COIN AUDITS at the Audits Menu. The Coin Audits menu permits you to assess the currency collection. This report screen presents revenue quantities and other important game statistics. Coin Audits is a read-only screen.

To exit, press any player panel button.

```
COIN AUDITS - PAGE: 1

    LEFT SLOT COINS          XXXXXXX
    RIGHT SLOT COINS         XXXXXXX
    BILLS                    XXXXXXX
    CENTER SLOT COINS        XXXXXXX
    EXTRA SLOT COINS         XXXXXXX
    GAME STARTS              XXXXXXX
    MID-GAME STARTS          XXXXXXX
    CONTINUES                XXXXXXX
    CHALLENGER ACCEPTED      XXXXXXX
    FREE QUARTERS AWARDED    XXXXXXX
    FREE GAMES AWARDED       XXXXXXX
    SERVICE CREDITS          XXXXXXX


       UP – NEXT / BUTTON - EXIT
```

**COIN AUDITS MENU**

The Coin Audits menu reports total quantities of coins, bills or credits collected by each active device. The menu doesn't calculate the value of the collected currency.

This screen reports information, but doesn't permit you to make changes. To reset the coin, bill and credit counters to zero, use the Clear Audits menu.

We recommend that you examine and record audit information before you make changes. Once you've cleared the counters, you can't retrieve the previous data from the system.

```
COIN AUDITS – PAGE: 2

TOTAL PLAYS          XXXXXXX
TOTAL PAID CREDITS   XXXXXXX
TOTAL                XXXXXXX




   DOWN - PREV / BUTTON - EXIT
```

**COIN AUDITS MENU, PAGE 2**
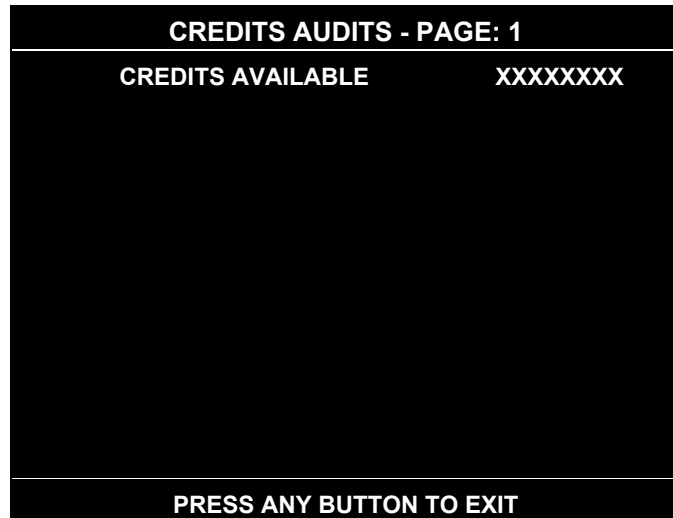
**CREDITS SCREEN**

Select CREDITS AUDITS at the Audits Menu. The Credits Audits Screen permits you to assess the currency collection. This report screen presents revenue quantities and other important game statistics. Credits Audits is a read-only screen.

To exit, press any player panel button.

```
CREDITS AUDITS - PAGE: 1

CREDITS AVAILABLE              XXXXXXXX




PRESS ANY BUTTON TO EXIT
```

**CREDITS AUDITS MENU**

## GAME AUDITS SCREEN

Select GAME AUDITS at the Audits Menu. The Game Audits Screen permits you to review the game play statistics. Game Audits is a read-only screen.

To exit, press any player panel button.

| GAME AUDITS - PAGE: 1 | | | |
|---|---|---|---|
| MACHINE POWER-ON | XX | WENT INTO OVERTIME 1 | XX |
| TOTAL UPTIME | XX | WENT INTO OVERTIME 2 | XX |
| TOTAL PLAYTIME | XX | WENT INTO OT 3 | XX |
| GAMES STARTED | XX | 1 PLAYER FINISHES | XX |
| INITIALS ENTERED | XX | 2 PLAYER FINISHES | XX |
| <FG> PURCHASED AT START | XX | 3 PLAYER FINISHES | XX |
| CREATE PLAYER SESSIONS | XX | 4 PLAYER FINISHES | XX |
| 1 PLAYER | XX | 2P V CPU FINISHES | XX |
| 2 PLAYER | XX | H VS H LSW'S | XX |
| 3 PLAYER | XX | CPU WINS (FG) | XX |
| 4 PLAYER | XX | AVG H VS H TOTAL SCORE (FG) | XX |
| 2PV CPU | XX | AVG H VS CPU TOTAL SCORE (FG) AVG | XX |
| 1 QUARTER GAMES | XX | AVG H VS H WIN SCORE (FG) | XX |
| 2 QUARTER GAMES | XX | AVG H VS H LOSS SCORE (FG) | XX |
| 3 QUARTER GAMES | XX | BIGGEST CPU WIN MARGIN (FG) | XX |
| 4 QUARTER GAMES | XX | BIGGEST CPU LOSS MARGIN (FG) | XX |
| | XX | | |
| | XX | | |
| | XX | | |
| | XX | | |
| | XX | | |
| | XX | | |

**GAME AUDITS SCREEN**

The Game Audits Screen reports information, but doesn't permit you to make changes. Examine and record information at GAME AUDITS before deleting data at the Clear Audits Menu. Once you've cleared the counters, you can't retrieve the previous data from the system.

### GAME AUDITS SCREEN TERMS

| SCREEN TERM | DEFINITION | SCREEN TERM | DEFINITION |
|---|---|---|---|
| AVG | Average | LSW | Your game computer's internal record-keeping counters |
| CPU | Central Processing Unit: The game computer | Machine Power-On | Number of power cycles (game turn-ons) |
| <FG>, (FG) | Full Game | OT | Overtime |
| H VS CPU | Human versus CPU: Competition that pits players against the game computer | PV | Player versus… |
| H VS H | Human versus human: Competition between human players | Total Uptime | Overall on-time for the game computer |
| | | 2PV | Two players versus… |

**TEAM STATS SCREEN**

Select TEAM STATS at the Audits Menu. The Team Stats Screen details the number of games played by each team in the league. Team Stats is a read-only screen.

To exit, press any player panel button.

```
                    TEAM STATS – PAGE: 1

        ATLANTA HAWKS          0%      NEW JERSEY NETS        0%
        BOSTON CELTICS         0%      NEW YORK NICKS         0%
      CHARLOTTE HORNETS        0%      ORLANDO MAGIC          0%
        CHICAGO BULLS          0%    PHILADELPHIA 76ERS       0%
     CLEVELAND CAVALIERS       0%       PHOENIX SUNS          0%
      DALLAS MAVERICKS         0%   PORTLAND TRAILBLAZERS     0%
       DENVER NUGGETS          0%     SACRAMENTO KINGS        0%
       DETROIT PISTONS         0%     SAN ANTONIO SPURS       0%
   GOLDEN STATE WARRIORS       0%    SEATTLE SUPERSONICS      0%
      HOUSTON ROCKETS          0%      TORONTO RAPTORS        0%
    INDIANAPOLIS PACERS        0%        UTAH JAZZ            0%
    LOS ANGELES CLIPPERS       0%    VANCOUVER GRIZZLIES      0%
     LOS ANGELES LAKERS        0%   WASHINGTON WIZARDS        0%
         MIAMI HEAT            0%
       MILWAUKEE BUCKS         0%
   MINNESOTA TIMBERWOLVES      0%



                    PRESS ANY BUTTON TO EXIT
```

**TEAM STATS SCREEN**

**GAME FEATURES SCREEN**

Select GAME FEATURES at the Audits Menu. Game Features tracks play statistics that relate characters in the game and game play. Game Features is a read-only screen.

To exit, press any player panel button.

```
                    GAME FEATURES – PAGE: 1


     NUMBER OF PLAYER RECORDS       0      CREATP CUSTOM UNIFORM      0
       NUMBER OF LRU RECORDS        0       CREATP TEAM UNIFORM       0
   RECORDS FROM CREATE PLAYER       0         CREATP NICKNAME         0
      NUMBER OF PLAYER FIRE         0      CREATP AVG HEIGHT PTS      0
        AVG PTS PLAYER FIRE         0      CREATP AVG WEIGHT PTS      0
       NUMBER OF TEAM FIRE          0       CREATP AVG PWR PTS        0
         AVG PTS TEAM FIRE          0      CREATP AVG SPEED PTS       0
       NUMBER OF ALLEY OOPS         0     CREATP AVG TWOPTS PTS       0
      NUMBER OF DOUBLE DUNKS        0      CREATP AVG STEAL PTS       0
       CREATP MASCOT HEADS          0      CREATP AVG BLOCK PTS       0
        CREATP NBA HEADS            0       CREATP AVG DUNK PTS       0
       CREATP FEMALE HEADS          0             PRIV1               0
         CREATP UM HEADS            0             PRIV2               0
         CREATP MID HEADS           0             PRIV3               0
       CREATP OTHER HEADS           0
     CREATP DEFAULT UNIFORM         0




                      UP – NEXT / BUTTON - EXIT
```

**GAME FEATURES SCREEN, PAGE 1**

**Number Of Player Records.** Number of player initial sets entered in CMOS RAM.

**Number Of LRU Records.** Number of record slots (space for player data) left in CMOS RAM.

**Records From Create Player.** Number of player records produced in Create Player Mode.

**Number Of Player Fire.** Number of times a player has started on fire.

**Avg Pts Player Fire.** Average number of points that player scored while player was on fire.

**Number Of Team Fire.** Number of times that the team has started on fire.

**Avg Pts Team Fire.** Average number of points that the team scored while it was on fire.

**Number Of Alley Oops.** Total number of alley oops performed.

**Number Of Double Dunks.** Total number of double dunks performed.

**Creatp Mascot Heads.** Number of player-created characters with mascot heads.

**Creatp NBA Heads.** Number of player-created characters with NBA-personality heads.

**Creatp Female Heads.** Number of player-created characters with female heads.

**Creatp UM Heads.** Number of player-created characters with Universal Studios¡ monster heads.

**Creatp Mid Heads.** Number of player-created characters with Midway Games¡ heads.

**Creatp Other Heads.** Number of player-created characters with custom heads.

**Creatp Default Uniform.** Number of player-created characters with the selected team's uniforms.

**Creatp Custom Uniform.** Number of player-created characters with custom uniforms.

**Creatp Team Uniform.** Number of player-created characters with specific team uniforms.

**Creatp Nickname.** Number of player-created characters with nicknames.

**Creatp Avg Height Pts.** Average height attribute setting.

**Creatp Avg Weight Pts.** Average weight attribute setting.

**Creatp Avg Pwr Pts.** Average power attribute setting.

**Creatp Avg Speed Pts.** Average speed attribute setting.

**Creatp Avg TwoPts Pts.** Average two-point shot attribute setting.

**Creatp Avg Steal Pts.** Average stealing attribute setting.

**Creatp Avg Block Pts.** Average blocking attribute setting.

**Creatp Avg Dunk Pts.** Average dunking attribute setting.

**Priv1.** Number of times player-created characters include privilege 1 (a player selection).

**Priv2.** Number of times player-created characters include privilege 2 (a player selection).

**Priv3.** Number of times player-created characters include privilege 3 (a player selection).

**Priv4.** Number of times player-created characters include privilege 4 (a player selection).

**Priv5.** Number of times player-created characters include privilege 5 (a player selection).

**Priv6.** Number of times player-created characters include privilege 6 (a player selection).

**Priv7.** Number of times player-created characters include privilege 7 (a player selection).

**Priv8.** Number of times player-created characters include privilege 8 (a player selection).

**Game With Creatp.** Number of games played with player-created characters.

**Win V CPU With Creatp.** Number of player-won games with player-created characters.

**Win V Human With Creatp.** Number of computer-won games with player-created characters.

**Tournament Games.** Number of games played in Tournament-Scoring Mode.

**Timer Level.** Speed at which game machine produces time-released and created characters.

**TLF's.** A counter employed by designers (has no purpose in the field).

**SBLF's.** A counter employed by designers (has no purpose in the field).

```
GAME FEATURES – PAGE: 2

         PRIV4                    0
         PRIV5                    0
         PRIV6                    0
         PRIV7                    0
         PRIV8                    0
   GAME WITH CREATP               0
WIN V CPU WITH CREATP             0
WIN V HUMAN WITH CREATP           0
   TOURNAMENT GAMES               0
      TIMER LEVEL                 0
         TLF'S                    0
         SBLF'S                   0




         DOWN – PREV / BUTTON - EXIT
```

**GAME FEATURES SCREEN, PAGE 2**

## EXCEPTION DUMP SCREEN

Select EXCEPTION DUMP at the Audits Menu. Game programmers use the Exception Dump Screen to view register contents during program development. This menu has no field purpose. Exception Dump is a read-only screen.

To exit, press any player panel button.

## CLEAR AUDITS MENU

Select CLEAR AUDITS at the Audits Menu. The Clear Audits menu allows you to clear individual memory counters or to reset them all at once.

Highlight an option with any player panel joystick. Select the option with any player panel button.

```
                   CLEAR AUDITS
   ─────────────────────────────────────────

                CLEAR COIN AUDITS
              CLEAR CREDITS AUDITS
               CLEAR GAME AUDITS
                CLEAR TEAM STATS
              CLEAR GAME FEATURES
               CLEAR GAME RESETS
             CLEAR EXCEPTION DUMP
                   CLEAR ALL
                     EXIT
```

**CLEAR AUDITS MENU**

You can reset any audit screen from the Clear Audits Menu. Choose an item and zero its counter. CLEAR ALL simultaneously changes all audit categories to factory default values. After you've selected an item, the system gives you the opportunity to escape this change. For example:

```
   ARE YOU SURE YOU WANT TO CLEAR COIN AUDITS?

          YES                      NO
```

**LAST CHANCE MENU**

After you've selected and verified a clear function, the values reset. The system can't restore the previous values. Examine and record utility values before you make changes.

# ADJUSTMENTS

Select ADJUSTMENTS at the Main Menu. The Adjustments menus permit you to change game characteristics. Use these screens to optimize game performance and earnings.

Highlight an option with any player panel joystick. Select the option with any player panel button.

```
           ADJUSTMENTS

              PRICING
             FREE PLAY
          ATTRACT SOUND
      ADDITIONAL ADJUSTMENTS
      FULL FACTORY RESTORE
               EXIT
```
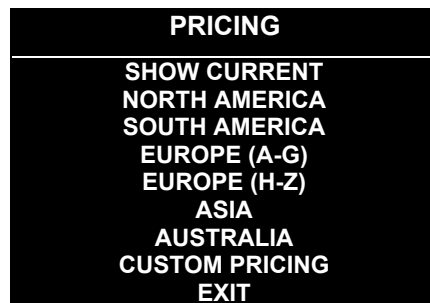
**ADJUSTMENTS MENU**

**PRICING MENU**

Select PRICING at the Adjustments Menu. The Pricing menus allow you to view current settings or change the cost of games. Custom pricing allows you to select the number of coins or credits required for each game. The game restores factory default values if you exchange the CPU Board or if the backup battery fails.

Highlight an option with any player panel joystick. Select the option with any player panel button.

You can set options to factory defaults or change an option after viewing it. We recommend examining and recording pricing options before making changes.

You can save several custom prices and then choose between them as needed. On-screen instructions guide you through the process of creating custom price settings.

```
             PRICING
         SHOW CURRENT
         NORTH AMERICA
         SOUTH AMERICA
          EUROPE (A-G)
          EUROPE (H-Z)
              ASIA
           AUSTRALIA
        CUSTOM PRICING
              EXIT
```

**PRICING MENU**

An additional box appears on screen to explain the available functions as you select each item.

## STANDARD PRICING TABLE

| 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 | 2 | 2 | 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 | 50BF | 20BF | 5BF | | |
| 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, 11/2 X 10Fr | 1Fr | 5Fr | 10Fr | 20Fr | |
| FRANCE ECA 6 | 1 | 1 | 2/5Fr, 4/10Fr, 9/2 X 10Fr | 1Fr | 5Fr | 10Fr | 20Fr | |
| FRANCE ECA 7 | 1 | 1 | 1/5Fr, 3/10Fr, 7/2 X 10Fr | 1Fr | 5Fr | 10Fr | 20Fr | |
| FRANCE ECA 8 | 1 | 1 | 1/5Fr, 2/10Fr, 5/2 X 10Fr | 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 | 1/2 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 | | |
| 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 | 100 | | | |
| JAPAN 2 | 2 | 2 | 2/100Yen | 100 | 100 | | | |
| NETHERLANDS | 2 | 2 | 1/1HFl, 3/2.5HFl | 1HFl | 2.5HFl | | | |
| 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 | | | |

*(Table continues on next page)*

## STANDARD PRICING TABLE, *continued*

| NAME | START | CONTINUE | CREDITS/COIN | COIN 1 | COIN 2 | COIN 3 | COIN4 | BILL |
|---|---|---|---|---|---|---|---|---|
| UK ECA 1 | 1 | 1 | 1/50p, 3/£1.00 | £1.00 | 50p | 20p | 10p | £2.00 |
| UK ECA 2 | 1 | 1 | 1/50p, 2/£1.00 | £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¢, 4/$1.00 | 25¢ | 25¢ | | | $1.00 |
| USA9 | 3 | 2 | 1/25¢, 4/$1.00 | 25¢ | 25¢ | | | $1.00 |
| USA10 | 3 | 3 | 1/25¢, 4/$1.00 | 25¢ | 25¢ | | | $1.00 |
| USA11 | 4 | 2 | 1/25¢, 4/$1.00 | 25¢ | 25¢ | | | $1.00 |
| USA12 | 4 | 3 | 1/25¢, 4/$1.00 | 25¢ | 25¢ | | | $1.00 |
| USA13 | 4 | 4 | 1/25¢, 4/$1.00 | 25¢ | 25¢ | | | $1.00 |
| USA ECA | 3 | 3 | 1/25¢, 4/$1.00 | $1.00 | 25¢ | 10¢ | 05¢ | $1.00 |

## CURRENT PRICING SCREEN

Select SHOW CURRENT at the Pricing Menu. The Current Pricing Screen is a read-only screen. Use it to check pricing parameters for the pricing table your game is using. To select a new pricing table, return to the Pricing Menu. To create your own pricing table, select Custom Pricing on the Pricing Menu.

Press any START button to exit from the Current Pricing Screen.

| CURRENT PRICING | |
|---|---|
| LEFT SLOT UNITS | XX |
| RIGHT SLOT UNITS | XX |
| CENTER SLOT UNITS | XX |
| EXTRA SLOT UNITS | XX |
| BILL VALIDATOR UNITS | XX |
| UNITS PER CREDIT | XX |
| UNITS PER BONUS | XX |
| MINIMUM UNITS | XX |
| CREDITS TO START | XX |
| CREDITS TO CONTINUE | XX |
| MAX CREDITS | XX |
| COINS PER BILL | XX |

**CURRENT PRICING SCREEN**

The following table clarifies Pricing Menu terms:

| SCREEN TERM | DISCUSSION |
|---|---|
| Slot Units; Bill Validator (DBV) Units | Cyber-currency. This adjustment assigns a number of "units" to each coin mechanism or bill acceptor. For instance, if a quarter buys 1 unit, then $1 buys 4 units. *(See Coins per Bill.)* You insert a coin into a 1-unit coin acceptor. The system, due to its programming, knows that your coin is worth one unit. |
| Units per Credit | How many units equal one credit. (Units buy credit, the price of one game.) |
| Units per Bonus | Units awarded when a player earns a bonus. |
| Minimum Units | Until this many units accumulate, the system awards no credits. |
| Credits to Start | Number of games a player must purchase to begin play. |
| Credits to Continue | Number of games a player must purchase to resume play. |
| Max Credits | Limits the number of credits that the game will accept. |
| Coins per Bill | How many coins one bill is worth. |

## CUSTOM PRICING MENU

Select CUSTOM PRICING at the Pricing Menu. The Custom Pricing Menu permits you to program and use your own pricing table. The menu heading CREATING XXXX allows you to input a descriptive name for your new pricing table. You can save several pricing schemes and chose between them as desired.

Highlight an option with any player panel joystick. Change the option with any player panel button. Press any START button to save your pricing table and exit from the menu.

| **CREATING XXXX** | | | |
| --- | --- | --- | --- |
| LEFT UNITS | XX | RIGHT UNITS | XX |
| CENTER UNITS | XX | EXTRA UNITS | XX |
| DBV UNITS | XX | UNITS PER CREDIT | XX |
| UNITS / BONUS | XX | MINIMUM UNITS | XX |
| CREDITS TO START | XX | CREDITS TO CONT. | XX |
| MAX CREDITS | XX | COINS / BILL | XX |
| SHOW FRACTIONS | XX | LEFT COUNT | XX |
| RIGHT COUNT | XX | CENTER COUNT | XX |
| EXTRA COUNT | XX | DBV COUNT | XX |

USE STICK TO SELECT AN ITEM TO MODIFY
PRESS ANY BUTTON TO MODIFY THE ITEM
PRESS ANY START BUTTON TO SAVE AND EXIT

### CUSTOM PRICING MENU

The Custom Pricing Menu employs the same terms that appear on the Current Pricing Table. See the table below for definitions of these terms.

### PRICING MENU TERMS

| SCREEN TERM | DISCUSSION |
| --- | --- |
| Slot Units;<br><br>Bill Validator (DBV) Units | Cyber-currency. This adjustment assigns a number of "units" to each coin mechanism or bill acceptor. For instance, if a quarter buys 1 unit, then $1 buys 4 units. *(See Coins per Bill.)* You insert a coin into a 1-unit coin acceptor. The system, due to its programming, knows that your coin is worth one unit. |
| Units per Credit | How many units equal one credit. (Units buy credit, the price of one game.) |
| Units per Bonus | Units awarded when a player earns a bonus. |
| Minimum Units | Until this many units accumulate, the system awards no credits. |
| Credits to Start | Number of games a player must purchase to begin play. |
| Credits to Continue | Number of games a player must purchase to resume play. |
| Max Credits | Limits the number of credits that the game will accept. |
| Coins per Bill | How many coins one bill is worth. |

**BASIC CUSTOM PRICING.** Custom pricing creates an imaginary currency exchange. In this currency exchange, the coins of the realm are "units." Think of units as a type of cyber-currency, useful only within the game software. By inserting coins, you purchase units.

Since units are only negotiable within game software, the system stores your units for you. When the system receives enough units, it buys a game for you. The price of a game is one "credit." You can think of credits as a second form of cyber-currency.

Even though you've now bought one game, you may not be able to begin playing. In many pricing schemes, you must buy two or more credits to begin play. The idea here is something like a minimum order of goods at a store. That is, the operator can "shrink-wrap" two or more games in a package. You can't play unless you buy the entire package.

●**1 / 25¢ COIN; 1 CREDIT TO START.** In a simple, quarter pricing scheme, the player inserts one coin to buy one unit. The system exchanges that unit for one credit. If CREDITS TO START contains the value one, then play commences. A dollar bill buys four units.

| Left Slot Units | Validator Units | Units / Credit | Credits to Start | Coins / Bill |
|---|---|---|---|---|
| 1 | 4 | 1 | 1 | 4 |

●**1 / 3 X 25¢; 2 CREDITS TO START.** Again, assuming quarter slots, here's one way to implement 75¢ pricing… In this scheme, each coin that the player inserts buys one unit. The system exchanges three units for one credit. CREDITS TO START contains the value two. To play, the player must pay for two credits. In this scheme, a dollar buys four units.

| Left Slot Units | Validator Units | Units / Credit | Credits to Start | Coins / Bill |
|---|---|---|---|---|
| 1 | 4 | 3 | 2 | 4 |

●**2 / 1 COIN; 6 CREDITS TO START.** Now let's consider a more unusual pricing scheme. Here, the player can buy two units with one coin. The system exchanges each of these units for one credit. Notice that CREDITS TO START contains the value six. To play, the player must insert two more coins to pay for six credits. Also notice that if the player pays with a bill, the system throws in an extra unit.

| Left Slot Units | Validator Units | Units / Credit | Credits to Start | Coins / Bill |
|---|---|---|---|---|
| 2 | 9 | 1 | 6 | 4 |

| Main Menu *(continued)* |
|---|
| Adjustments Menu *(continued)* |
| Free Play Feature |

## FREE PLAY FEATURE

Select FREE PLAY at the Adjustments Menu. Free Play is a useful feature for promotions and long-term testing under play conditions. Enable Free Play to allow players to play the game without inserting currency. Disable Free Play to sell games.
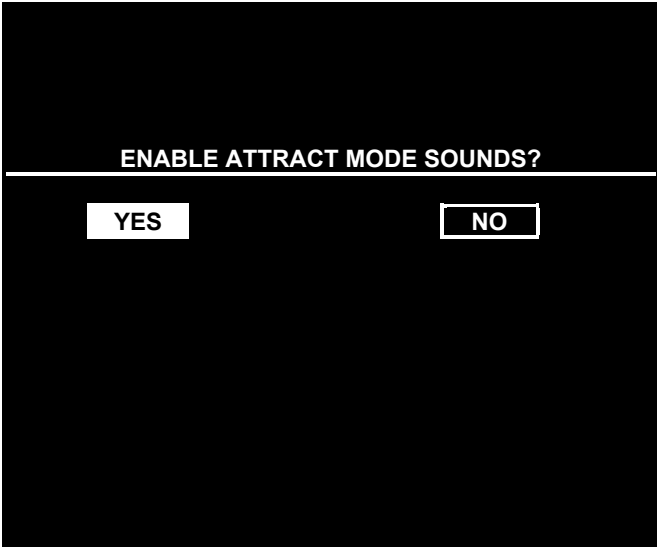
Highlight an option with any player panel joystick. Select the option with any player panel button.

| Main Menu *(continued)* |
|---|
| Adjustments Menu *(continued)* |
| Attract Sound Menu |

## ATTRACT SOUND MENU

Select ATTRACT SOUND at the Adjustments Menu. The Attract Mode operates between games. It attempts to lure prospective players into trying your game. Attract Mode sound may not be appropriate for some locations. The Attract Sound Menu allows you to enable or disable the Attract Mode sound feature. You can turn Attract Mode sound on or off without changing the game volume level.

Highlight an option with any player panel joystick. Select the option with any player panel button.

**ENABLE ATTRACT MODE SOUNDS?**

YES          NO

**ATTRACT SOUND MENU**

## ADDITIONAL ADJUSTMENTS MENU

Select ADDITIONAL ADJUSTMENTS at the Adjustments Menu. Additional Adjustments menu items allow you to set the game to match player requirements. These adjustments affect speed, challenge, rewards, etc. that determine player enjoyment.

Highlight an option with any player panel joystick. Select the option with any player panel button.

```
ADDITIONAL ADJUSTMENTS
───────────────────────────────

             GAME DIFFICULTY
        DISCOUNT PRICE / CREDITS
              CLOCK SPEED
        FREE GAME – FULL 4 PLR.
        FREE GAME – FULL 1 ON 1
        FREE GAME – FULL V. CPU
      FREE QUARTER – FULL 4 PLR.
      FREE QUARTER – FULL 1 ON 1
      FREE QUARTER – FULL V. CPU
        CLEAR PLAYER RECORDS
         CLEAR WORLD RECORDS
           PLAYER HEAD SIZE
            TOURNAMENT MODE
         COMPUTER ASSISTANCE
         ATTRACT MOVIE SOUND
                 EXIT
```

**ADDITIONAL ADJUSTMENTS MENU**

**Game Difficulty** allows you to alter the challenge that a game poses to players. Choose the level that most closely matches the players' skills.

**Discount Price / Credits** adjusts the quantity of buy-in points to encourage multiple game purchases.

**Clock Speed** alters how much game time that a player can purchase for one credit. Choose one of these settings: Extra slow, slow, medium, fast or extra fast.

**Free Game,** when enabled, allows the program to award a free game. The free game may be a four-player or a one-on-one game. The free game may also involve competition against the game computer.

**Free Quarter.** The program divides games into quarters, as in NBA rules. The Free Quarter feature, when enabled, allows the program to award a free game quarter. The free quarter may be a four-player or a one-on-one quarter. The free quarter may also involve competition against the game computer.

**Clear Player Records** allows you to zero out game play data. Examine and record this information before you clear it. Once you've cleared player records, you can't retrieve the previous data.

**Clear World Records** allows you to zero out world record data. Examine and record this information before you clear it. Once you've cleared player records, you can't retrieve the previous data.

**Player Head Size** allows you to alter the head size of on-screen characters. This feature determines whether the characters appear more lifelike, or more like caricatures. Choose "normal" or "big."

**Tournament Mode,** when enabled, adapts your game's scoring for tournament-style play.

**Computer Assistance,** when enabled, permits the game computer to aid players in play action.

**Attract Movie Sound,** when enabled, allows Attract Mode movie sound with Attract Mode sound off. The Attract Mode movie is only one component of the Attract Mode graphics.
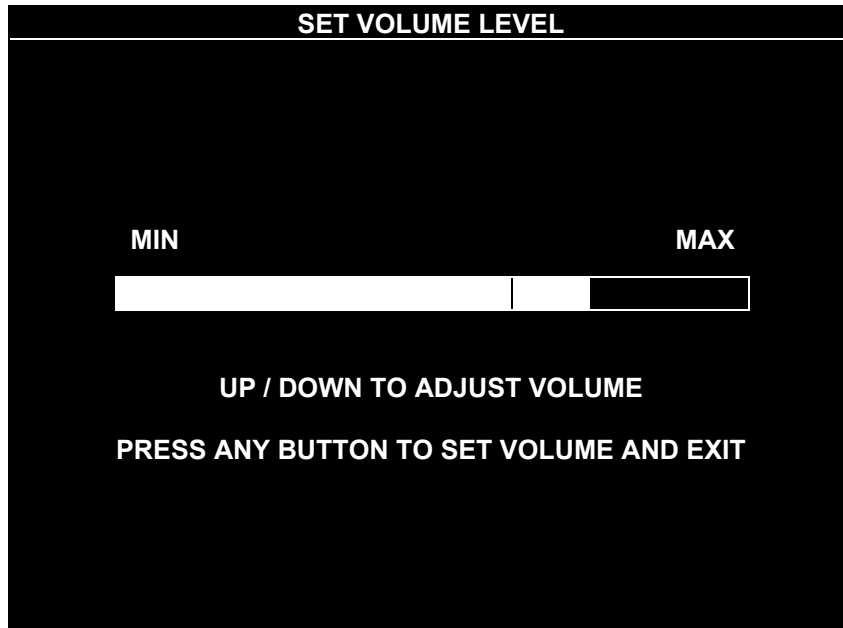
**VOLUME LEVEL MENU**

Select VOLUME LEVEL at the Main Menu. When you display the Volume Level Menu, music plays continuously.

Raise or lower the game's sound level with any player panel joystick. (You can also use the volume up/down buttons on the diagnostic switch bracket.) Save your change and return to the Main Menu by pressing any player panel button.



**SET VOLUME LEVEL**

MIN                                    MAX

**UP / DOWN TO ADJUST VOLUME**

**PRESS ANY BUTTON TO SET VOLUME AND EXIT**

**VOLUME LEVEL MENU**

Loud games attract more player interest than games with low-level sound. The Attract Mode sound level is always lower than the game play sound level.

**NOTICE:** These adjustments affect the volume of tests as well as of game play. If you set volume levels to minimum (zero), the speakers are silent during audio tests. We recommend setting volume levels to a moderately high value whenever you perform sound tests. After you complete tests, you may return sound levels to previous settings.

## FULL FACTORY RESTORE FEATURE

Select FULL FACTORY RESTORE at the Adjustments Menu. The Full Factory Restore menu allows you to clear all memory counters at once.

Highlight an option with any player panel joystick. Select the option with any player panel button.



**RESTORE ADJUSTMENTS & AUDITS?**

YES        NO

**FULL FACTORY RESTORE MENU**

**NOTICE:** Examine and record audit information before you make changes. Once you've cleared the counters, you can't retrieve previous data from the system.

Examine and record utility values before you make changes. If you choose YES, the system restores all adjustments and audits to factory default values. This change isn't reversible. The system can't restore the previous values. With the settings restored, the system displays the Reset Complete Screen.
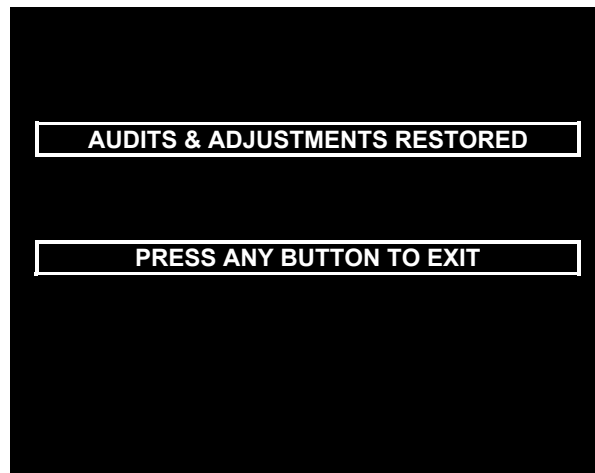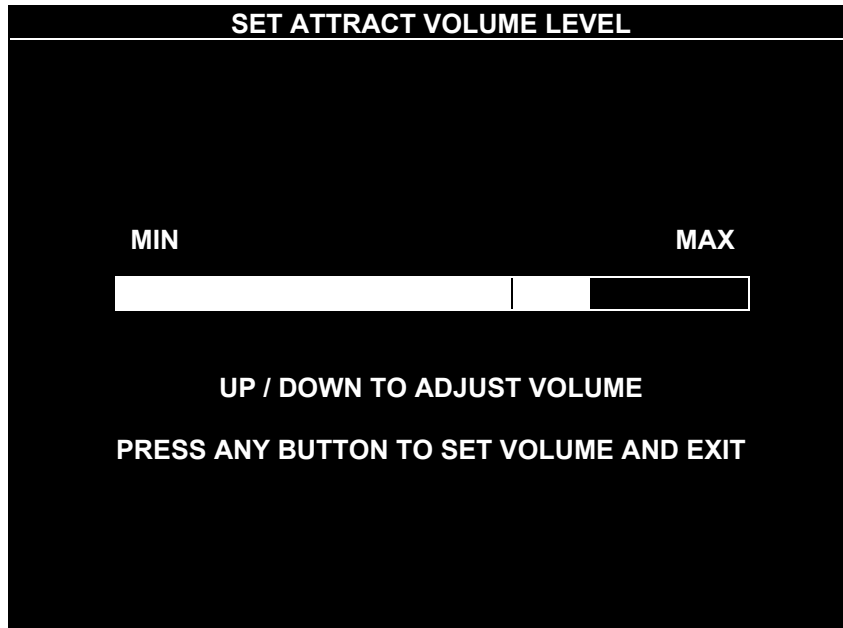


**AUDITS & ADJUSTMENTS RESTORED**

**PRESS ANY BUTTON TO EXIT**

**RESET COMPLETED SCREEN**

## ATTRACT MODE VOLUME LEVEL MENU

Select ATTRACT VOLUME LEVEL at the Main Menu. When you display the Attract Mode Volume Level Menu, music plays continuously.

Raise or lower the game's Attract Mode sound level with any player panel joystick. (You can also use the volume up/down buttons on the diagnostic switch bracket.) Save your change and return to the Main Menu by pressing any player panel button. Your setting won't affect the game play sound level.



**SET ATTRACT VOLUME LEVEL**

MIN                         MAX

**UP / DOWN TO ADJUST VOLUME**

**PRESS ANY BUTTON TO SET VOLUME AND EXIT**

**ATTRACT MODE VOLUME LEVEL MENU**

Increase the Attract Mode sound level to generate player interest. The game play sound-level setting determines the maximum level for Attract Mode sound. Regardless of your setting, the Attract Mode level remains lower than the game play level.

# UTILITIES

Select UTILITIES at the Main Menu. Utilities Menu items allow you to clear bookkeeping totals. From the Utilities Menu, you can also restore game adjustments to factory settings.

Highlight an option with any player panel joystick. Select the option with any player panel button.

**UTILITIES**

DUMP AUDITS
CLEAR CREDITS
CLEAR AUDITS
RESET HIGH SCORES
DEFAULT ADJUSTMENTS
FULL FACTORY RESTORE
DISCOUNT PRICE / CREDITS
EXIT

**UTILITIES SCREEN**

**Dump Audits** allows you to send data to the game computer's serial port. You can connect a serial printer to make a paper record of your audit data.

**Clear Credits** opens a menu that allows you to zero the game's credit data. Examine and record audit information before you make changes.

**Clear Audits** opens a menu that allows you to zero the game's audit data.

**Reset High Scores** permits you to delete player names and scores that appear in the Attract Mode. This feature may be useful if players insert inappropriate language into the high score table.

**Default Adjustments** opens a menu that allows you to reset game adjustments to factory settings.

**Full Factory Restore** allows you to reset game adjustments and audits to factory settings.

**Discount Price / Credits** permits you to enter special game pricing or award extra credits. You can use this feature for advertising or promotional purposes.

| | **NOTICE:** Be careful when clearing audit information. Once you clear data, you can't restore it. |
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