NBA SHOWTIME GOLD EDITION / NFL BLITZ 2000 GOLD EDITION CONVERSION KIT

C H A P T E R
F O U R

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* by flipping switch 8 at DIP bank U13. Then power down and up again. After you change the game play, you must change game artwork.

MENU SYSTEM

WHAT IS THE MENU SYSTEM?

The game's Menu System is a series of auditing, game adjustment and diagnostic screens. We call these screens *menus,* because they present options in menu-like lists. You can easily access and apply menus to optimize game performance. For instance…

- Use game audits menus to assess game performance.
- Use adjustment menus 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 menus 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. You can also invoke the Menu System by turning on DIP bank U12, switch 8. (To reenter Game Mode, turn off switch 8.)

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**
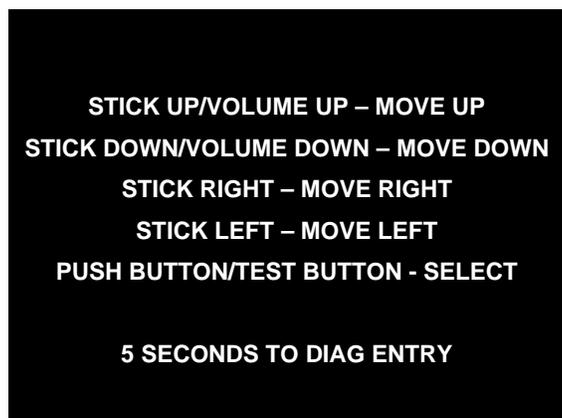
CONTROL FUNCTIONS MENU

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 *NBA* settings also affect *NFL* 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
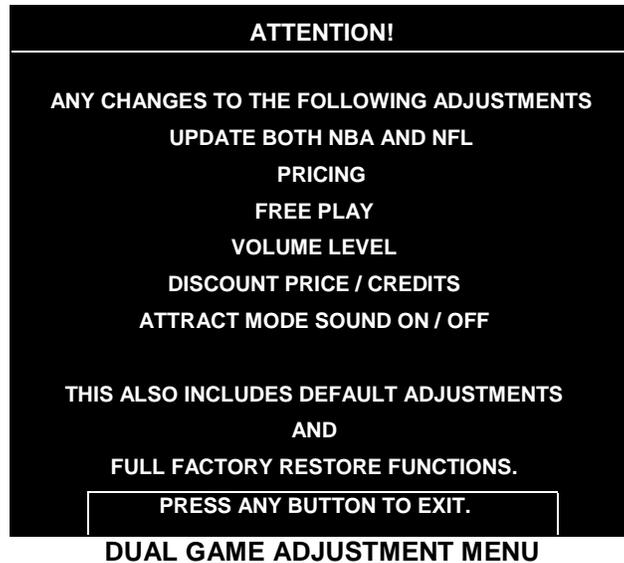
MAIN MENU

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 menu locations.

- The block at the top, center of each menu displays the current menu title.
- Data (menu items, video signals, statistics, reports, etc.) appears in the center of the menu.
- Messages (explanations, control functions, revision levels) display at the bottom of the menu.

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.

|	
☞	**NOTICE:** This manual depicts some menus as having two pages. Your video game machine may present these same menus as one-pagers. Monitor resolution affects whether a menu has a second screen.

Main Menu *(continued)*
Diagnostics Menu

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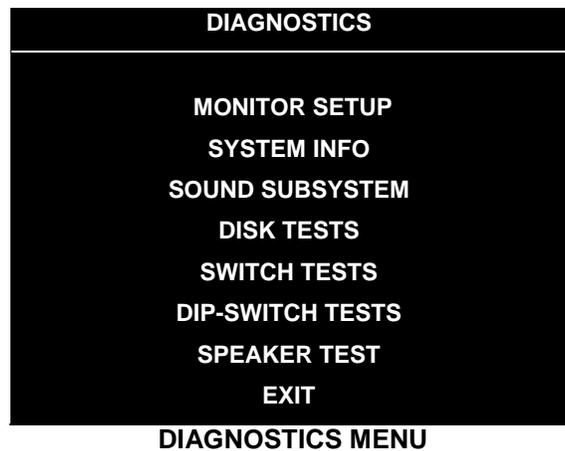
Diagnostic tests assist you in checking and adjusting the game's major systems. By running diagnostics, you can gain an insight into both system hardware and game software. Periodically running diagnostics is a crucial part of maintaining game performance and player satisfaction. Sometimes you can improve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

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

Highlight an option with any player panel joystick. Select the option with any player panel button.
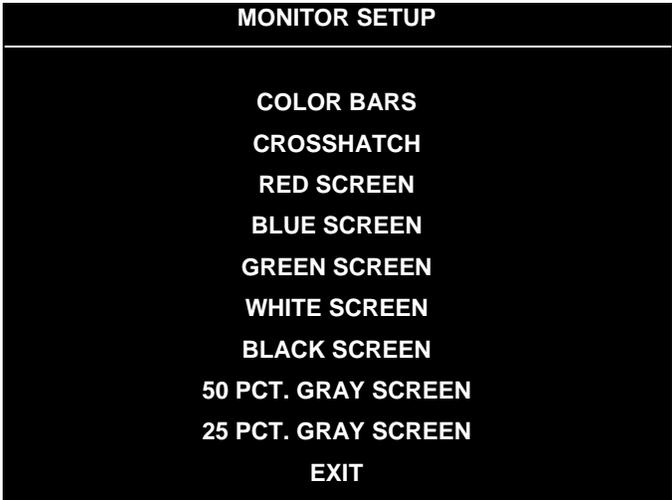
```
                    MONITOR SETUP
    _____

                     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 literature 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.

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

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

SYSTEM INFORMATION

Select SYSTEM INFO at the Diagnostics Menu. The System Information Menu 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.

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

```
            SYSTEM INFORMATION

              MIDWAY GAMES, INC.
               XXXXXXX SYSTEM


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


           PRESS ANY BUTTON TO EXIT
```
**SYSTEM INFORMATION MENU**

The System Information menu 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
```
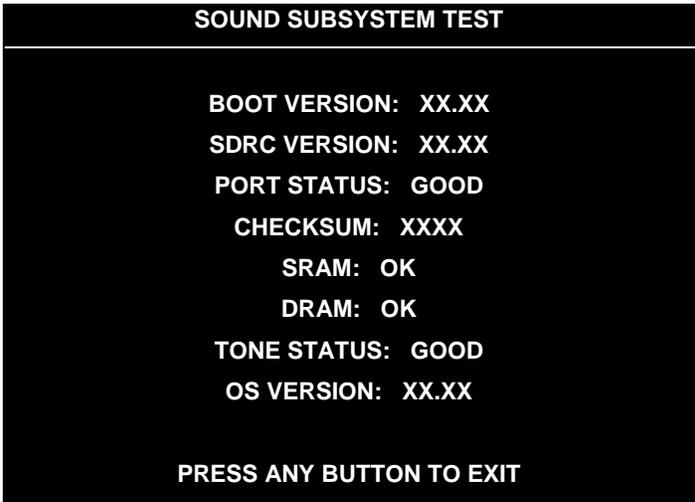
SOUND SUBSYSTEM MENU

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

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
```
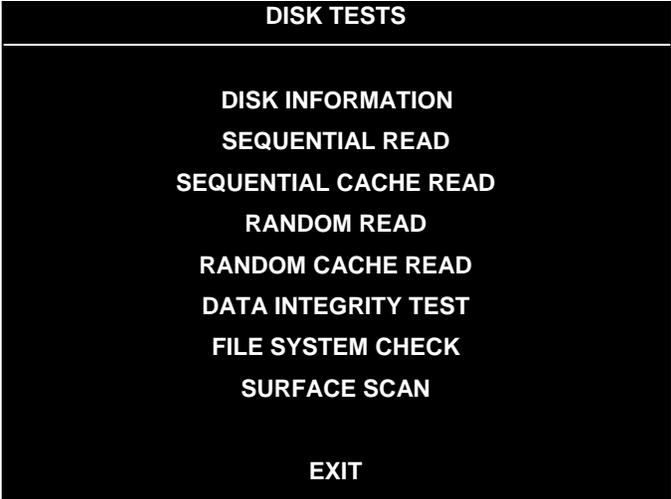
DISK TESTS MENU

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

Select SWITCH TESTS at the Diagnostics Menu. Switch Tests verify proper operation of the game's switches, including buttons and joystick switches.

Activate each switch, and the indicator on the menu 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 Menu 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 TEST MENU

Switches appear on the menu 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 should exactly duplicate a button or joystick change. You'll notice a unique number for a switch recognized by game electronics.

Use Switch Tests to locate crossed wires, intermittent conditions and stuck switches.

	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
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 menu 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 menu 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).

Game-Selection Switch. Select *NBA Showtime* or *NFL Blitz* by flipping switch 8 at DIP bank U13. Then power down and up again. After you change the game play, you must change game artwork.

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				
USA9 Ger9 Fr ECA9 UK9			On	Off	On				
USA10 Ger10 Fr ECA10 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		
Game Selection	By player							Off*	
	By Switch 8							On	
Game at power up	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

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 menu 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 menu of bookkeeping information. On these menus, you can track favorite teams, frequently used offensive and defensive plays, etc.

Some audits menus also include histograms. Histogram menus 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 menu presents revenue quantities and other important game statistics. Coin Audits is a read-only menu.

To exit, press any player panel button.

```
COIN AUDITS - PAGE: 1

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


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

To exit, press any player panel button.

```
CREDITS AUDITS - PAGE: 1
CREDITS AVAILABLE            XXXXXXXX




PRESS ANY BUTTON TO EXIT
```
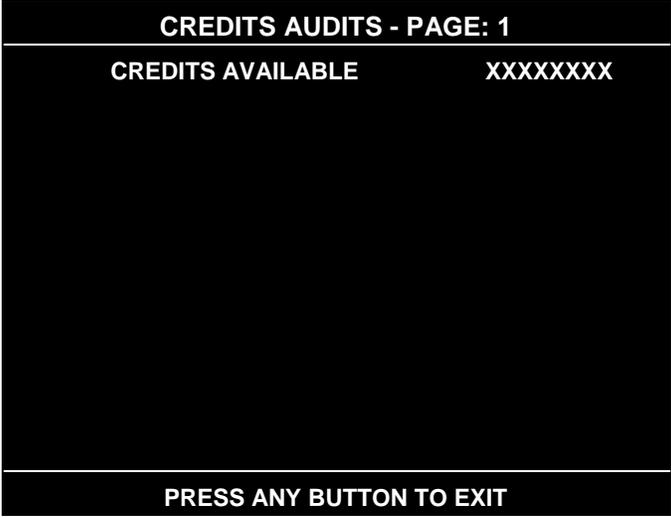
CREDITS AUDITS MENU

GAME AUDITS

Select GAME AUDITS at the Audits Menu. The Game Audits menus permit you to review the game play statistics. Game Audits is a read-only menu.

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
2P V 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 MENU

The Game Audits menu 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 AUDIT MENU TERMS

TERM	DEFINITION	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

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

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 MENU

GAME FEATURES

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 menu.

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      CREATP AVG DRIBBLE PTS      0
    CREATP UM HEADS               0      PRIV1                       0
    CREATP MID HEADS              0      PRIV2                       0
    CREATP OTHER HEADS            0      PRIV3                       0
    CREATP DEFAULT UNIFORM        0      PRIV4                       0
                                         PRIV5                       0
                                         PRIV6                       0
                                         PRIV7                       0



                        UP – NEXT / BUTTON - EXIT
```

GAME FEATURES MENU, 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).

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

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 MENU, PAGE 2

Main Menu *(continued)*
Audits Menu *(continued)*
Exception Dump Menu

EXCEPTION DUMP

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

To exit, press any player panel button.

Main Menu *(continued)*
Audits Menu *(continued)*
Clear Audits Menu

CLEAR AUDITS

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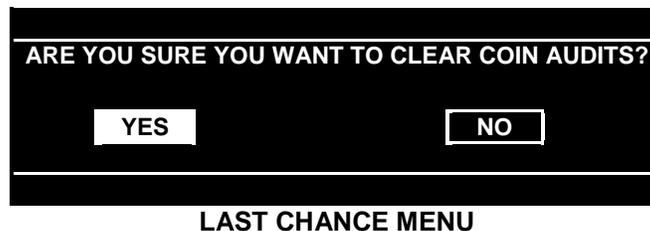
After you've selected and verified a clear function, the values reset. The system can't restore the previous values. Examine and record utility values before you make changes.

ADJUSTMENTS

Select ADJUSTMENTS at the Main Menu. The Adjustments menus permit you to change game characteristics. Use these menus 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

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

You may 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-H)
             EUROPE (I-U)
                 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	1	1	1/5X20¢, 1/$1.00	.20¢	$1.00			
AUSTRIA 1	2	2	1/5Sch, 2/10Sch	5 Sch	10 Sch			
AUSTRIA 2	1	1	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			
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			

(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

Main Menu *(continued)*
Adjustments Menu *(continued)*
Pricing Menu *(continued)*
Current Pricing Menu

Current Pricing

Select SHOW CURRENT at the Pricing Menu. The Current Pricing Menu is a read-only menu. 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 invent your own pricing table, select Custom Pricing on the Pricing Menu.

Press any START button to exit from the menu.

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 MENU

The following table clarifies Pricing Menu terms…

MENU 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.

Main Menu *(continued)*
Adjustments Menu *(continued)*
Pricing Menu *(continued)*
Custom Pricing Menu

Custom Pricing
Select CUSTOM PRICING at the Pricing Menu. The Custom Pricing Menu permits you to program and use your own 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.

CUSTOM PRICING

ADD
EXIT

CUSTOM PRICING OPENING MENU

Add allows you to write a new custom pricing scheme. If you choose ADD, the system directs you to…
    [ ] 1. Name your scheme.
    [ ] 2. Program pricing information.
    [ ] 3. Select the coin denomination for your scheme.
    [ ] 4. Retain or alter the pricing screen message. (Later, check it in Game Mode by pressing START.)
    [ ] 5. Save your pricing scheme.
    [ ] 6. Use your pricing scheme by selecting it.

Delete permits you to eliminate a single custom pricing scheme.

Edit lets you modify a stored custom pricing scheme.

Delete, when enabled, clears all custom pricing schemes.

Select enables you to choose which custom pricing scheme is the active one.

Creating Pricing Scheme

After you name your custom pricing scheme, you encounter the Creating Pricing Scheme Menu. This menu is where you program the pricing scheme. You can save several pricing schemes and choose between them as desired.

Highlight an option with any player panel joystick. Select Change Mode with any player panel button. Use a joystick to change the option. Save your setting by pressing any player panel button. Press any START button to exit from the menu. Exiting invokes the Select Currency Menu. Use this menu to choose the coin denomination that players will use. Exit by choosing DONE.

CREATING XXXX

LEFT UNITS	XX	RIGHT UNITS	XX
CENTER UNITS	XX	EXTRA UNITS	XX
DBV UNITS	XX	UNITS PER CREDIT	XX
UNITS / BONUS	XX	MIN 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

SELECT CURRENCY

DOLLAR
POUND
GUILDER
SCHILLING
FRANC
KRONE
MARKKA
DEUTSCHE MARK
LIRE
FORINT
PESETA
YET
DONE

SELECT CURRENCY MENU (PAGE 2 OF CREATING XXXX 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

MENU 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.

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

Pricing Prompt

After you exit the Select Currency Menu, you encounter the Current Pricing Prompt Menu. The Current Pricing Prompt Menu allows you to enter a brief pricing or advertising message. The video game machine displays your message during the Attract Mode.

Select YES at the menu's first page. The Screen Message Entry Menu opens. You may enter up to three lines of text. Each line may include up to 32 alphanumeric characters. Here's an example message…

<div align="center">

1 CREDIT / 2 COINS
EAT AT JOE'S

</div>

Highlight a letter with any player panel joystick. Select the letter with any player panel button. Delete the rightmost character of the default message by selecting the on-screen asterisk (*). Watch the bottom of the screen to see your message line develop. Save the entire line and proceed to the second line by selecting the arrow (>).

<div align="center">

CURRENT PRICING PROMPT

1 CREDIT / 2 COINS

DO YOU WANT TO CHANGE?

YES   NO

CURRENT PRICING PROMPT MENU

</div>

<div align="center">

PRICING – LINE 1

0   1   2   3   4   5   6

7   8   9   A   B   C   D

E   F   G   H   I   J   K

L   M   N   O   P   Q   R

S   T   U   V   W   X   Y

Z   / $ ✱   ➡

1 CREDIT / 2 COINS

USE STICK TO MOVE / BUTTON TO SELECT
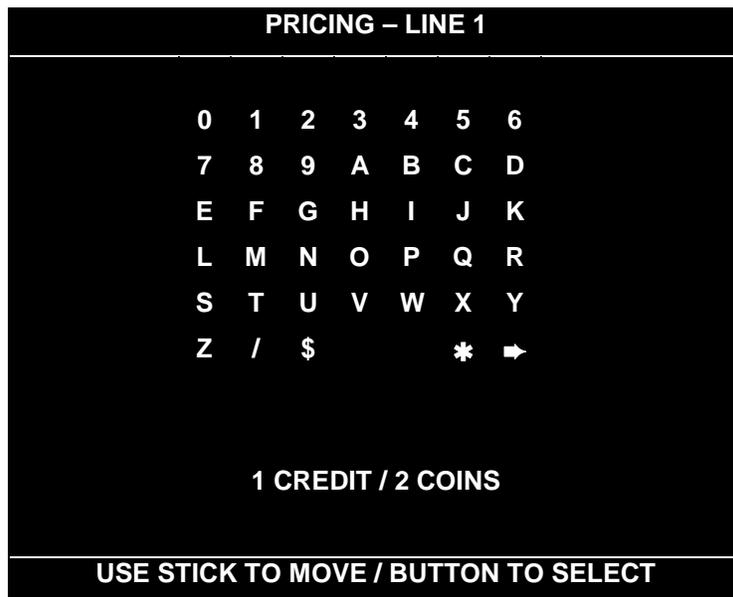
**SCREEN MESSAGE ENTRY MENU (PRICING – LINE 1)**

</div>

After you complete your message, you may edit it by reentering the Screen Message Entry Menu. To reenter the menu, choose EDIT from the Custom Pricing Menu.

Main Menu *(continued)*
Adjustments Menu *(continued)*
Pricing Menu *(continued)*
Custom Pricing Menu *(continued)*
Save Pricing Scheme

Save Pricing Scheme
Exiting from the Screen Message Entry Menu invokes the Save Pricing Scheme Menu. The Save Pricing Scheme Menu allows you to save your pricing scheme.

Highlight an option with any player panel joystick. Select YES to save, or NO to delete your pricing scheme.

```
        DO YOU WANT TO SAVE XXXXX?

     YES                        NO
```

SAVE PRICING SCHEME MENU

To use the new pricing scheme, you must now select it. The program returns you to the Custom Pricing Menu. You'll notice a few more entries on the menu. Besides ADD and EXIT, you'll see that you can now EDIT or SELECT a pricing scheme.

Highlight SELECT with any player panel joystick. To use your pricing scheme, press any player panel button. The program acknowledges your pricing scheme choice and returns you to Custom Pricing Menu. Choose EXIT to return to the Pricing Menu.

```
        CUSTOM PRICING

              ADD
             DELETE
              EDIT
             SELECT
              EXIT
```

CUSTOM PRICING OPENING MENU

Main Menu *(continued)*
Adjustments Menu *(continued)*
Free Play Menu

Free Play
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
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
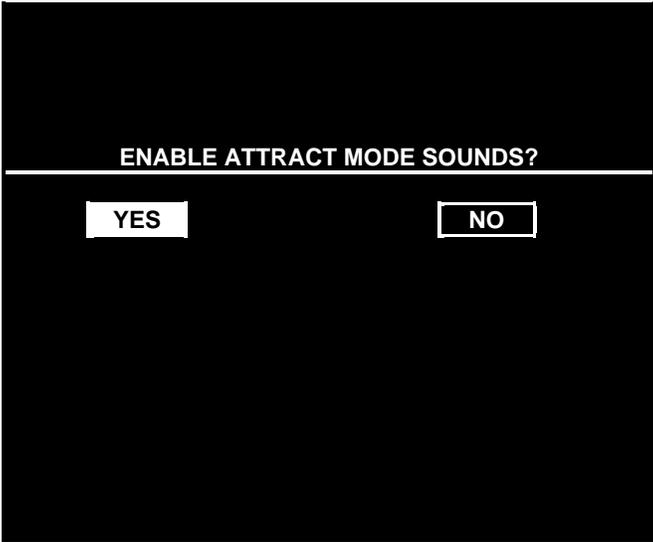
NOTICE: After you enable Attract Mode sound, you can adjust the Attract Mode volume level. See the Main Menu.

ADDITIONAL ADJUSTMENTS

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.

Main Menu *(continued)*
Adjustments Menu *(continued)*
Full Factory Restore Menu

FULL FACTORY RESTORE
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
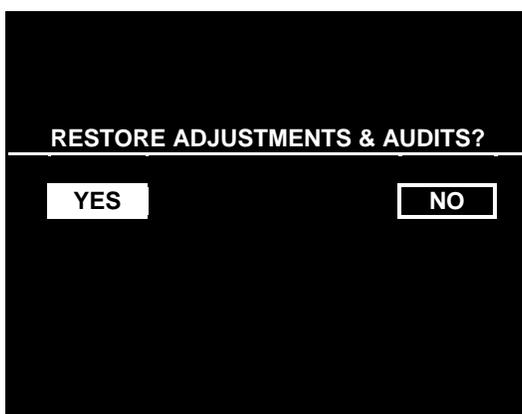
FULL FACTORY RESTORE MENU

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 Menu.


AUDITS & ADJUSTMENTS RESTORED

PRESS ANY BUTTON TO EXIT
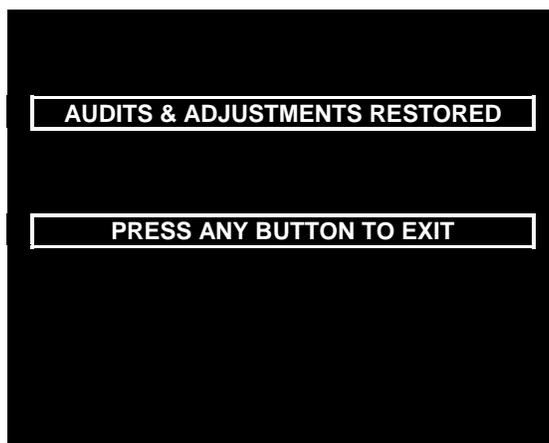
RESET COMPLETED MENU

SET VOLUME LEVEL

Select VOLUME LEVEL at the Main Menu. The Set Volume Level Menu appears, and 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     │
└──────────────────────────────────────────────────┘
```
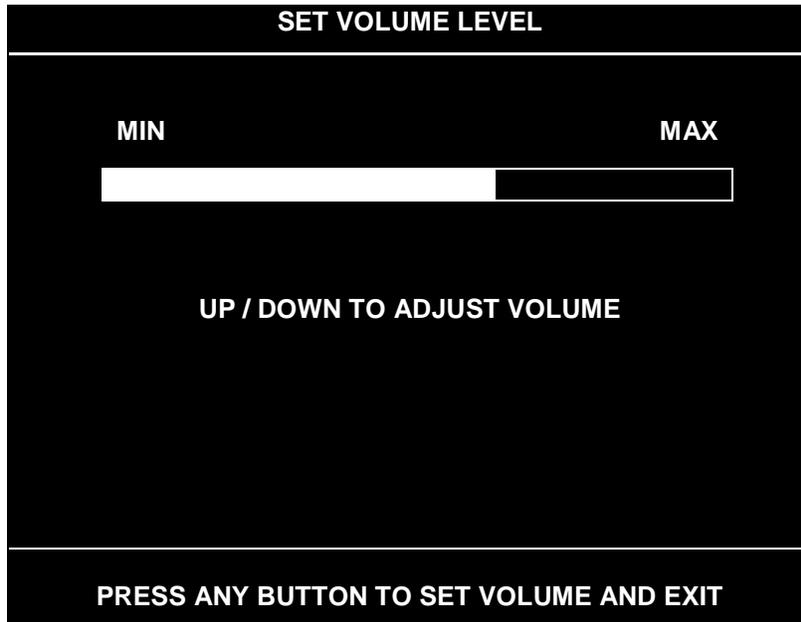
SET VOLUME LEVEL MENU

Loud games attract more player interest than games with low-level sound.

You can turn Attract Mode sound on or off without changing the game volume level. (See *Adjustments.*)

☞	**NOTICE:** Sound level 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.
☞	**NOTICE:** You can also change the volume level during Game Mode. Press VOLUME UP or VOLUME DOWN as necessary until you achieve the desired volume. These buttons are inside the coin door.

SET ATTRACT VOLUME LEVEL

Select ATTRACT VOLUME LEVEL at the Main Menu. You must enable Attract Mode sound before setting the Attract Mode volume level. (You can enable Attract Sound from the Adjustments Menu.)

When you display the Set Attract 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
```
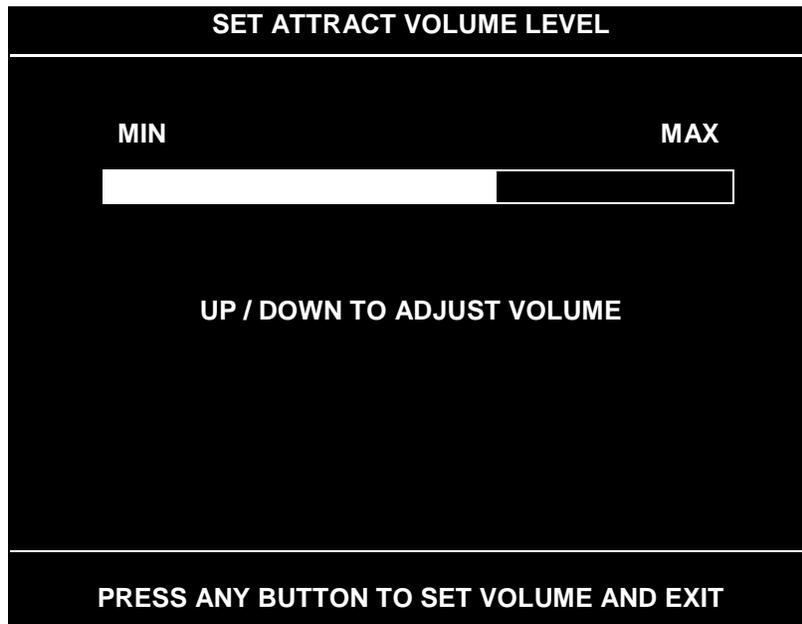
SET ATTRACT VOLUME LEVEL MENU

A loud Attract Mode encourages player interest. You can turn Attract Mode sound on or off without changing the game volume level. (See *Adjustments.)*

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
                 EXIT
```

UTILITIES MENU

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.

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