

BIG BUCK Safari



SAFARI DELUXE SERVICE MANUAL



Play Mechanix™

OPERATORS MANUAL

1- SAFETY

2-SETUP AND OPERATION

3-AUDITS, ADJUSTMENTS AND DIAGNOSTICS

4-MAINTENANCE, WIRING AND
TROUBLESHOOTING

5-PARTS

LIFE LIKE
VIOLENCE
MILD

Chapter 1. Safety.....	1-5
Warnings, Cautions & Notices.....	1-5
Chapter 2. Setup & Operation.....	2-1
Product Specifications.....	2-1
Inspection & Installation.....	2-1
Gun Calibration Menu.....	2-3
Chapter 3. Adjustments, Audits & Diagnostics.....	3-1
Main Menu.....	3-2
Menu System Map.....	3-3
Operator Adjustments Menu.....	3-4
Game Adjustments Menu.....	3-5
Coin Settings Menu.....	3-6
Player Cost Menu.....	3-7
Volume Menu.....	3-8
General Audits Menu.....	3-9
Game Audits Menu.....	3-10
System Audits Menu.....	3-11
Game Purchase Audits Menu.....	3-12
Adventure Purchase Audits Menu	3-13
Bonus Only Audits Menu.....	3-14
Coin Audits Menu.....	3-15
High Scores Menu.....	3-16
Whitetail Adventure Scoreboard.....	3-17
Other Scoreboards.....	3-17
Gun Calibration Menu.....	3-18
Reset Menu.....	3-19
System Tests Menu.....	3-20
Versions Menu.....	3-21
Switch Test Menu.....	3-22
Monitor Test Menu.....	3-23
Color Adjustment Menu.....	3-24
Screen Adjustment Menu.....	3-25
Color Screens.....	3-25
Sound Tests Menu.....	3-26
File Test Menu.....	3-27
Coin Meter Test.....	3-27
DIP Switch Settings Menu.....	3-27
Start Button Lamps Menu.....	3-27
Watchdog Tests Menu.....	3-27
Adjustments, Audits & Diagnostics Notes	3-28
Chapter 4. Maintenance, Wiring & Troubleshooting	4-1
Hard Drive Recovery.....	4-1
BIOS Power Management Setting.....	4-2
Monitor Adjustments.....	4-3
Cabinet Wiring.....	4-4
JAMMA I/O Board Connector	4-5
Shotgun I/O Board Connector.....	4-5
Troubleshooting Guide.....	4-6
Chapter 5. Parts.....	5-1
Shotgun Parts.....	5-1
Cabinet Parts.....	5-4



For parts or service, contact your local distributor, or:
Betson Enterprises
303 Paterson Plank Road
Carlstadt, New Jersey 07072-2307



Main Phone: (201) 438-1300
Toll Free Phone: (800) 524-2343
Part Phone: (800) 828-2048

Chapter 1. Safety

Safety instructions apply to operators and service personnel. Read these instructions before preparing the video game machine (VGM) for play. Other safety instructions appear throughout this manual.

WARNING: TRANSPORTING THE VIDEO GAME MACHINE (VGM). The VIDEO GAME MACHINE contains glass and fragile electronic devices. During transport, use appropriate care. Avoid rough handling.

WARNING: DISCONNECT POWER. Before servicing, moving or adjusting the VIDEO GAME MACHINE, turn off the VIDEO GAME MACHINE and unplug the AC line cord. Lethal voltages still exist in the game when power is disconnected. Use extreme caution while servicing. Servicing the game while powered can damage components and voids your warranty.

WARNING: AC GROUNDING. Avoid electrical shock! Do not plug in the VIDEO GAME MACHINE until you have verified a properly grounded AC outlet is available for use. Only use a grounded three-wire outlet. Do not use an adapter that removes the ground connection. Do not cut off the ground pin of the line cord.

WARNING: AVOID ELECTRICAL SHOCKS. This VIDEO GAME MACHINE does not use an isolation transformer. Disconnect power before servicing. Lethal voltages still exist in the game while power is disconnected. Use extreme caution while servicing. Verify the game has a working ground connection. Do not use VIDEO GAME MACHINE and disconnect power if the unit has water damage.

WARNING: HANDLE FLOURESCENT TUBE AND CRT WITH CARE. If you drop a fluorescent tube or CRT and it breaks, it will implode! Shattered glass from the implosion can travel extreme distances and cause bodily harm. Proper procedures must be used when handling broken materials. These items can contain hazardous materials such as mercury or lead.

WARNING: CHECK POWER SELECTOR, LAMP AND FAN. Before installing the VIDEO GAME MACHINE, verify that the VIDEO GAME MACHINE is properly set for the AC line voltage of the installation site. On the computer, notice the 115/230 VAC selector switch. Set this switch for the correct line voltage at the installation site. Verify the fluorescent lamp rating. The rating must match the line voltage at the installation site.

WARNING: USE PROPER FUSE. Avoid electrical shock! Disconnect power to the VIDEO GAME MACHINE before servicing. Fuse replacement by qualified service technician only. For continued protection replace a fuse with identical rated fuse.

WARNING: ATTACH CONNECTORS PROPERLY. Be sure all connectors mate properly. If connectors do not slip in easily, do not force them. Keyed connectors only connect one way. Check for correct orientation.

WARNING: USE EXTREME CARE WHEN HANDLING COMPONENTS. The VIDEO GAME MACHINE device contains numerous components that are very sensitive to handling, environmental and ESD(Electro Static Discharges) events. The computer contains sensitive components. Do not handle the computer roughly. Before servicing call your distributor and inquire about the computer's warranty. Utilize proper ESD procedures when servicing the VIDEO GAME MACHINE or components of the VIDEO GAME MACHINE. Do not expose the VIDEO GAME MACHINE or any components of the VIDEO GAME MACHINE to adverse environmental conditions, including but not limited to extreme temperatures or excessive moisture.

WARNING: HAZARD TO EPILEPTICS. A small portion of the population has an epileptic condition that may cause seizures. Affected persons experience seizures while watching some television pictures or playing certain video games. People who have not had seizures may still have an undetected epileptic condition. If anyone in your family has experienced epilepsy symptoms (seizures or loss of awareness), consult your physician before using video games. While children play video games, a parent should observe. Be alert to the following symptoms: Dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation, or convulsions. If you or your child experiences these symptoms, discontinue use immediately and consult your physician.

WARNING: POWER CORD REPLACEMENT. If the power cord is damaged or missing it must be replaced by an identical line cord as supplied by the manufacturer or authorized service agent.

WARNING: WATER JET. Do not install or operate game within operating perimeter of a water jet. Do not clean VIDEO GAME MACHINE using water jet.

CAUTION

Failure to properly operate this machine could result in malfunction or accident. Before operating your video game device, read this manual. Operate the machine according to instructions in this manual.

Keep this manual available and ready for use.

If the machine fails to function properly, immediately turn off the machine and unplug the AC line cord. Contact your local distributor. Your warranty lasts 60 days from your purchase date.

CAUTION

For reasons such as performance, this product's specifications might change without notice.

Federal patent, copyright and other intellectual property laws protect the content, devices and design of the VIDEO GAME MACHINE.

Without authorization, you may not reproduce this document or any of its contents.

NOTICE. All contents: Copyright 2008 by Raw Thrills Inc. All rights reserved. Release date: April 30, 2008.

NOTICE. Big Buck Safari is a trademark of Play Mechanix, Inc. All rights reserved.

CHAPTER 2. SETUP AND OPERATION

Product Specifications

ELECTRICAL POWER

Domestic
International Users
Japan

120 VAC @ 60 Hz, 5 amps
240 VAC @ 50 Hz, 2.5 amps
100 VAC @ 50 Hz, 5 amps

DC POWER FUSE GUIDE

+5 VDC	2 AMP Slow Blow
+12 VDC	7 AMP Slow Blow

TEMPERATURE

32° F to 100° F
(0° C to 38° C)

HUMIDITY

Must not exceed 95% relative humidity.

DELUXE MODEL, CABINET DIMENSIONS

Height = 79.9in.(2.0m)
Depth = 68.9in (1.75m)
Width = 29.5in.(0.75m)

DELUXE MODEL, CABINET WEIGHT

Weight = 700lbs(317.5Kg)



WARNING. Use extreme care when moving or servicing the game cabinet. Moving or servicing the game by qualified service technicians only. Read this manual before you connect power to the VIDEO GAME MACHINE.

[] 1. Make sure the shipping crate is on a flat stable surface.

[] 2. Using an appropriate tool, cut the banding straps.

[] 3. Remove the cardboard lid from the top of the shipping crate.

[] 4. Lift off the large cardboard container that surrounds the VIDEO GAME MACHINE. Do not use a sharp tool to cut the cardboard container the VIDEO GAME MACHINE is enclosed.

[] 5. Remove shipping cleats.

[] 6. Remove VIDEO GAME MACHINE from the shipping pallet. Seek help as required by your situation.

[] 7. Remove packing material from the guns.

[] 8. Place the VIDEO GAME MACHINE in a suitable play or service area.

[] 9. For safety reasons, make sure the game cabinet is level and stable. Adjust the leg levelers as necessary. Leveling the cabinet is a job for two or more people. Seek help as required by your situation.

[] 10. Check the AC line cord for visible signs of damage. Pay particular attention to the plug and line cord insulation.

[] 11. Check for shipping damage to the following:
Gun assembly: Left and right guns, gun holders, and cable
Cabinet glass: Marquee and monitor
Cabinet back door
Cabinet coin door
Cabinet and gun decals

[] 12. Remove the coin door key from the coin return chute.

[] 13. Open the top coin door. Locate the key for the back door and the cash box.

[] 14. Open the cash box and remove the plastic tub. Remove the items inside the tub. The items enclosed will include this service manual, AC line cord, bag of tools and a warranty card.

[] 15. Verify that a proper working AC outlet is available for use. Verify the AC outlet voltage. Verify the AC outlet ground connection is present and working.

[] 16. Verify the VIDEO GAME MACHINE is setup for the correct AC voltage. This involves opening the VIDEO GAME MACHINE back door. Use extreme caution when inside the game. Utilize appropriate ESD and safety procedures. Verify that the computer voltage selector switch is properly set to match the AC outlet voltage. Verify the fluorescent fixture in the marquee (top front of the VIDEO GAME MACHINE) is the correct voltage. Verify that the fan is the proper voltage rating. This will involve removing the marquee.

[] 17. Once the VIDEO GAME MACHINE voltage has been set/verified and the AC outlet ground and voltage has been verified, plug in the VIDEO GAME MACHINE line cord into the AC outlet.

[] 18. On the back of the game cabinet, locate the game AC power switch. The switch is on the bottom left side (you facing the back side of the VIDEO GAME MACHINE). Turn on the VIDEO GAME MACHINE.

[] 19. Verify that the cooling fan located on the bottom back of the VIDEO GAME MACHINE is working. If not, turn off and disconnect the AC line cord from the VIDEO GAME MACHINE. Refer to the diagnostic section of this manual for help.

[] 20. Verify that the VIDEO GAME MACHINE or any component of the VIDEO GAME MACHINE is not excessively hot or is emitting any foul odors. If so, turn off and disconnect the AC line cord from the VIDEO GAME MACHINE immediately. Refer to the diagnostic section of this manual for help.

[] 21. While loading you should see information on the video display. If not, see the diagnostic section of this manual.

[] 22. Once the VIDEO GAME MACHINE software is loaded, it may have the gun calibration screen posted. If not, enter the service menu by pressing the TEST button located on the bracket inside the top coin door.

[] 23. Select GUN CALIBRATION.

[] 24. Calibrate the guns. See procedure listed next. See the diagnostic section of this manual if errors occur.

[] 25. Enter the SWITCH TEST menu. Verify that all the VIDEO GAME MACHINE switches function.

[] 26. Enter the SCREEN TEST menu. Verify that the video is acceptable.

[] 27. Enter the SOUND TEST menu. Verify the audio works and is not distorted.

[] 28. Enter the COIN METER TEST menu. Verify the operation of the coin meter.

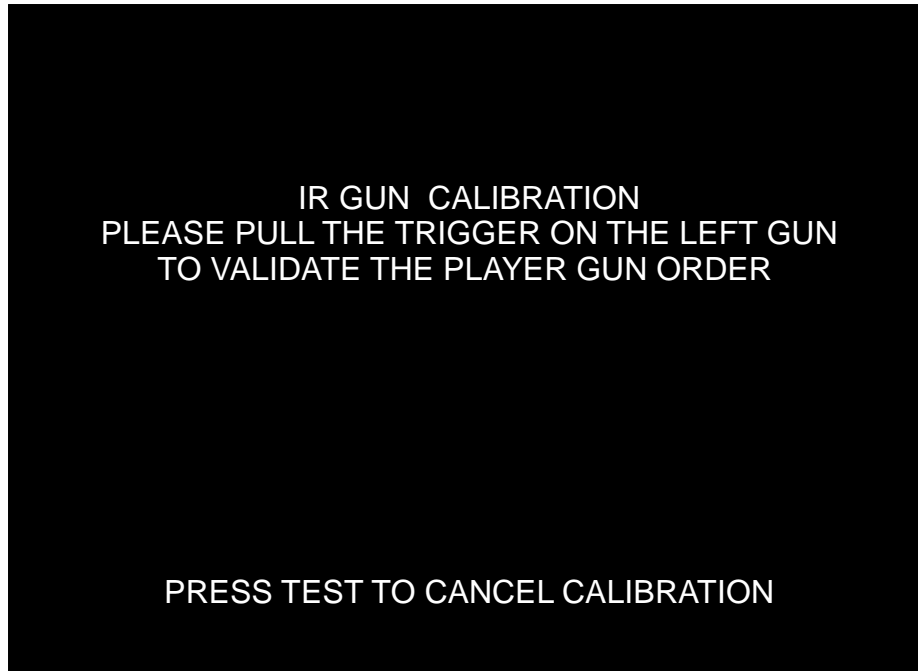
[] 29. Enter the START BUTTON LAMPS menu. Verify that the lamps of the buttons work correctly.

[] 30. Enter the WATCHDOG TEST menu. This test will cause the VIDEO GAME MACHINE to re-boot.

[] 31. Upon a successful re-boot of the VIDEO GAME MACHINE, you are ready to adjust your game for operation. Refer to Chapter 3 for this information.

Gun Calibration Menu

From the Main Menu, select Gun Calibration. The Gun Calibration Menu opens. As part of VIDEO GAME MACHINE setup, you must calibrate the guns. Periodic gun calibration also allows you to optimize and verify gun performance. We recommend calibrating the guns every week of operation. Properly calibrated guns improve your collections.



HOW TO CALIBRATE

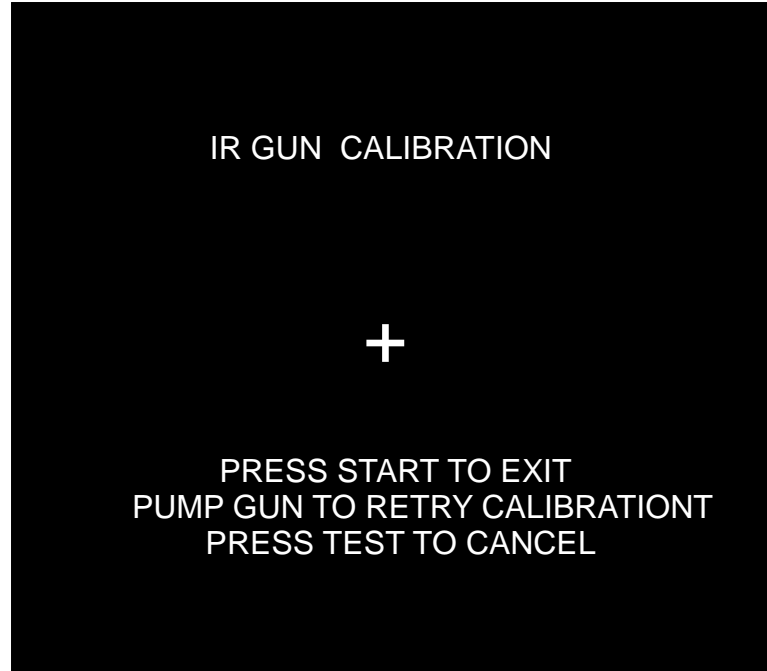
NOTICE. During gun calibration, the gun muzzle must be two feet from the monitor. You must calibrate each gun separately. The left START button accepts left gun calibration and the right START button accepts right gun calibration respectively. It is important to calibrate both guns at the same time. Do not calibrate one gun and then cancel calibration while working with the second gun. This will cause the calibration to not be updated for either gun.

First, the trigger on the LEFT (GREEN) gun must be pulled. This allows the game machine to identify which gun is the LEFT gun and which gun is the RIGHT gun.

(calibration continues on next page...)

Gun Calibration Menu

From the Main Menu, select Gun Calibration. The Gun Calibration Menu opens. As part of VIDEO GAME MACHINE setup, you must calibrate the guns. Periodic gun calibration also allows you to optimize and verify gun performance. We recommend calibrating the guns every week of operation. Properly calibrated guns improve your collections.



HOW TO CALIBRATE

NOTICE. During gun calibration, the gun muzzle must be two feet from the monitor. You must calibrate each gun separately. The left START button accepts left gun calibration and the right START button accepts right gun calibration respectively. It is important to calibrate both guns at the same time. Do not calibrate one gun and then cancel calibration while working with the second gun. This will cause the calibration to not be updated for either gun.

A “+” sign appears in the center of the screen. Aim the gun at the “+” sign and shoot. Accept calibration by pressing corresponding player gun START button .

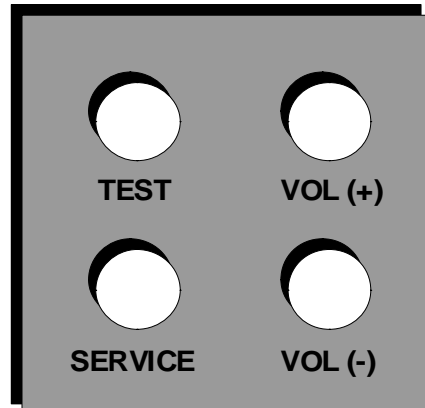
When you’re satisfied with the calibration of the gun, press the START button for the gun that was just calibrated. For example, to accept calibration for the left gun, press the left START button. With the second gun, repeat the calibration procedure.

Once the calibration for a gun is accepted, the gun tracking screen for that gun will appear. This gives the opportunity for additional gun calibration verification before moving on.

Chapter 3. Adjustments, Audits & Diagnostics

Diagnostic Menu System

Locate the Service Button Panel. It mounts inside the top coin door area. To access the MAIN MENU of the operator's screen, press the TEST button.



Menu Navigation

BUTTON	ACTION
TEST	ENTER MAIN MENU
RIGHT START or TEST	ENTER OR SELECT ITEM
GUN TRIGGER or LEFT START or VOL DOWN	SCROLL DOWN
GUN PUMP or VOLUMN UP	SCROLL UP

THE EASIEST WAY TO NAVIGATE through menus is to use the guns and START buttons. To move downward through menu rows, click the gun trigger. To move upward through menu rows, snap the gun pump lever. The active row highlights. To select a menu row, click the RIGHT START button.

ON ONE-COLUMN MENUS, clicking RIGHT START usually opens a new menu. To return to the previous menu, highlight EXIT. Then click RIGHT START. When you exit from the Main Menu, the VIDEO GAME MACHINE returns to Game Mode.

ON TWO-COLUMN MENUS, the RIGHT START button also allows you to change columns. The right column contains settings. Clicking RIGHT START once moves the highlight to the right column. Now use the gun to cycle through values. To save your change, click RIGHT START.

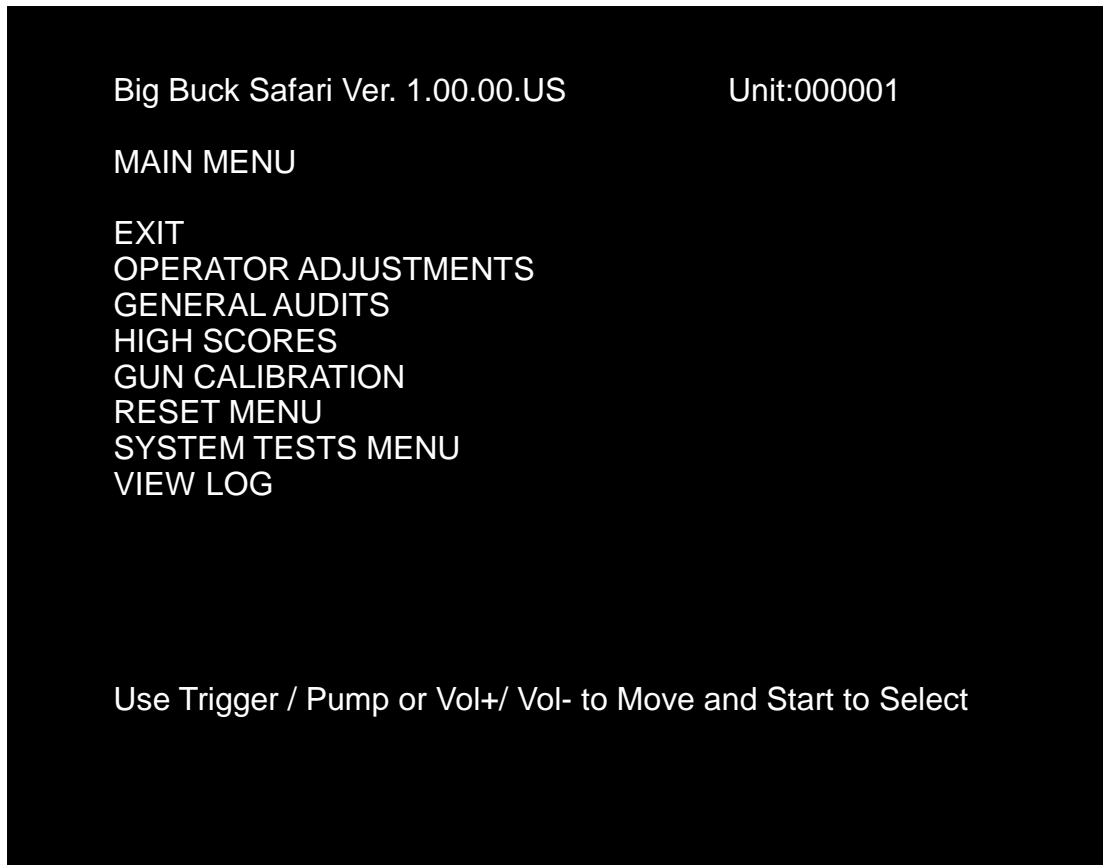
GUN CALIBRATION requires you to use LEFT START to accept left gun calibration. Also in gun calibration, use RIGHT START to accept right gun calibration. Exit rules for some other menus vary. Follow screen directions.

IF THE GUNS FAIL, you can still access the menu system. Use LEFT START or VOL DN instead of TRIGGER. Use VOL UP instead of PUMP. You'll find the VOL buttons inside the coin door, on a switch bracket.

NOTICE. This chapter includes special page headings. The headings indicate the menu you're in, plus the one you just came from. The headings also show how many menus you've drilled down. This way, you know which parent menu associates with the sub-menu you're looking at.

Main Menu

When you press the TEST button, the Main Menu appears. The Main Menu presents a number of selections that you can choose.



Procedure

A BAR APPEARS ON SCREEN and highlights your selection. Use TRIGGER to move the highlight bar up. Use PUMP to move the bar down. To enter your selection, press either START button. After you press START, the screen displays the menu that corresponds to your selection.

THE IDEA IS TO “DRILL DOWN” to a terminal menu. At that menu, you make an adjustment, read audit totals or test part of the VIDEO GAME MACHINE.

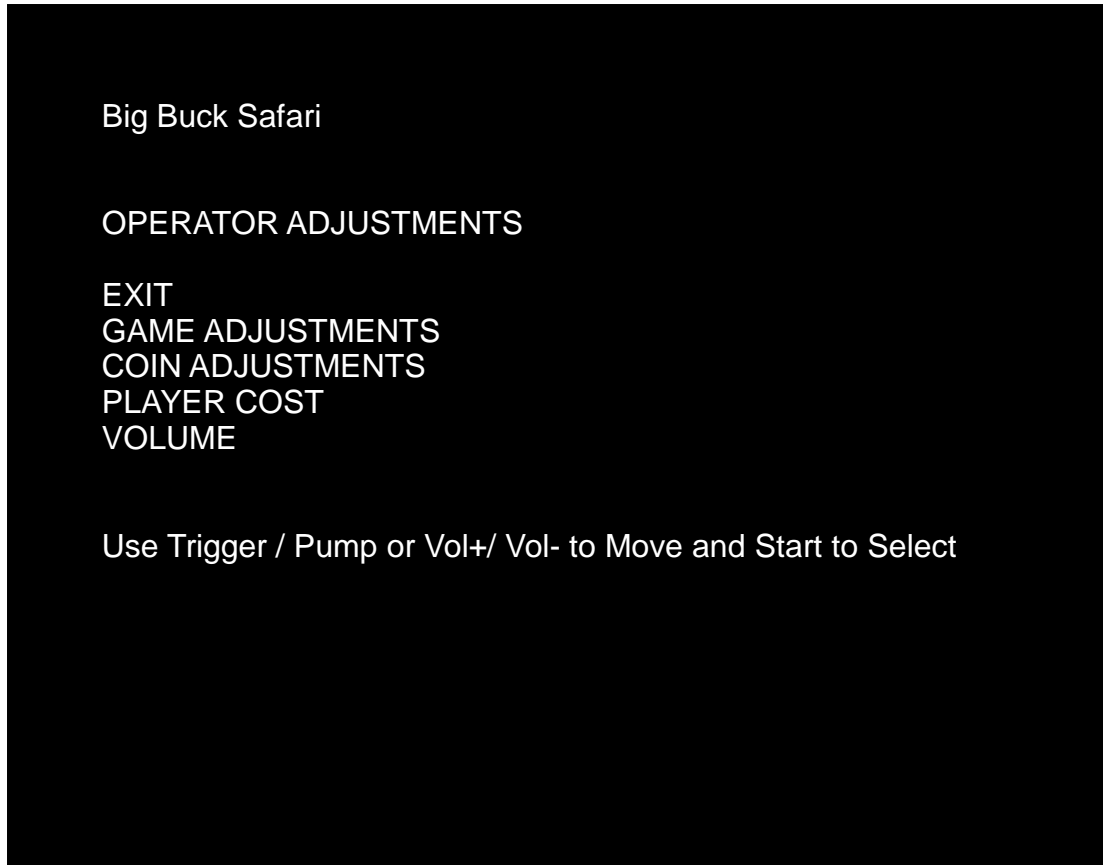
HOW DO YOU KNOW WHERE YOU ARE? How do you know where you’ve come from? Use the Menu System Map on the next page. This map covers all the submenus below the Main Menu. Also, don’t forget the tables at the top of each menu page. These tables indicate each menu’s path back to the Main Menu.

Menu System Map

OPERATOR ADJUSTMENT	GUN CALIBRATION
Game Adjustments Violence Big Buck Girls Skill Level Initials Type Coin Adjustments Freeplay Currency Type Currency Unit Value Coin 1 Value Coin 2 Value Coin 3 Value/DBV Pulse Maximum Credits Bonus Award Units for Bonus Player Cost Volume	<p style="text-align: center;">[No submenus]</p>
GENERAL AUDITS	RESET MENU
Game Audits System Audits Game Purchase Audits Adventure Purchase Audits Bonus Only Audits Coin Audits	Reset Game Audits Reset Adventure Audits Reset Credits Reset Coin Counters Reset Adjustments Reset High Scores Factory Reset
HIGH SCORES	SYSTEM TEST MENU
Sable Adventure Kudu Adventure Wildbeest Adventure Gemsbok Adventure Afr. Buffalo Adventure Perfect Streak Perfect Sites	Version List Switch Test Screen Tests Color Adjustment Screen Adjustment Color Screens Sound Test File Test DIP-switch Settings Start Button Lamps Watchdog Test Gun Tracking Test

Operator Adjustments Menu

From the Main Menu, select Operator Adjustments. The Operator Adjustments Menu opens. From here, you can select gameplay, coinage or sound adjustments. Then go to the selected menu and tailor the game to your installation.



Procedure

Select an option with the highlight bar.

The TRIGGER moves the highlight bar down the left column.

The PUMP moves the highlight bar up the left column.

On one-column menus, select an item by pressing START.

On two-column menus, you can change settings from the right column. Switch to the right column by pressing START.

On menus with settings, change a setting with the TRIGGER or PUMP.

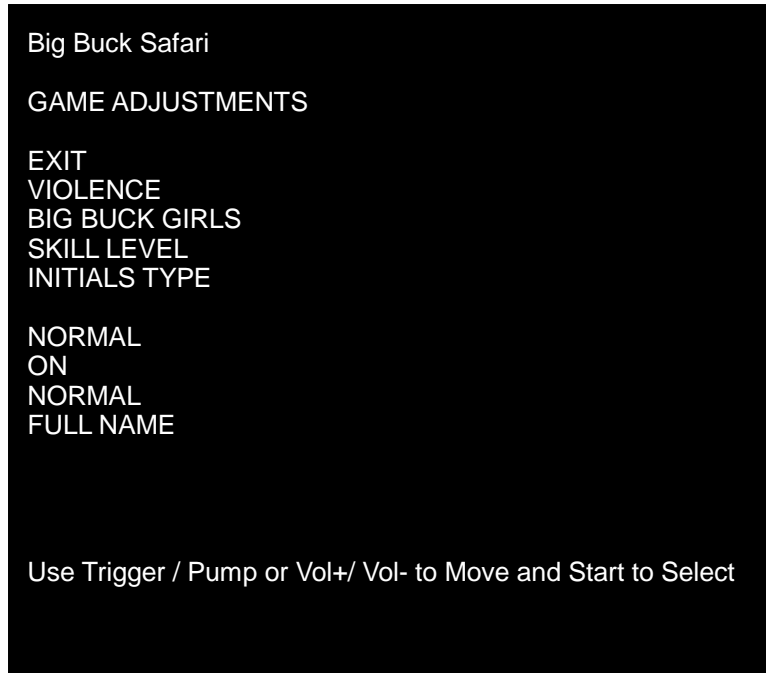
To accept the change, press START. The left column becomes active again.

Adjustments Can Improve Collections

Adjustments allow you to customize the performance of the game. Each variable on an adjustment menu changes an aspect of game or game appearance. Optimizing these settings should result in ongoing player interest and game earnings. How do you know what works best? You monitor the effects of your adjustments. Compare audit information before and after you make changes. Then you know which changes increase or sustain your earnings.

Game Adjustments Menu

From the Main Menu, select Operator Adjustments. The Game Adjustments Menu opens. From here, you can select several gameplay aspects. You can also make adjustments from this screen.

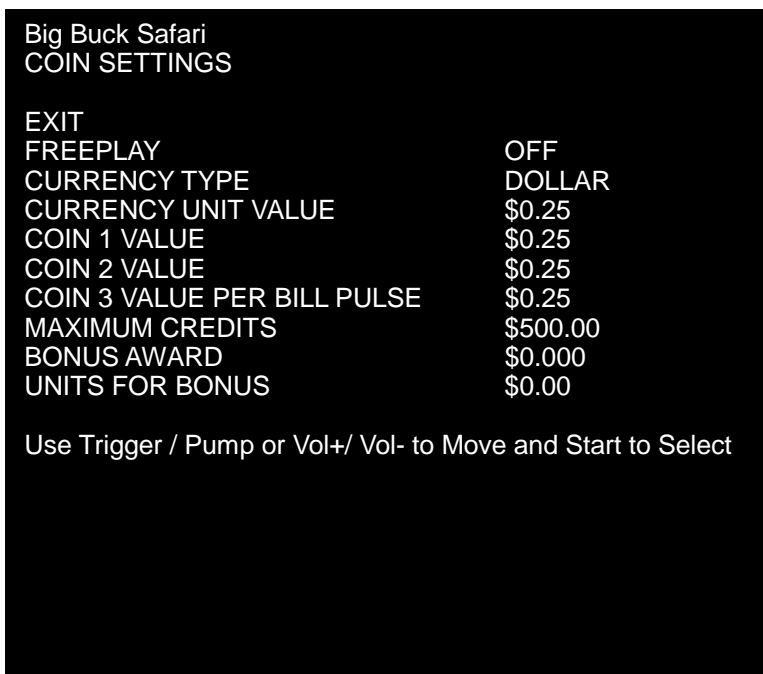


Settings, Defaults & Choices

Setting Name	Description	Default	Choices
Violence	Changes visual effect of hit on animal. NORMAL. Some blood appears on shot animals. Red star appears on kills. NO BLOOD. No blood appears on shot animal. In No Blood Mode, small blue star replaces red star on kills.	Normal	No Blood / Normal
Big Buck Girls	Normally, Big Buck Girls appear in Attract Mode and Gameplay Mode. This setting allows operator to permit or eliminate images of Big Buck Girls.	On	ON: Big Buck Girls Appear
Skill Level	Adjusts level of game difficulty by changing way shotgun reloads after each trigger pull. EASY. After each trigger pull, shotgun reloads itself without pumping. To fire another shot, pull trigger again. NORMAL. After each trigger pull, reload by pumping.	Normal	Normal / Easy
Initial Type	Adjusts how player can enter name. FULL NAME. Players can enter their full names on two screens. First name screen allows up to 13 characters. Last name screen allows up to 15 characters. INITIALS. Players can enter up to three characters.	Full Name	Full Name / Initials

Coin Settings Menu

From the Operator Adjustments Menu, select Coin Adjustments. The Coin Settings Menu opens. From here, you can select and change coin slot and DBV pricing. These settings don't set the game price. Instead, these settings specify the coin type that a coin slot accepts. The smallest acceptable coin is 25 cents. In the US, 25 cents is the typical setting for both coin values. The DBV value is also a multiple of 25 cents. The typical US DBV value is \$1.



SETTING NAME	DEFAULTS	CHOICES
FREEPLAY	OFF	ON/OFF
CURRENCY TYPE	DOLLAR	
CURRENCY UNIT VALUE	\$0.25	
COIN 1 VALUE	\$0.25	\$0.25 - \$63.75 IN \$0.25 INCREMENTS
COIN 2 VALUE	\$0.25	\$0.25 - \$63.75 IN \$0.25 INCREMENTS
COIN 3 VALUE/DBV PULSE	\$0.25	\$1,\$5,\$10 OR \$20
MAX CREDITS	\$500.00	\$125 - \$500
BONUS AWARD	\$0.00	
UNITS FOR BONUS	\$0.00	

FREEPLAY MODE. This mode requires no coins. Players can start a game just by pressing START. Use the Freeplay Mode for promotions or for noncommercial applications. Freeplay Mode is also very useful for testing the machine. Select Freeplay with the TRIGGER and PUMP. Then save your setting by pressing START.

COIN 1 VALUE & COIN 2 VALUE allow you to set coin slot pricing. With the TRIGGER and PUMP, select Coin 1 Value or Coin 2 Value. The highlight bar indicates option selection. TRIGGER moves the highlight bar down the left column. PUMP moves the highlight bar up the left column. Enter your setting by pressing START. Now, the highlight bar moves to the right column. Here, use TRIGGER and PUMP to make changes. Save your setting by pressing START.

VALUE PER BILL PULSE allows you to set DBV pricing. The bill validator (DBV) translates bills into electronic pulses. This setting determines one bill's value in pulses. The number of pulses is always an integer. The smallest acceptable coin value equals one pulse. In a VIDEO GAME MACHINE with US coin mechanisms, one pulse is worth a quarter. Typically, the DBV value is \$1.00, or equal to four coins. In that case, the DBV pulses the coin line four times.

MAXIMUM CREDITS is the maximum number of unplayed credits that the VIDEO GAME MACHINE allows.

BONUS AWARD is the minimum purchase amount needed to earn bonus monetary units.

UNIT FOR BONUS AWARD is the monetary unit amount given when BONUS AWARD purchase amount is met.

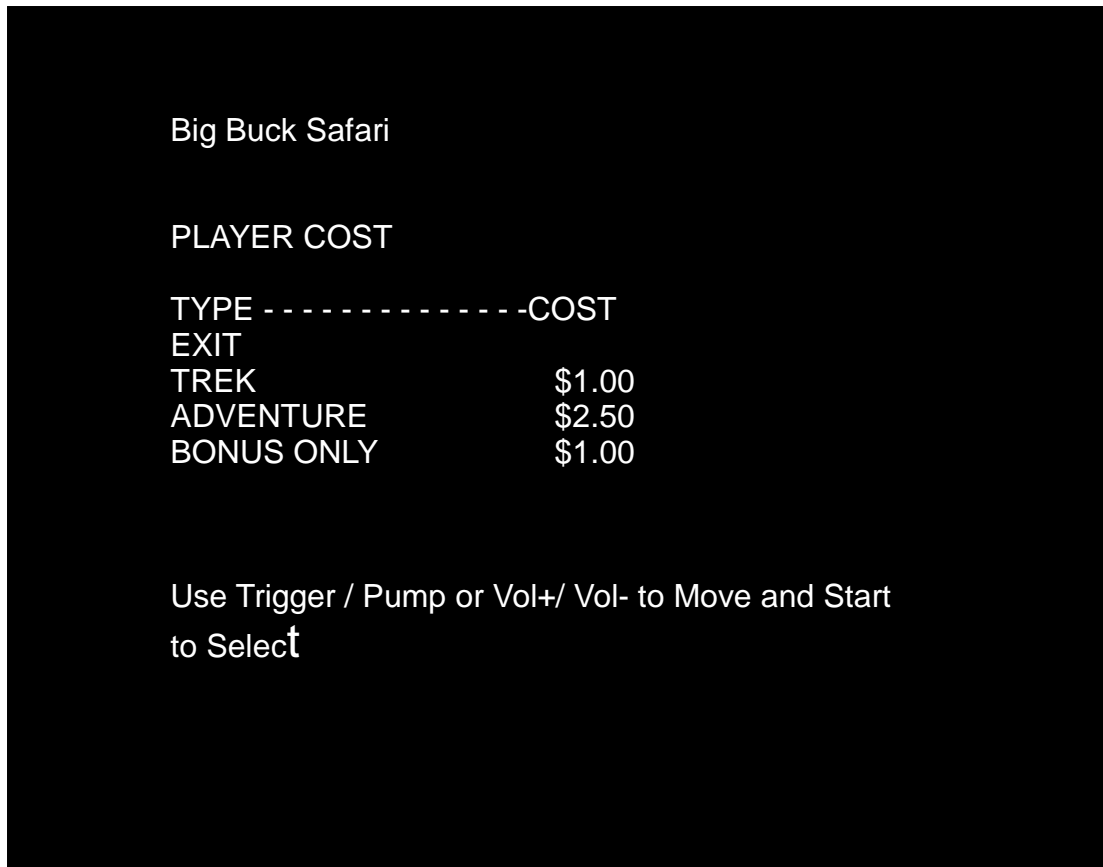
Player Cost Menu

From the Operator Adjustments Menu, select Player Cost. The Player Cost Menu opens. This screen indicates the costs for various levels of play:

A trek allows the player to hunt at five sites.

An adventure is three treks.

A bonus round allows an additional hunting opportunity.

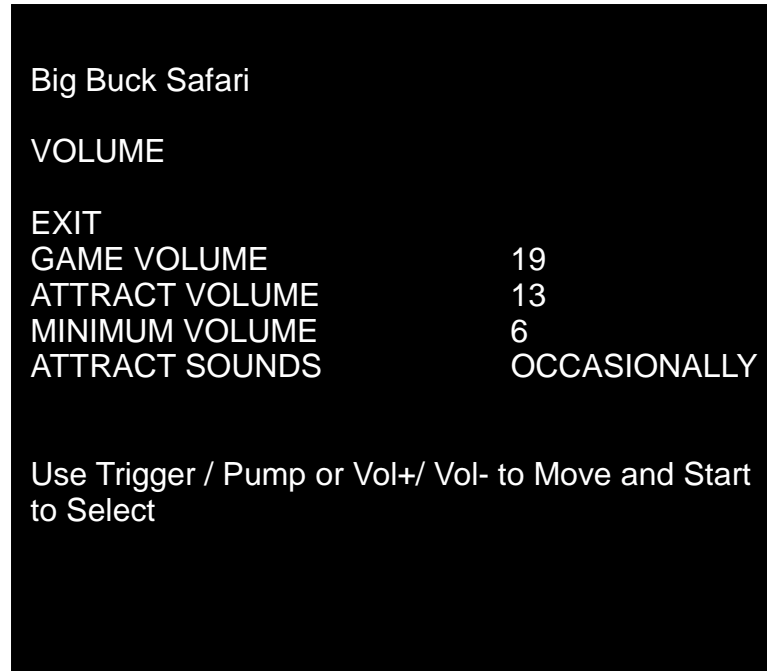


Settings, Defaults & Choices

SETTING NAME	DEFAULT	CHOICES
TREK	\$1.00	\$0.25 - \$63.75 IN \$0.25 INCREMENTS
ADVENTURE	\$2.50	\$0.25 - \$63.75 IN \$0.25 INCREMENTS
BONUS ONLY	\$1.00	\$0.25 - \$63.75 IN \$0.25 INCREMENTS

Volume Menu

From the Operator Adjustments Menu, select Volume. The Volume Menu opens. Use this menu to set sound volume levels for game features.



SETTING NAME	DEFAULT	CHOICES
GAME VOLUME	18	0 -31
ATTRACT VOLUME	13	0 -31
MINIMUM VOLUME	6	0 -31
ATTRACT SOUNDS	OCCASIONALLY	OFF / OCCASIONALLY / ALWAYS

HOW TO MAKE SETTINGS. Don't look for the volume pot! Big Buck Safari uses digital volume settings, rather than analog ones. Now, you can separately adjust the volume of Gameplay Mode and Attract Mode. You can make your volume adjustments from the screen. To select a setting from the left column, use either gun's TRIGGER or PUMP. Then switch to the right column by pressing START. Locate the value that you want by using TRIGGER and PUMP. Then save this value by pressing START.

GAME VOLUME allows you to change game sound volume. You can also reduce the volume to zero. The Game Volume setting only affects sound levels during the game.

ATTRACT VOLUME allows you to change Attract Mode sound volume. Attract Mode is the mode of operation between games. This mode advertises the VIDEO GAME MACHINE to prospective players.

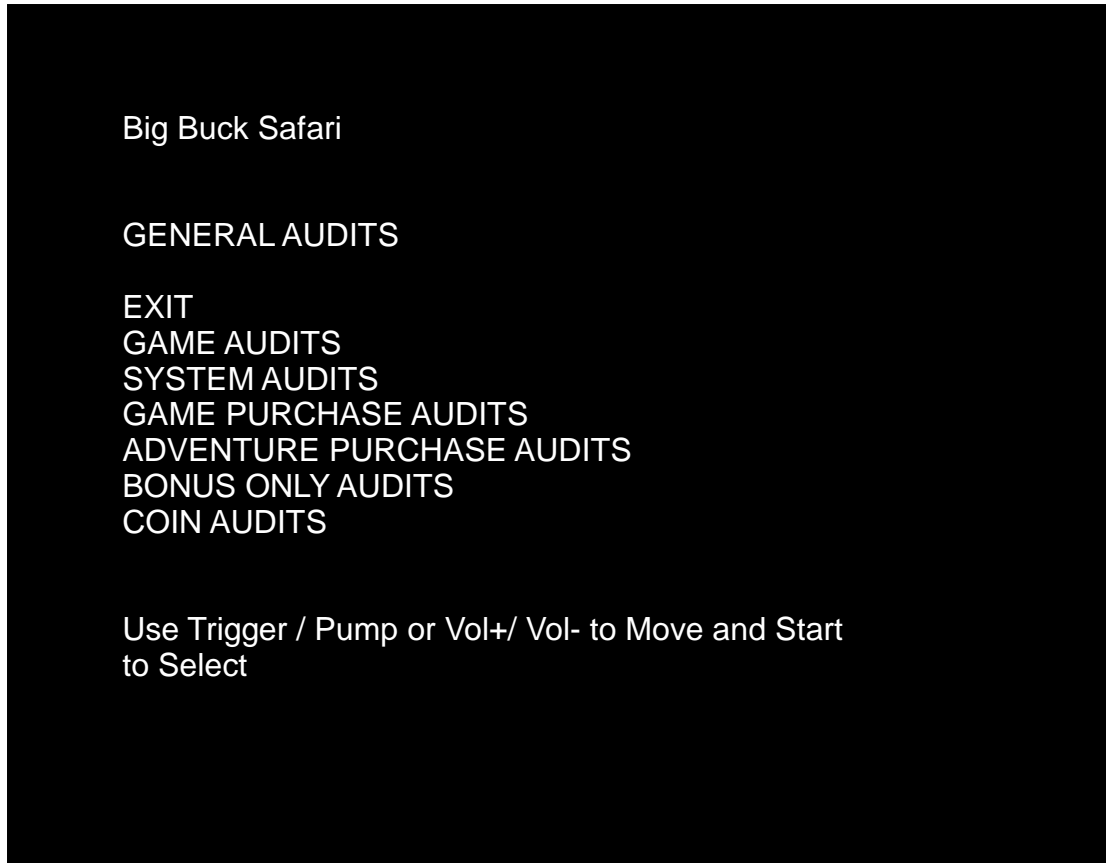
MINIMUM VOLUME is the lowest that you can set any of the other volume settings.

ATTRACT SOUNDS allows you to change how often attract sounds come on. Usually, the location determines the appropriate interval between Attract Mode Sounds. Frequent sounds may be more appropriate to an arcade than to a lobby location.

NOTICE. During gameplay, you can adjust game volume with the VOL+ and VOL- buttons. You'll find them inside the coin door. These buttons also allow you to adjust Attract Mode volume during Attract Mode.

General Audits Menu

From the Main Menu, select General Audits. The General Audits Menu opens. This is the opening screen for the VIDEO GAME MACHINE's bookkeeping totals. From here, you can select an audit and go to that audit's menu.



Applications for General Audits

Use game audit screens to assess game performance.

Use audit data to determine options such as game difficulty and the free game award.

Use audits to help you to maximize game earnings.

Use audit information to help you to detect intermittent problems.

Game Audits Menu

From the General Audits Menu, select Game Audits. The Game Audits Submenu opens.

Big Buck Safari

GAME AUDITS

EXIT

1 PLAYER GAMES	0
2 PLAYER GAMES	0
3 PLAYER GAMES	0
4 PLAYER GAMES	0
SHOOTOUT GAMES	0
PLAYER STARTS	0
GAMES ENDED	0
GAME WINS	0
CONTINUES	0
CONTINUES OFFERED	0
SHOOTOUT CHALLENGES	0

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

System Audits Menu

From the General Audits Menu, select System Audits. The Game Audits Submenu opens.

Big Buck Safari

SYSTEM AUDITS

EXIT

PLAY TIME 0 yr 0 dy—0:00:00

UP TIME 0 yr 0 dy—0:00:00

WATCHDOGS 0

EXCEPTIONS 0

BAD TRAPS 0

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

Game Purchase Audits Menu

From the General Audits Menu, select Game Purchase Audits. Select Local Game Purchase Audits Menu and the Game Purchase Audits Menu Appears

Big Buck Safari

GAME PURCHASE AUDITS

EXIT

ADV PURCHASE AUDIT:TURN BASED

ADV PURCHASE AUDIT: SHOOTOUT

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

Adventure Purchase Audits: Turn-Based Menu or Shootout

From the Game Purchase Audits Menu, select Adventure Purchase type, Turn-Based or Shootout. The Adventure Purchase Audits Menu opens.

Big Buck Safari

ADVENTURE PURCHASE AUDITS: TURN BASED

ADVENTURE	WHOLE	TREK1	TREK2	TREK3
SABLE	0	0	0	0
KUDU	0	0	0	0
WILDBEEST	0	0	0	0
GEMSBOK	0	0	0	0
AFR.BUFFALO	0	0	0	0

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

Big Buck Safari

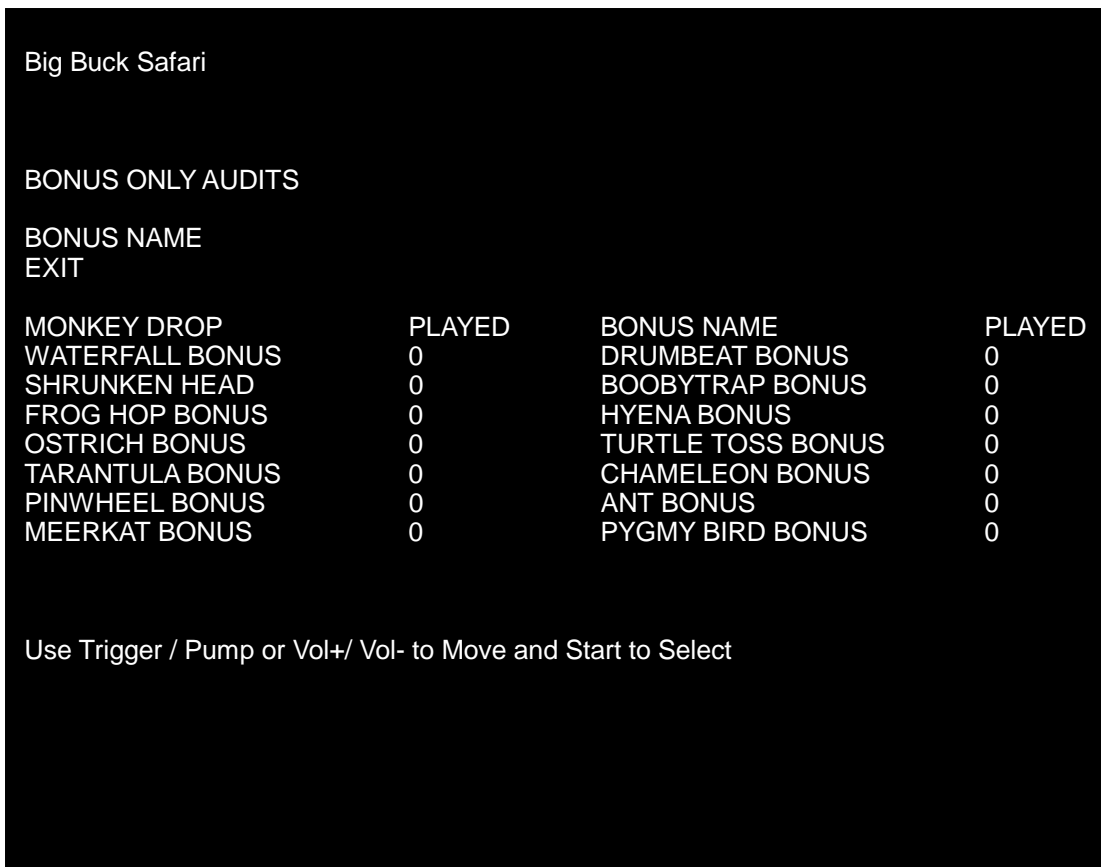
ADVENTURE PURCHASE AUDITS: SHOOT-OUT

ADVENTURE	WHOLE	TREK1	TREK2	TREK3
SABLE	0	0	0	0
KUDU	0	0	0	0
WILDBEEST	0	0	0	0
GEMSBOK	0	0	0	0
AFR.BUFFALO	0	0	0	0

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

Bonus Only Audits Menu

From the General Audits Menu, select Bonus Only Audits. The Bonus Only Audits Menu opens.



Coin Audits Menu

From the General Audits Menu, select Coin Audits. The Coin Audits Menu opens.

Big Buck Safari

COIN AUDITS

EXIT

TOTAL COIN 1 \$0.00

TOTAL COIN 2 \$0.00

TOTAL COIN 3 DBV \$0.00

LIFETIME COIN COINT \$0.00

SERVICE CREDITS \$0.00

Use Trigger / Pump or Vol+ / Vol- to Move and Start to Select

High Scores Menu

From the Main Menu, select High Scores. The High Scores Menu opens. From this menu, you can view high scores from each type of Big Buck Safari game. There are two main High Score categories: Turn Based and Shootout.

Big Buck Safari
HIGH SCORES:TURN BASED

EXIT
SABLE
KUDU
WILDBEEST
GEMSBOK
AFR.BUFFALO
PERFECT STREAK
PERFECT SITES

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

Big Buck Safari
HIGH SCORES:SHOOTOUT

EXIT
SABLE
KUDU
WILDBEEST
GEMSBOK
AFR.BUFFALO
PERFECT STREAK
PERFECT SITES

Use Trigger / Pump or Vol+/ Vol- to Move and Start to Select

Sable Adventure Scoreboard

From the High Scores Menu, Sable Adv Scoreboard. The Sable Menu opens. From this menu, you can view high scores from each type of Big Buck Safari game.



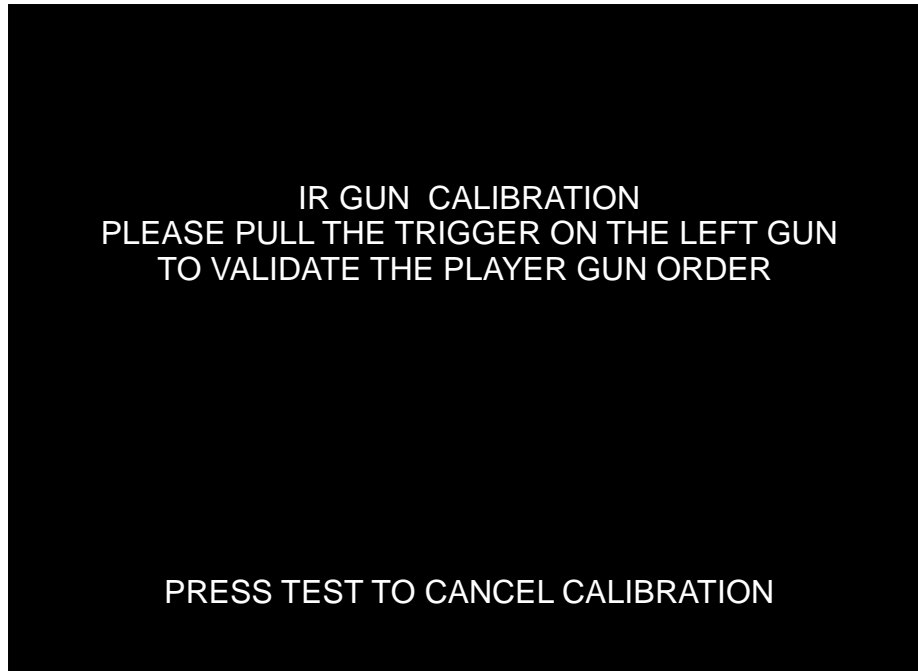
Other Scoreboards

You can access eleven more other scoreboards from the High Scores Menu...

- Sable Adventure
- Kudu Adventure
- Wildbeest Adventure
- Gemsbok Adventure
- Afr.Buffalo Adventure
- Perfect Streak
- Perfect Sites

Gun Calibration Menu

From the Main Menu, select Gun Calibration. The Gun Calibration Menu opens. As part of VIDEO GAME MACHINE setup, you must calibrate the guns. Periodic gun calibration also allows you to optimize and verify gun performance. We recommend calibrating the guns every week of operation. Properly calibrated guns improve your collections.



HOW TO CALIBRATE

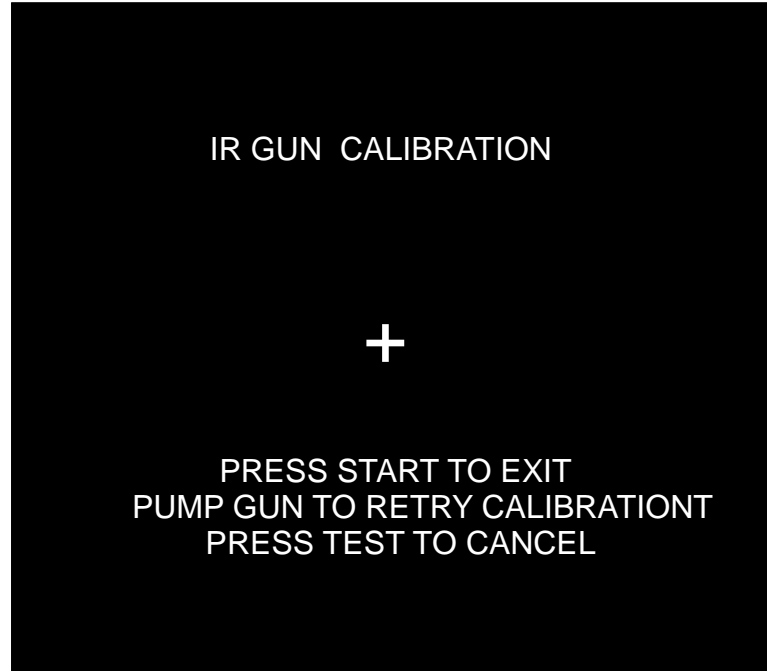
NOTICE. During gun calibration, the gun muzzle must be two feet from the monitor. You must calibrate each gun separately. The left START button accepts left gun calibration and the right START button accepts right gun calibration respectively. It is important to calibrate both guns at the same time. Do not calibrate one gun and then cancel calibration while working with the second gun. This will cause the calibration to not be updated for either gun.

First, the trigger on the LEFT (GREEN) gun must be pulled. This allows the game machine to identify which gun is the LEFT gun and which gun is the RIGHT gun.

(calibration continues on next page...)

Gun Calibration Menu

From the Main Menu, select Gun Calibration. The Gun Calibration Menu opens. As part of VIDEO GAME MACHINE setup, you must calibrate the guns. Periodic gun calibration also allows you to optimize and verify gun performance. We recommend calibrating the guns every week of operation. Properly calibrated guns improve your collections.



HOW TO CALIBRATE

NOTICE. During gun calibration, the gun muzzle must be two feet from the monitor. You must calibrate each gun separately. The left START button accepts left gun calibration and the right START button accepts right gun calibration respectively. It is important to calibrate both guns at the same time. Do not calibrate one gun and then cancel calibration while working with the second gun. This will cause the calibration to not be updated for either gun.

A "+" sign appears in the center of the screen. Aim the gun at the "+" sign and shoot. Accept calibration by pressing corresponding player gun START button .

When you're satisfied with the calibration of the gun, press the START button for the gun that was just calibrated. For example, to accept calibration for the left gun, press the left START button. With the second gun, repeat the calibration procedure.

Once the calibration for a gun is accepted, the gun tracking screen for that gun will appear. This gives the opportunity for additional gun calibration verification before moving on.

Reset Menu

From the Main Menu, select Reset Menu. The Reset Menu opens. This menu helps you to find which aspect of the VIDEO GAME MACHINE that you want to reset:

- Audits
- Credits
- Counters
- Adjustments
- Scores
- All of the above

Factory Reset

Maybe you just want to reset everything. Then choose Factory Reset. Use TRIGGER and PUMP to select Factory Restore. Then enter your setting by pressing START. Factory Reset causes game adjustments to revert back to the settings that the manufacturer recommends. The reset also clears audit data. After the reset, you must recalibrate the gun.

Big Buck Safari

RESET MENU

EXIT

RESET GAME AUDITS

RESET ADVENTURE AUDITS

RESET CREDITS

RESET COIN COUNTERS

RESET ADJUSTMENTS

RESET HIGH SCORES

FACTORY RESET

Use Trigger / Pump or Vol+ / Vol- to Move and Start to Select

System Tests Menu

From the Main Menu, select System Tests. The System Tests Menu opens. From this menu, select menus that verify your system version and check peripherals.

Big Buck Safari 00.88.01 DEBUG Build: Dec 30 2005 17:41:35

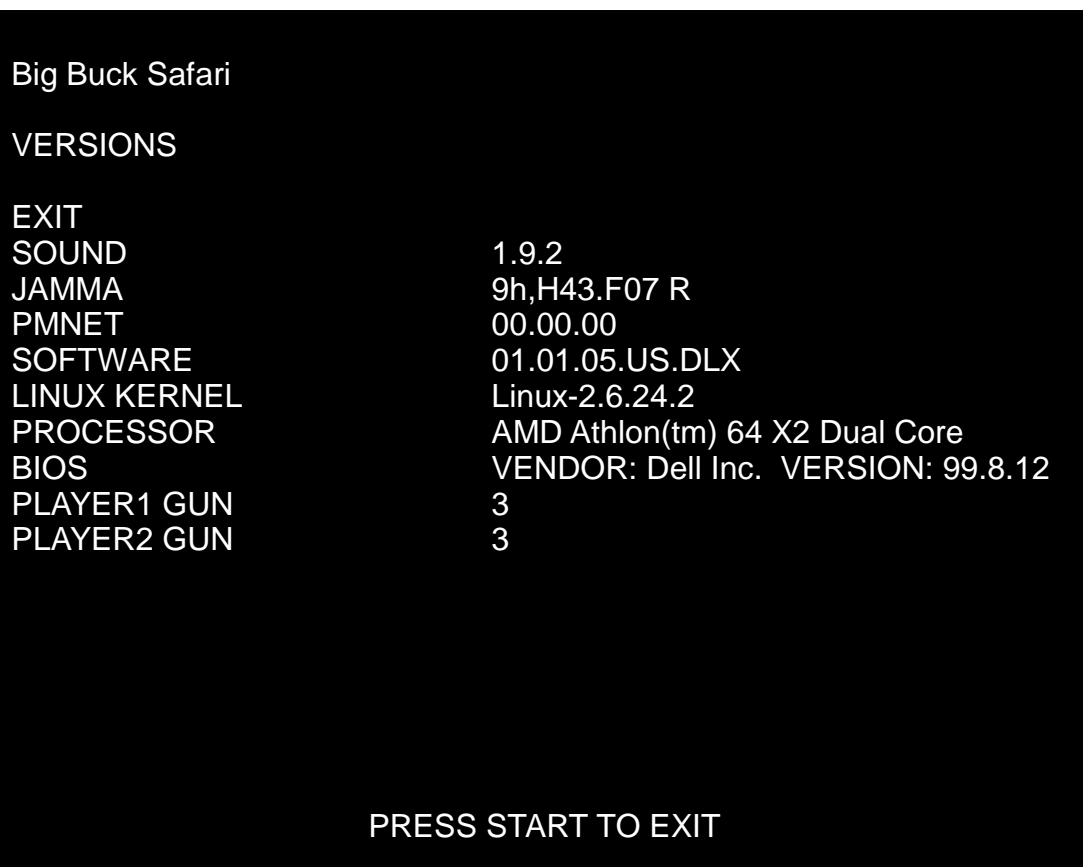
SYSTEM TESTS

EXIT
VERSION LIST
SWITCH TEST
SCREEN TESTS
SOUND TEST
FILE TEST
COIN METER TEST
DIPSWITCH SETTINGS
START BUTTON LAMPS
WATCHDOG TEST
GUN SENSOR TEST
GUN CAMERA TEST
GUN ELECTRONICS TEST

Use Trigger / Pump or Vol+ / Vol- to Move and Start to Select

Versions Menu

From the System Tests Menu, select Version List. The Versions Menu opens. Use this menu to check your VIDEO GAME MACHINE's hardware and software versions.



Switch Test Menu

From the System Tests Menu, select Switch Test. The Switch Test Menu opens. Use this menu to check input switch performance. The test screen highlights each switch that you activate. The VIDEO GAME MACHINE also sounds a “switch active” alert.

NOTICE: EXIT PROCEDURE. The Switch Test Menu uses a unique exit procedure. Due to the ongoing diagnostic routine, the procedure has to be different. The menu checks all the switches that you normally use for navigation. To exit, simultaneously press the either START button and either gun trigger. Exiting returns you to the Main Menu.

Big Buck Safari

SWITCH TEST

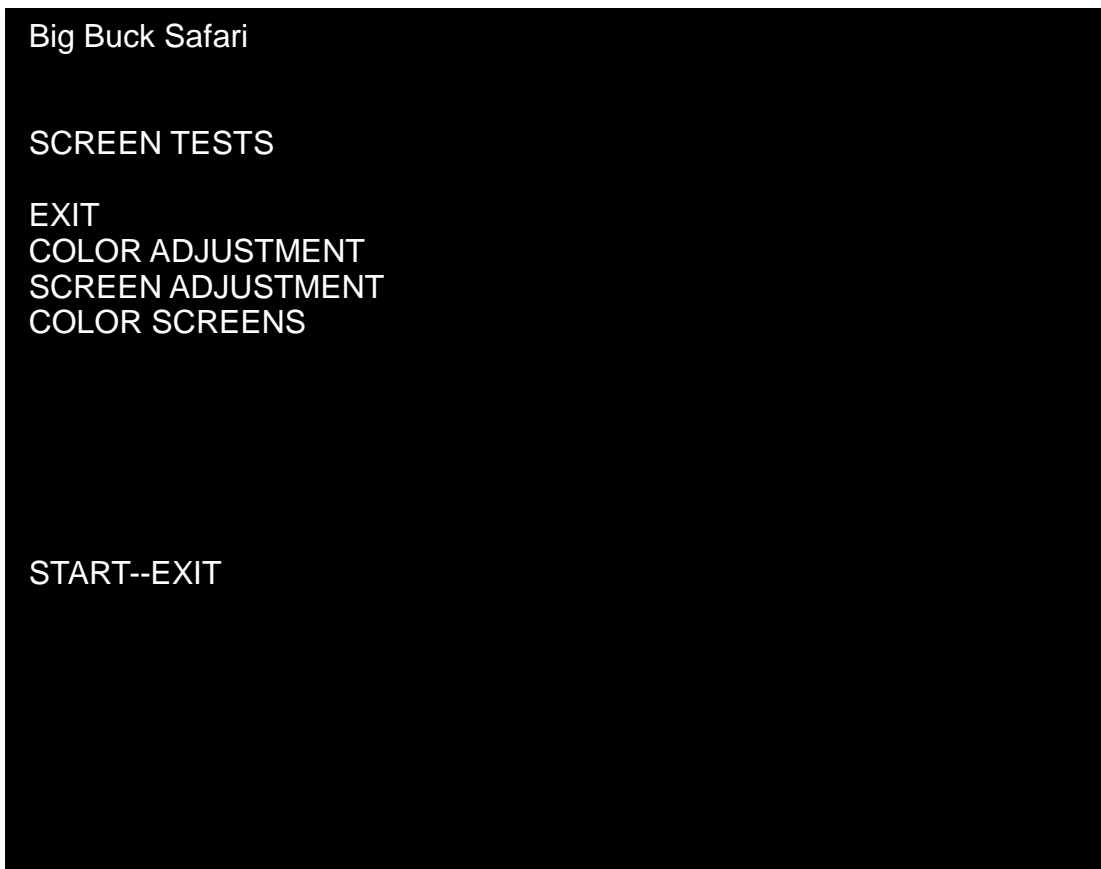
COIN1
START 1
VOLUME DOWN
TEST
TRIGGER 1
PUMP 1
SERVICE

COIN2
START2
VOLUME UP
BILL
TRIGGER2
PUMP2

Press Start & Trigger –or– Start & Volume to Exit

Monitor Test Menu

From the System Tests Menu, select Screen Tests. The Screen Tests Menu opens. To perform verify VIDEO GAME MACHINE color performance and adjust the monitor, select Color Adjustment.



Color Adjustment Menu

From the Monitor Test Menu, select Color Adjustment. The Color Adjustment Menu opens. To exit, press START.

Color Adjustment isn't really a menu. Actually, it's a special, color bars screen. In the monochrome illustration below, we label the colors that you'll see. These labels don't appear on the screen.

Uses for the Color Adjustment Menu

Check the color bars for missing colors. Missing colors can be cause for adjustments. On the other hand, missing colors might indicate serious trouble. The monitor isn't the only cause for missing colors. You might have a bad video RAM in your VIDEO GAME MACHINE computer. Inside the monitor, a bad gun or bad gun drive transistor could be the culprit. Here are some other uses for the color bars...

- Peak the brightness and black level
- Balance the red, green and blue drives
- Check purity problems (color contamination)
- Adjust convergence (particularly static convergence)
- Compensate for barrel or pincushion distortion
- Adjust size controls
- Check for plumb lines (straight yoke)
- Test for video noise sources (bad cables, etc.)



Screen Adjustment Menu

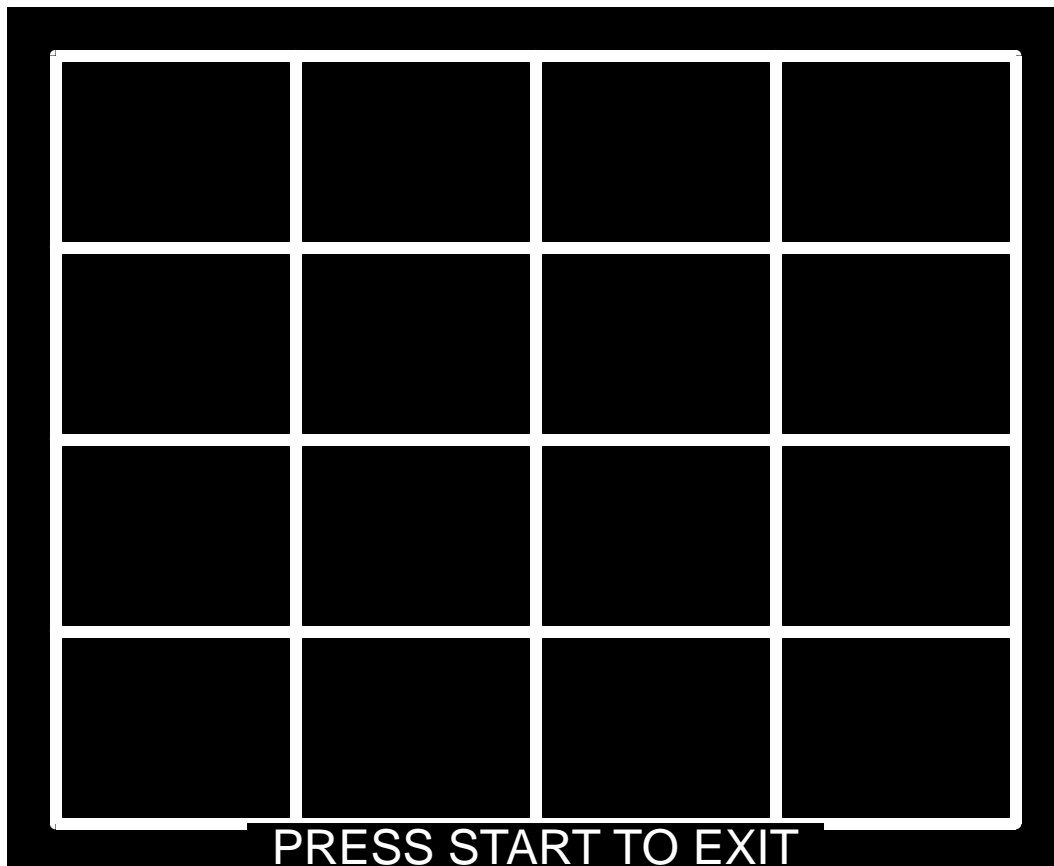
From the Monitor Test Menu, select Screen Adjustment. The Screen Adjustment Menu opens. This is a crosshatch screen.

WIDTH & HEIGHT. The crosshatch grid helps you to adjust the monitor height and width controls. Adjust them until the grid fills the screen. Keep all the lines visible, though. If part of the grid goes off the screen, then the game image will, too. To exit from this screen, press START.

STATIC CONVERGENCE & PURITY. A crosshatch pattern is also useful when you're converging the beams. All the lines must be white. Otherwise, you have convergence or purity problem. Slight color tinges at the extreme edges of the screen are okay, though. Check your monitor manual for adjustment instructions.

BRIGHTNESS. Also make sure that the bars are a fairly strong white. If they aren't, then you should adjust the raster brightness or pedestal control. Also adjust this control if you find retrace lines across the grid.

FOCUS. Bars with fuzzy edges indicate a focus problem. Adjust the focus control for best sharpness.



Color Screens

From the Monitor Test Menu, select Color Screens. Color screens are solid, one-color images. You can cycle through screens with the START button. Pressing start once more cause you to exit. You'll find five screens...

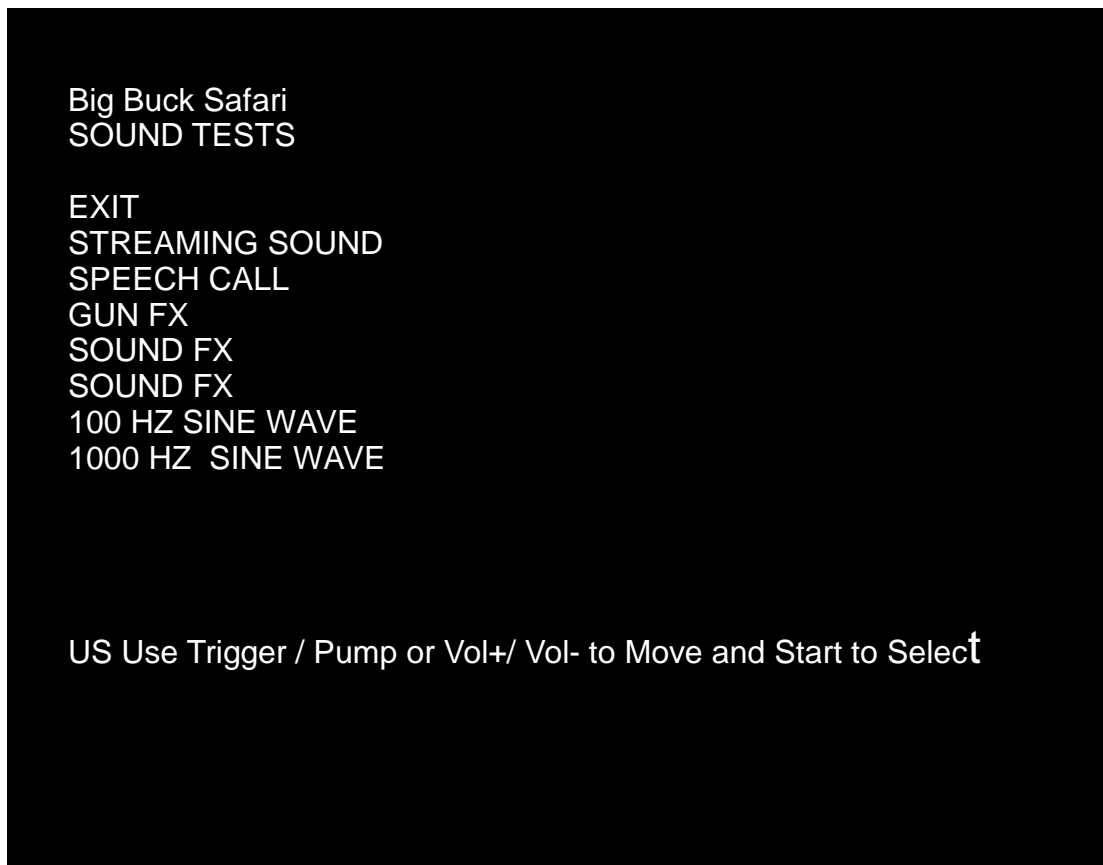
Black	Green
White	Blue
Red	

The color screens help you to adjust color drive controls for proper intensity. You can use the red, blue and green screens to test for a dead picture tube gun. When setting the pedestal (black level) control, use the black screen. Put up the white screen for brightness adjustments and to help you balance color output.

Sound Tests Menu

From the System Tests Menu, select Sound Test. The Sound Tests Menu opens. Use this menu to check sound volume and quality.

Missing sounds indicate digital flaws. Distorted sounds suggest analog flaws. The lack of sound implies disconnected or bad cables, speakers or amplifiers.



STREAMING SOUND is a sample of the game music.

SPEECH CALL includes talking commentary.

GUN FX is the shotgun blast.

SOUND FX is a whistle.

SOUND FX (2ND ONE) is a guitar riff.

100 HZ SINE WAVE

1000 HZ SINE WAVE

File Test Menu

From the System Tests Menu, select File Test. The File Test Menu opens. This menu runs a checksum test of system memory. Afterward, an onscreen message informs you of file status. If the memory is good, you can proceed with the next test. Otherwise, proceed to Chapter 4, Maintenance, Wiring & Troubleshooting. Run a hard drive recovery.

CAUTION

If your VIDEO GAME MACHINE fails the file test, don't proceed with system tests. Corrupt files as indicated by the message "Errors Detected in Files..." affect gameplay and the results of the other tests. If file errors result from failing power circuits, continued operation might cause further damage.

Coin Meter Test

From the System Tests Menu, select Coin Meter Test. No menu opens. For this test, the System Tests Menu is the bottom-level menu. Watch your VIDEO GAME MACHINE's mechanical coin meter. You'll find this meter on the switch bracket behind the coin door. When you select Coin Meter Test, the meter should increment by one count. If it does, then the meter is okay. If the meter doesn't click, then it probably isn't receiving a pulse from the VIDEO GAME MACHINE. Troubleshoot the problem. If the meter clicks, but doesn't increment, replace the meter.

DIP Switch Settings Menu

From the System Tests Menu, select DIP Switch Settings. The DIP Switch Settings Menu opens. Use this menu to check settings of the I/O Board DIP switches. For normal operation, all eight switches must be off.

Start Button Lamps Menu

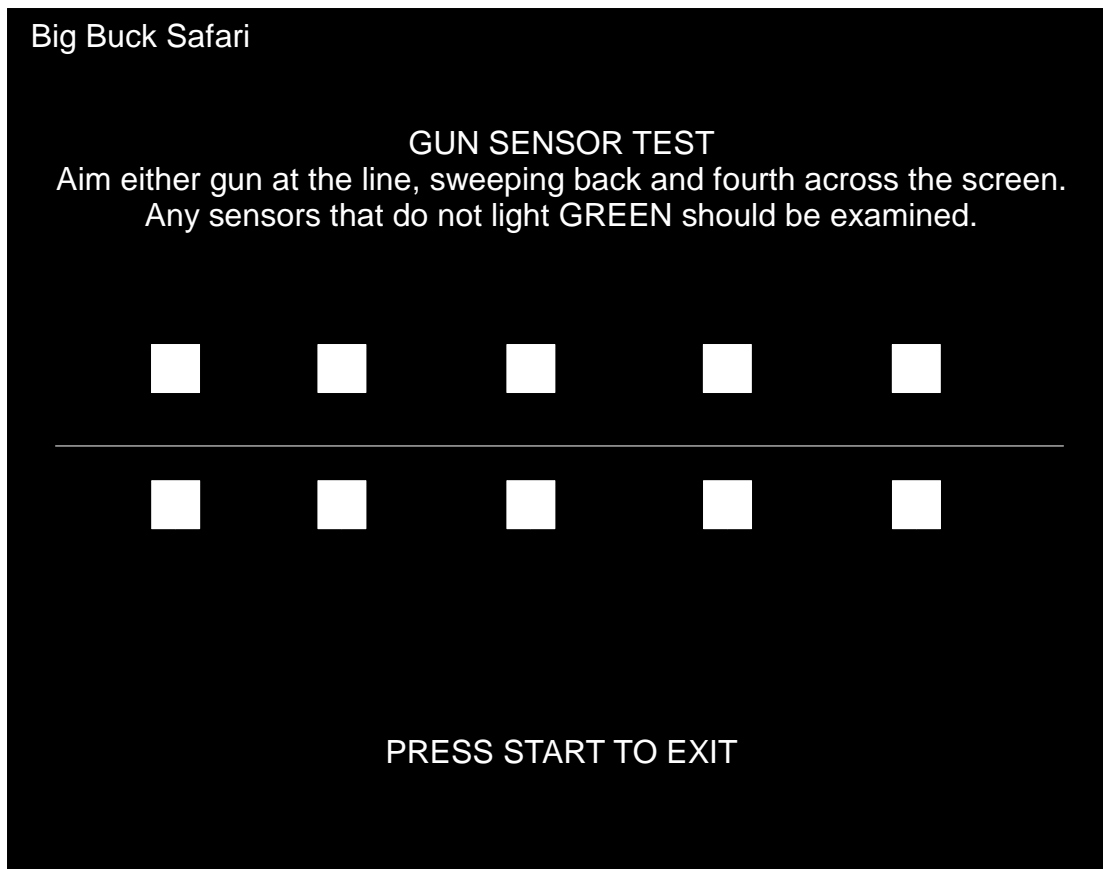
From the System Tests Menu, select Start Button Lamps. The Start Button Lamps Menu opens. Use this menu to check for burned out START button LEDs. The test blinks the LEDs. Replace failed parts.

Watchdog Tests Menu

From the System Tests Menu, select Watchdog Test. The Watchdog Test Menu opens. Use this menu to test the Watchdog circuit. This circuit protects the VIDEO GAME MACHINE against screen freezes (loops). After a countdown, the Watchdog Test resets the VIDEO GAME MACHINE. To exit before the reset, use PUMP, TRIGGER, START or either VOLUME button. If the test succeeds, the game resets normally. If the test fails, the reset process loops or ends abnormally. If you encounter a failure mode, troubleshoot the VIDEO GAME MACHINE or call for service.

Gun Sensor Test

From the System Tests Menu, select Gun Sensor Test. The Gun Sensor Test opens.



Gun Sensor Test

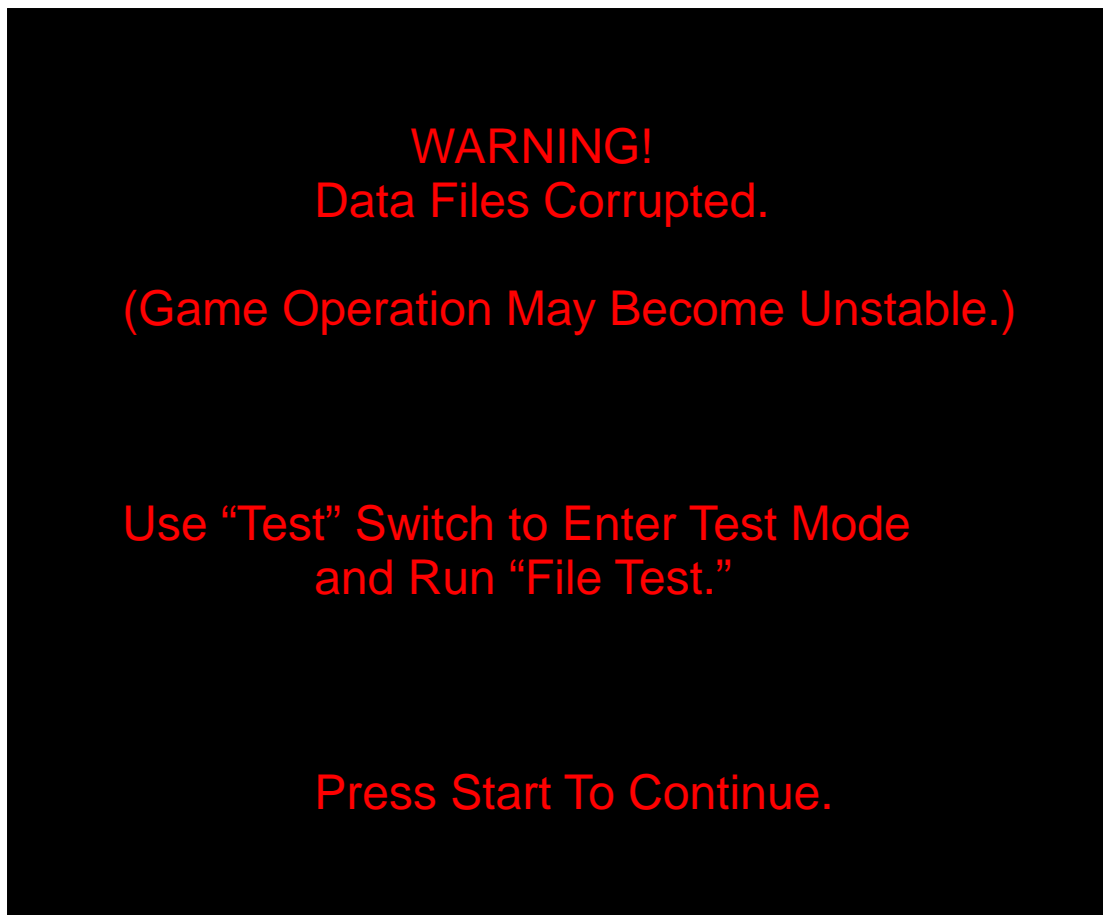
From the System Tests Menu, select Gun Sensor Test. The Gun Sensor Test opens. To exit, press START.

With no gun pointing at the screen, all 10 boxes will be RED. Using either gun, at a distance of 3-4 feet, start pointing on the left edge of the screen, on the white horizontal line. As you sweep along the line from left to right, the 10 boxes should turn from RED to GREEN.

If one or more boxes remain RED and do NOT turn green, inspect the LED board that corresponds to the box. The LED boards are located in the marquee, with 5 above the artwork and 5 below the artwork.

Chapter 4. Maintenance, Wiring & Troubleshooting

Hard Drive Recovery



CORRUPT FILE SCREEN. If you see the above screen, your VGM computer has corrupt files. To determine which files are corrupt, you can run the File Test. (See Chapter 3, Audits, Adjustments & Diagnostics.) The File Test can't repair corrupt files, though. The only solution is to perform a hard-drive recovery.

HERE ARE SOME SYMPTOMS of a bad hard drive:

- Hard Drive Test reports "bad" or "missing" files.

- The game fails to finish loading.

- After you cycle the power or reset the VGM, the VGM reports a error.

- The VGM prompts you to insert a boot DVD.

- Erratic Game Mode or Attract Mode.

NOTICE. Big Buck Hunter Pro ships with a recovery DVD. Hard drives occasionally fail. If your disk fails, restore hard drive data by following this procedure. Avoid rough handling of the computer or DVD. Check the Troubleshooting Guide in this document.

From the back of the video game, check the I/O board. The I/O board must be powered and be connected to the computer. Verify the serial cable connects the I/O board and the computer.

1. Verify that the I/O board has power.
2. Access the computer by opening the top coin door.
3. Open the DVD of the computer by pressing the OPEN/CLOSE button on the DVD drive.
4. Insert the recovery DVD.
5. Close the DVD drive by pressing the OPEN/CLOSE button.
6. Turn-off the video game using the main power switch.
7. Turn-on the video game. The disk recovery process will begin automatically. Recovery will take 30-40 minutes. If recovery process does not start, check to make sure the DVD is inserted correctly or is not physically damaged.
8. When the recovery is completed, there will be a message on the bottom of the screen to remove the DVD.
9. Remove DVD and power cycle the game.

CAUTION: DURNING THE FOLLOWING PROCESS, DO NOT INTERRUPT POWER OR RESET THE GAME!

10. The video game will begin a 'first-boot' initialization procedure. This will take a few minutes.
11. The video game will require that the guns be calibrated. The calibration mode will automatically be entered. Calibrate both guns at this time.

BIOS Settings / Power Management

NOTICE. Big Buck Hunter Pro ships with the correct BIOS settings. Making BIOS changes will adversely affect the VGM.

The BIOS settings along with the functionality of the FUSE/WD board (p/n 500-00012-xx) allows the main VGM to power correctly. The BIOS settings need to match the settings listed below. Otherwise the VGM will not properly recover from being turned-off, power failure, or brownout. It is also noteworthy that the FUSE/WD board makes the functionality of the power switch on the computer not function as one would expect. Never use the power switch on the computer. Proper power control for the VGM is performed by using the main AC power switch located on the lower backside of the VGM.

BIOS Set-up Procedure

1. Turn the game off.
2. Connect a USB keyboard to the computer.
3. While holding the [F2] key, turn on the main power switch of the VGM. The BIOS menu screen will appear. For a Dell Computer, verify the settings listed in the following table on the next page.
4. To save and exit, follow the instructions on the BIOS screen. The computer will reset and load the game.

LEVEL	ITEM	VALUE
SYSTEM	BOOT SEQUENCE	1. CD/DVD/CD-RW DRIVE 2. USB-ZIP 3. USB-DEVICE 4. HARDDRIVE 5. USB-FDD 6. USB-CDROM 7. NIC 8. DISKETTE DRIVE
DRIVES	DISKETTE DRIVE	USB
DRIVES	DRIVE 0:	SATA-0: ON
DRIVES	DRIVE 1:	SATA-1: ON
DRIVES	SMART REPORTING	OFF
ONBOARD DEVICES	INTEGRATED NIC	ON
ONBOARD DEVICES	INTEGRATED AUDIO	ON
ONBOARD DEVICES	USB CONTROLLER	ON
ONBOARD DEVICES	REAR TRIPLE USB	ON
ONBOARD DEVICES	REAR DUAL USB	ON
ONBOARD DEVICES	FRONT USB	ON
ONBOARD DEVICES	LPT PORT MODE	EPP
ONBOARD DEVICES	LPT PORT ADDRESS	378H
ONBOARD DEVICES	SERIAL PORT #1	COM1
VIDEO	PRIMARY VIDEO	ONBOARD/CARD
VIDEO	VIDEO MEMORY SIZE	16MB
PERFORMANCE	HDD ACOUSTIC MODE	BYPASS
SECURITY	ADMIN PASSWORD	NONE
SECURITY	SYSTEM PASSWORD	NONE
SECURITY	DRIVE 0 PASSWORD	NONE
SECURITY	DRIVE 1 PASSWORD	NONE
SECURITY	PASSWORD CHANGES	UNLOCKED
SECURITY	CHASSIS INTRUSION	OFF
POWER MANAGEMENT	AC RECOVERY	ON
POWER MANAGEMENT	AUTO POWER-ON	OFF
POWER MANAGEMENT	LOW POWER MODE	OFF
POWER MANAGEMENT	REMOTE WAKE-UP	OFF
POWER MANAGEMENT	COOL AND QUIET	OFF
POWER MANAGEMENT	SUSPEND MODE	S3
MAINTENANCE	ASF MODE	OFF
MAINTENANCE	FAST BOOT	ON
POST BEHAVIOR	NUMLOCK KEY	ON
POST BEHAVIOR	POST HOTKEYS	SETUP & BOOT MENU
POST BEHAVIOR	KEYBOARD ERRORS	DO NOT REPORT

JAMMA I/O BOARD CONNECTOR TABLE

FUNCTION	WIRE COLOR	PIN	PIN	WIRE COLOR	FUNCTION
GROUND	BLACK	1	A	BLACK	GROUND
		2	B		
5 VOLTS	RED	3	C	RED	5 VOLTS
		4	D	RED	5 VOLTS
		5	E		
12 VOLTS	ORANGE	6	F		
		7	H		
COIN METER	BROWN YELLOW	8	J	VIOLET BROWN	P1 LAMP
RESET	VIOLET	9	K	VIOLET RED	P2 LAMP
		10	L		
SPEAKER (+)	BROWN RED	11	M	BROWN BLACK	SPEAKER (-)
		12	N		
		13	P		
		14	R	VIOLET WHITE	SERVICE
TEST	BLUE	15	S		
COIN 1	GREY BROWN	16	T	GRAY BLUE	COIN 2
P1 START	WHITE BROWN	17	U	GREEN BROWN	P2 START
		18	V		
		19	W		
		20	X		
		21	Y		
		22	Z		
		23	a		
VOLUME (+)	ORANGE RED	24	b	ORANGE GREEN	VOLUME (-)
DBV	GRAY ORANGE	25	c		
		26	d		
		27	e		
GROUND	BLACK	28	f	BLACK	GROUND

TROUBLESHOOTING GUIDE

WARNING. Remove all power and disconnect AC line cord to VGM before servicing! Service performed by qualified service technician only. With power on do not connect or disconnect cables or connectors, damage to the VGM will occur.

VGM Fails To Power-up

The VGM will be in this failure mode when either the main AC power has failed, been disconnected, or the computer has failed to turn-on. The computer provides +5VDC and +12VDC for the VGM. Turning on the computer is controlled by the FUSE/WD board, p/n 500-00012-01.

1. Verify the VGM power switch is on.
2. Verify the AC line cord is plugged into a functional AC outlet.
3. Verify the AC outlet is the correct voltage for the VGM.
4. Verify the VGM is set to the correct voltage. There is a voltage switch on the computer that needs to be set correctly. If this switch is set incorrectly and the VGM has been powered, damage to the computer may have occurred.
5. Verify the main AC power fuse for the VGM. This can be found on the lower back side of the VGM by the main power switch. If a fused failed, examine the VGM for a fault condition and repair the condition before replacing the fuse. For Continued protection, replace the fuse with identical UL rated fuse.
6. Verify the fuses on the FUSE / WD board, p/n 500-00012-01. These fuses protect the +5VDC and +12VDC power rails of the VGM. If a fused failed, examine the VGM for a fault condition and repair the condition before replacing the fuse. For Continued protection, replace the fuse with identical UL rated fuse.
7. Verify cable connectors inside the VGM. Look for cable connectors that are loose or not connected.
8. Contact _____ for additional service. You may have a failed computer or FUSE/WD board.

VGM Displays “NO VIDEO” Message On The Video Monitor

The VGM will display this message when the video display is powered but the video monitor has no valid video signal.

1. Verify the VGM is set to the correct voltage. There is a voltage switch on the computer that needs to be set correctly. If this switch is set incorrectly and the VGM has been powered, damage to the computer may have occurred.
2. Verify cable connections inside the VGM, including the video and power cables of the computer, I/O board, FUSE/WD board and monitor.
3. Verify the fuses on the FUSE / WD board, p/n 500-00012-01. These fuses protect the +5v and +12v power rails of the VGM. If a fused failed, examine the VGM for a fault condition and repair the condition before replacing the fuse. Replace fuse with identical UL rated fuse.
4. Verify the I/O board has power.
5. Verify the FUSE/WD board has power. The +5VDCSTBY LED indicator should be on.
6. Verify the FUSE/WD board is running. There is a green LED indicator that should be blinking.
7. Contact _____ for additional service. You may have a failed computer, FUSE/WD board or I/O board.

VGM Displays No Video On The Video Monitor

The VGM will exhibit this failure when either the VGM is not powered, the monitor is not powered, the monitor is not correctly adjusted or the video monitor has failed.

1. Verify the VGM has powered-up. If not see 'VGM Fails To Power-up' in this troubleshooting section for more details.
2. Verify the cable connectors inside the VGM, paying close attention to the power and video signal cables of the video monitor.
3. Verify the video monitor has AC power.
4. Verify the contrast and brightness settings of the monitor. Make sure they are not set too low.
5. Contact _____ for additional service. You may have a failed monitor.

VGM Has No Sound

If the game is running and there is no sound.

1. Verify that the audio levels are set to acceptable levels. This can be done through the Diagnostic Menu System.
2. Verify the cable connections inside the VGM. Ensure that the audio cable from the computer is connected to the I/O board.
3. Verify the speaker cable is connected.
4. Verify the fuses on the FUSE / WD board, p/n 500-00012-01. These fuses protect the +5v and +12v power rails of the VGM. If a fuse has failed, examine the VGM for a fault condition and repair the condition before replacing the fuse. Replace fuse with identical UL rated fuse.
5. Verify the I/O board has power.
6. Contact _____ for additional service. You may have a failed audio system.

VGM Monitor Displays 'CONNECT I/O'

If the computer is unable to communicate with the I/O board, the 'Connect I/O' message will be displayed in the video display.

1. Verify that the I/O board has power. Check the fuses on the FUSE / WD board, p/n 500-00012-01.
2. Verify the cable connections inside the VGM. Verify the serial cable that connects the I/O board to the computer is securely attached.
3. Power-cycle the VGM.
4. Contact _____ for additional service. You may have a failed I/O board.

VGM Monitor Displays 'INSERT DONGLE'

This message indicates that the computer is unable to communicate with the security dongle that is located on the back of the computer.

1. Verify that the security dongle is attached to a USB port of the computer.
2. Contact _____ for additional service. You may have a failed security dongle or a USB port on the computer.

VGM Game Play is Slow, Freezes, or Resets.

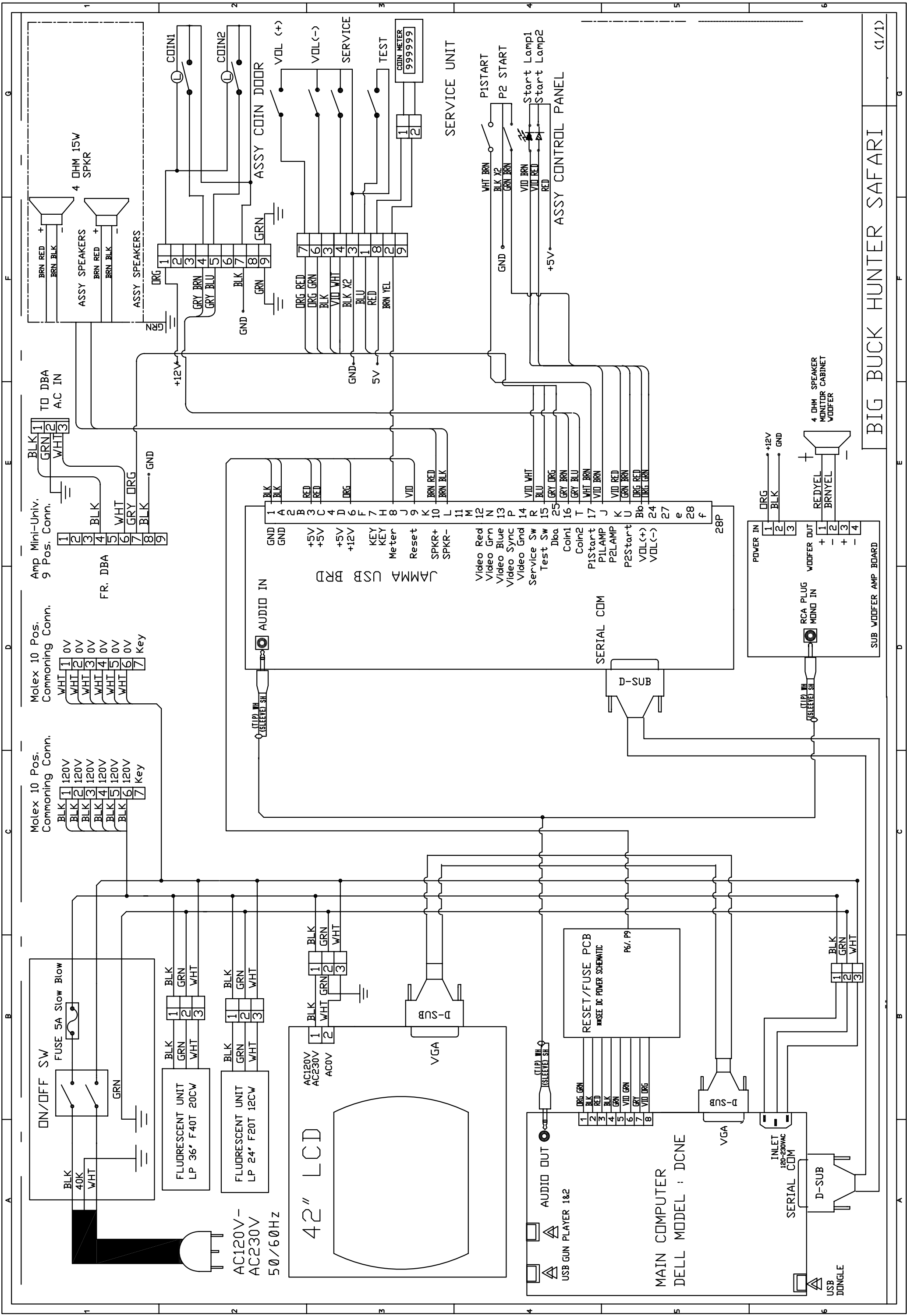
Numerous items can cause game play to exhibit freezing or slow play. Typical failure modes include excessive heat, corrupt drive, or failing hardware.

1. Verify that the security dongle is attached to a USB port of the computer.
2. Verify cable connections inside the VGM. Verify the serial cable that connects the I/O board to the computer is securely attached.
3. Verify that the VGM is not running excessively hot. Verify that the cooling fan at the top of the VGM is running and not obstructed. The back of the VGM must be at least one foot away from a wall in order to allow the vents on the VGM to breathe.
4. Verify that the computer is not running excessively hot. Verify that the computers cooling fans are running.
5. Verify the drive. This can be done via the Operators Menu. The drive can be re-imaged, by inserting the CD that was included with the VGM. See 'Drive Recovery Procedure' for instructions.
6. Verify that the games +5VDC +12VDC power rails are within +/- 5% tolerance.
7. Incorrect lamps in the coin door can cause the VGM to reset. Verify that the bulbs are 12 volt DC rated.
8. Contact _____ for additional service.

VGM Guns Do Not Work Properly

As part of VGM setup, you must calibrate the guns. Periodic gun calibration also allows you to optimize and verify gun performance. We recommend calibrating the guns every week of operation. Properly calibrated guns improve your collections.

1. Calibrate the guns and verify calibration. Verify that the guns switch's work in addition to the optics. Calibration is done via the Diagnostic Menu System.
2. If calibration does not solve the issue, power cycle the Game Machine.
3. Verify that the "Gun Electronics Test" reports "OK" for both guns, for all tests.
 - a. If "Connected" is failed, be sure that both gun USB cables are plugged in, then power cycle.
 - b. If "Electronics" is failed, check gun cable, check gun for physical damage, check gun camera module for damage.
 - c. If "Calibrated" is failed, calibrate the guns.
4. Verify "Gun Sensor Test" in the Diagnostic Menu System.
5. Contact _____ for additional service.



MAIN COMPUTER
DELL MODEL : DCNE

SERVICE UNIT

ASSY CONTROL PANEL

JAMMA 28P

SUB WOOFER AMP BOARD

4 OHM SPEAKER
MONITOR CABINET
WOOFER

4 OHM 15W
SPKR

ASSY SPEAKERS

FR. DBA

TO DBA
A.C IN

Molex 10 Pos.
Commoning Conn.

Molex 10 Pos.
Commoning Conn.

AC120V-
AC230V
50/60HZ

FLUORESCENT UNIT
LP 36" F40T 20CW

FLUORESCENT UNIT
LP 24" F20T 12CW

42" LCD

VGA

RESET/FUSE PCB
#RESE DC POWER SCHEMATIC
P67.P9

AUDIO OUT

USB GUN PLAYER 1&2

SERIAL COM

D-SUB

POWER IN

RCA PLUG
MONO IN

WOOFER OUT

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

ASSY SPEAKERS

ASSY COIN DOOR

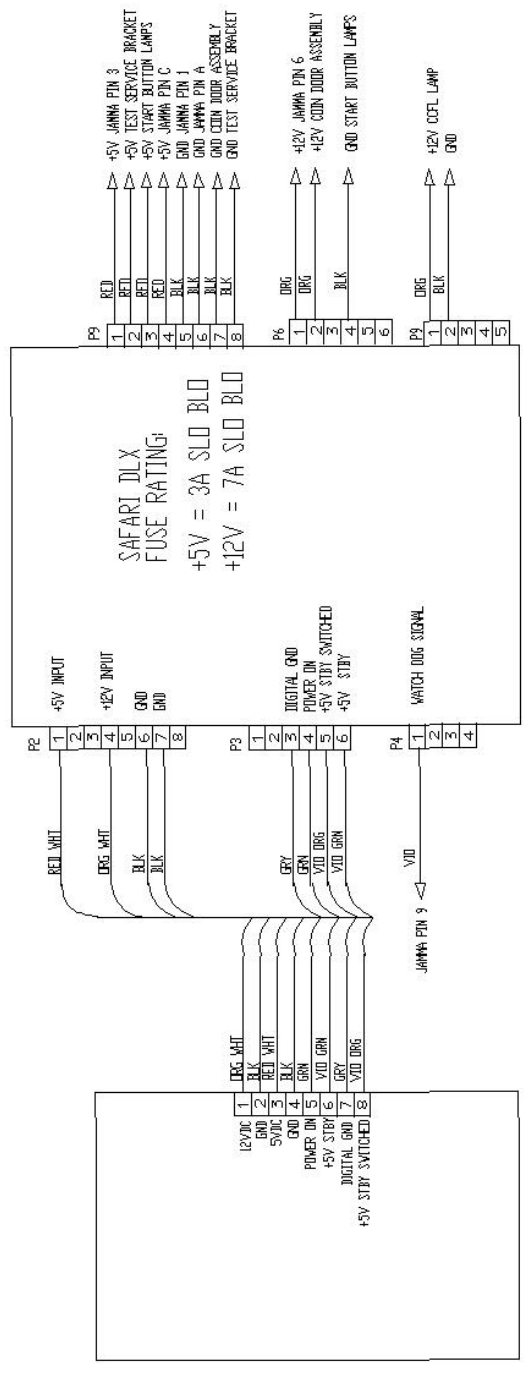
ASSY SPEAKERS

ASSY COIN DOOR

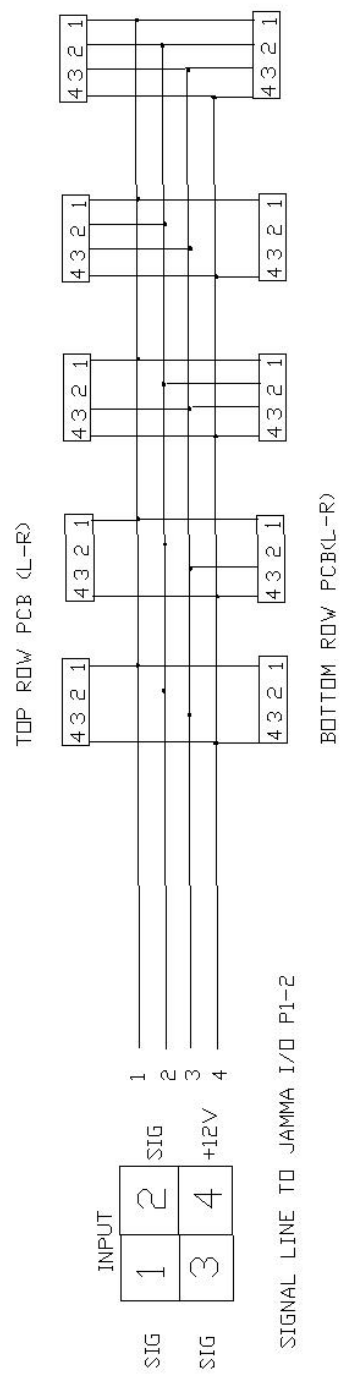
ASSY SPEAKERS

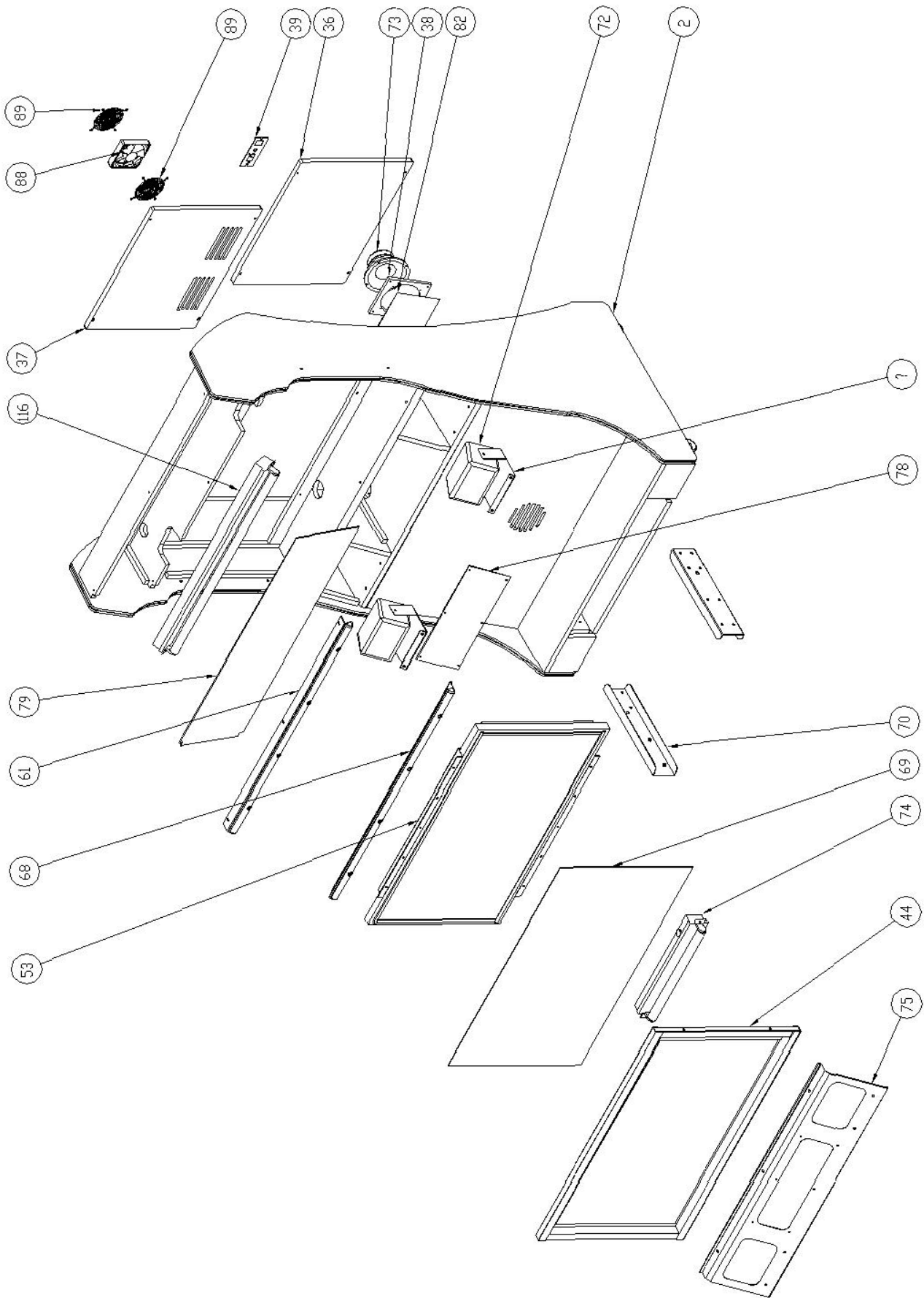
DELLE OPTIPLEX 740 PC

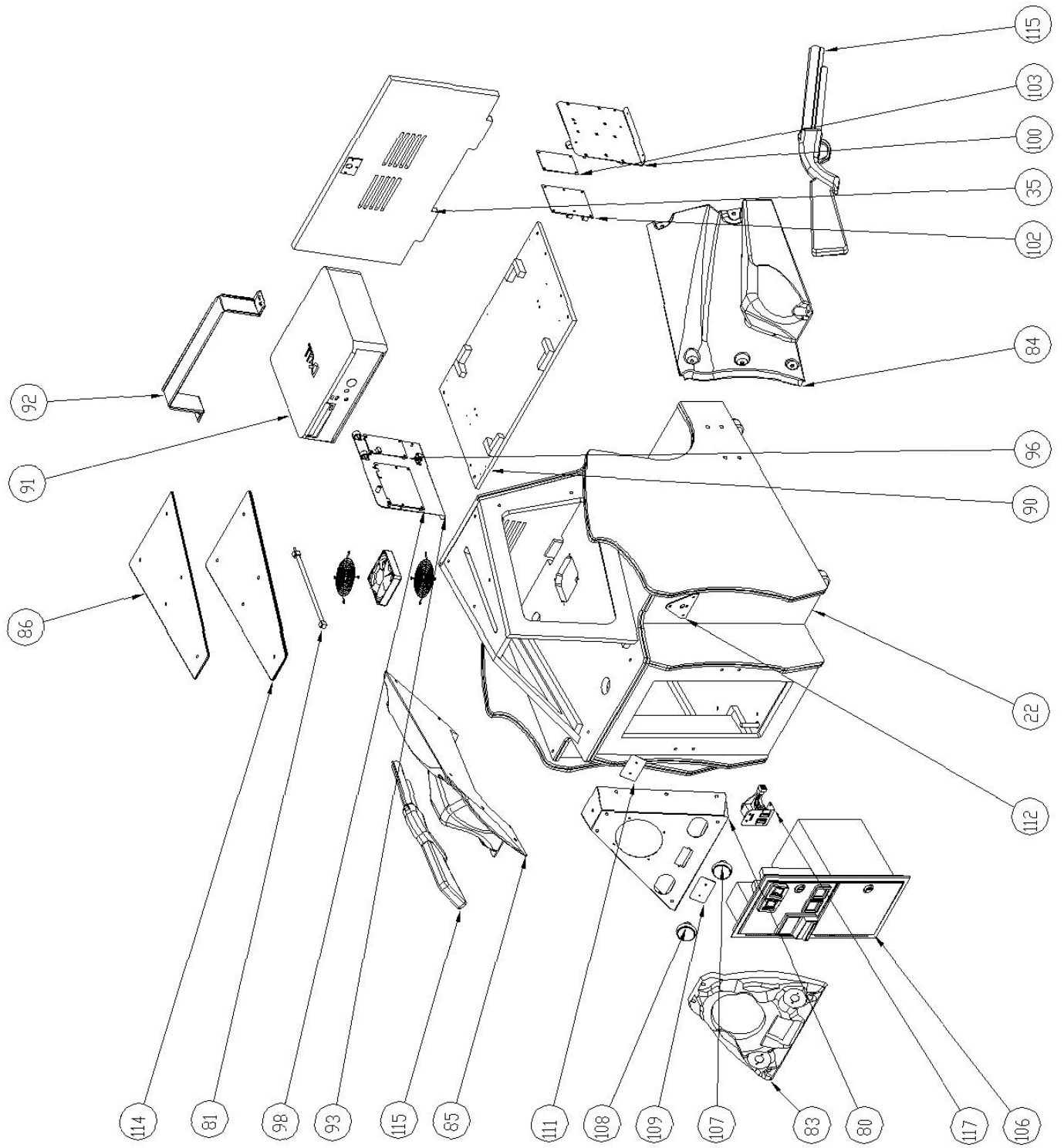
FUSE/WATCHDOG PCB



IR LED PCB WIRE DIAGRAM







BOM Table

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
35	601-00028-01	Safari Deluxe 42" Pedestal Back Door	1
36	601-00026-01	Safari Deluxe 42" Lower Back Door	1
37	601-00025-01	Safari Deluxe 42" Upper Back Door	1
38	600-00075-01	Sub Woofer Panel	1
39	600-00076-01	AC Inlet Power Plate (standard)	1
42	600-00071-01	42" LCD Display Channel Top/Bottom	2
44	600-00072-01	42" LCD Display Channel Sides	2
61	600-00066-02	Opto Bracket Top	1
64	500-00020-02		10
67	603-00027-02	LED Board Cover	2
68	600-00067-02	Opto Bracket Botttom	1
69	600-00073-01	42" LCD Display Glass (Tempered)	1
70	600-00030-01	Pedestal Mounting Channel	2
71	600-00069-01	3-Way Speaker Mounting Bracket	2
72	speaker_box		2
73	807-00002-02	Woofer Speaker, 6.5in 4 ohms	1
74	812-00002-02	CE Marquee Light - DRIFT	1
75	600-00070-01	42" LCD Display Mounting Bracket	1
77	Speaker Grill (8.5in X 6.25in)	Speaker Grill (8-1/2" X 6-1/4")	2
78	606-00071-01	Safari Deluxe 42" Marquee Bottom	1
79	606-00069-01	Safari Deluxe 42" Marquee Top	1
80	602-00010-00		1
81	702-00017-00	CCFL 3.0X 300MM White Glass Tube (Acrylic Tube 4 pin conn)	1
82	Wire Mesh Speaker Woofer (7 x 7)	Wire Mesh Speaker Woofer, 7" X 7"	1
83	603-00028-01	Safari Control Panel Cover	1
84	603-00016-01right-1		1
85	603-00017-01Left-1		1
86	606-00070-03	Safari Deluxe Pedestal Top Panel	1
87	125blackfoamtape0.50		2
88	820-00001-00	Fan, 120vac,19/15W	2
89	800-00001-00	120mm Wire Fan Guard	4
90	601-00035-01	Safari Deluxe PC Shelf	1
91	850-00001-01	Dell Optiplex 740	1
92	600-00056-01	Dell CPU Mounting Bracket	1
93	600-00068-02		1
96	500-00012-01		1
98	500-00001-02	Big Buck Safari I/O Board	1
100	600-00074-01	Dell PC Shelf PCB Mtg Plate (Widget & Amp)	1
102	500-00018-02	Gun Processing Board - BB Safari	1
103	500-00003-02		1
106	800-00005-01	Coin Door Assembly Mid Width - BBHP	1
107	702-00008-01	Orange Round Button Assy	1
108	702-00007-01	Green Round Button Assy	1
109	602-00008-00	Card Reader Face Plate	1
111	602-00009-00	Card Reader Face Plate	1
112	Betson 47-4450-XX	Mounting Plate	2
114	606-00073-01	Top Panel Edge-Glow	1
115	Safari DLX GUN ASSY		2
115.a	500-00022-01	USB Gun Camera Assy. 27.5 Deg(complete)	1
115.b	600-00078-01	GUN IR LENS	1
115.c	400-00001-01	Camera Module	1
115.d	603-00026-01	Camera Housing	1
116	812-00008-01	36" Fluorescent Assy - 120V	1
117	810-00053-01	Test Service Button Assy	1



Play Mechanix™



BIG BUCK SAFARI SUPER DELUXE

Operation and Service manual

Table of Contents

Safety	3
Product Specifications.....	5
Setup	7
Adjustments, Audits and Diagnostics	25
Network Connectivity	46
Maintenance	54
Wiring.....	56
Troubleshooting.....	57
Parts	62

Big Buck Safari Super Deluxe

Safety

OPERATION

Failure to properly install and operate this game could result in malfunction or accident. Before operating game, read this manual. Operate the game in accordance with the manual.

TRANSPORTING

The screen assembly, base and gun pedestal are very heavy. Use appropriate care when moving or transporting components and avoid rough handling.

DISCONNECT POWER

Always turn the power off and unplug the unit before servicing or making adjustments unless otherwise instructed. Installing or repairing components while power is on can damage the components and void the warranty.

GROUNDING

Avoid electrical shock. Do not plug in AC power until you have inspected and properly grounded the unit. Only plug into a grounded, three-wire outlet. Do not use a "cheater" plug or cut off the ground pin on the line cord.

POWER SELECTOR LAMP

Set the 115/230 VAC selector switch on the power supply for the correct line voltage on the installation site. Verify that the lamps are also rated for the proper line voltage.

CONNECTORS

Ensure all connectors mate properly. If connectors do not slip in easily, do not force them. Connectors are often keyed and only connect one way. Check for correct orientation.

COMPUTER

The computer contains sensitive components, including a hard drive. Do not handle roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Do not turn the PC power switch on or off. It should remain permanently in the ON position. Cycle AC power on or off with the cabinet power switch.

A dongle has been inserted into one of the USB ports. This is required for game play. Do not remove the dongle except for troubleshooting purposes.

FLUORESCENT TUBES

A dropped fluorescent tube may break and implode. Shattered glass from the implosion can travel long distances and cause bodily injury. Use proper procedures when handling broken materials, as these items can contain hazardous material such as mercury or lead.

POWER CORD

If the power cord is damaged or lost, replace it with an identical cord as supplied by the manufacturer or an authorized service agent.

POWER SELECTOR

Before installing game, ensure the AC line voltage is set properly. On the computer, there is a 115/230 VAC selector switch. Set it for the correct voltage for your site. Verify the fluorescent lamp rating. The rating must match the line voltage at the installation site.

INSTALLING SCREWS AND BOLTS

Be careful when aligning and fastening bolts during assembly. If you encounter resistance, do not force the bolt. Doing so may strip the threading from the bolt or damage the other component. Properly aligned bolts should screw in smoothly.

WATER JETS

Do not install or operate game within operating perimeter of a water jet. Do not clean equipment using water jet.

HAZARD TO EPILEPTICS

A small portion of the population has an epileptic condition that may cause seizures. Affected persons experience seizure while watching some television pictures or playing certain video games. People who have not had seizures may still have an undetected epileptic condition. If anyone in your family has experienced epilepsy symptoms (seizures or loss of awareness), consult your physical before using video games. While children play video games, a parent should observe. Be alert to the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation or convulsions. If you or your child experiences these symptoms, discontinue use immediately and consult your physician.

MANUAL

Keep this manual available and ready for use. If the game fails to function properly, turn off the machine and unplug the AC line cord. Contact your local distributor. Your warrantee, when applicable, lasts 60 days from your purchase date. You may not reproduce this document or any of its contents without written authorization from Raw Thrills, Inc. or Play Mechanix, Inc.

SPECIFICATIONS

For reasons such as performance, this product's specifications may change without notice. Federal patent, copyright and other intellectual property laws protect the content, devices and design of the game and its equipment.

Big Buck Safari Super Deluxe

Product Specifications

Electrical Power

Domestic, international users and Japan

120 VAC @60 Hz, 5 amps

240 VAC @ 50 Hz, 2.5 amps

100 VAC @ 50 Hz, 5 amps

DC Power Fuse Guide

+5 VDC 2 amp Slow Blow

+12 VDC 7 amp Slow Blow

Temperature

32 degrees F to 100 degrees F

(0 degrees C to 38 degrees C)

Humidity

Must not exceed 95% relative humidity

Dimensions

Screen assembly: height: 94"
 width: 97.5"
 depth: 18.5"

Screen marquee: height: 16"

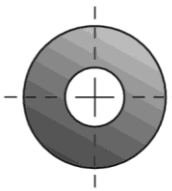

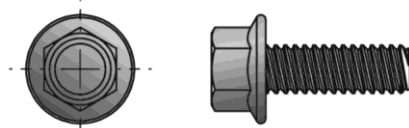
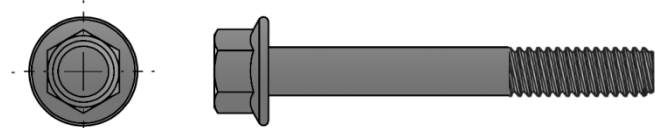



Gun pedestal/outriggers: height: 37.25"
 width: 76"
 depth: 31"

Carton Weight

About 1,000 lbs.

Hardware

Use this page to identify screws, bolts and nuts used in the setup. A circled letter appears next to each item and is used in the installation instructions. When in doubt, hold the item up to its corresponding measurement to verify.

❶	¼-20 black washer		22 pcs.
❷	¼-20 nylon insert nut		4 pcs.
❸	¼-20 x ¾" black bolt		30 pcs.
❹	¼-20 x 2" black bolt		4 pcs.
❺	¼-20 x 2 ½" black bolt		8 pcs.
❻	¼-20 x 3" black bolt		14 pcs.
❼	¼-20 x 1.25" black torx screw		12 pcs.

Big Buck Safari Super Deluxe

Setup

Unpack Carton

1. Move shipping carton near assembly site.
2. Remove banding straps and open carton.
3. Remove boxes from the top of the carton.
4. Remove corrugated sides and corners from container.
5. Unpack remaining boxes. Set hardware bag aside.
6. Remove all contents from boxes and inspect.
7. For this assembly, you will need
 - An assistant,
 - Two six-foot ladders,
 - A Phillips head screwdriver,
 - A 3/8 socket wrench,
 - A 7/16 socket wrench,
 - A T-25 security torx screwdriver (included in kit)
 - A level

Locate Screen base

1. Identify a site for the game that:
 - Has a grounded AC outlet,
 - Has about 10 horizontal feet of unobstructed wall space with no windows, *Light may shine through behind the screen or cast shadows.*
 - Has about 20 feet of open space from the wall,
 - Has at least nine feet ceiling clearance, in order to raise the front screen frame assembly cleanly over the screen base,
 - Is moderately dark,
 - Is away from neon lights (which impair the IR sensors) and
 - Has a relatively flat floor
2. Position the screen base about 3 feet from the wall so that the 12 infrared (IR) sensors face away from the wall.
3. Remove the screws holding the access door on the left (when facing wall) rear of the screen base.
4. Remove the access door and set aside.
5. Place a level on top of the screen base.
6. Adjust the six leg levelers beneath the screen base until it is level front to back as well as left to right.

Turn the knobs at the base of the levelers to raise and lower the screen base.

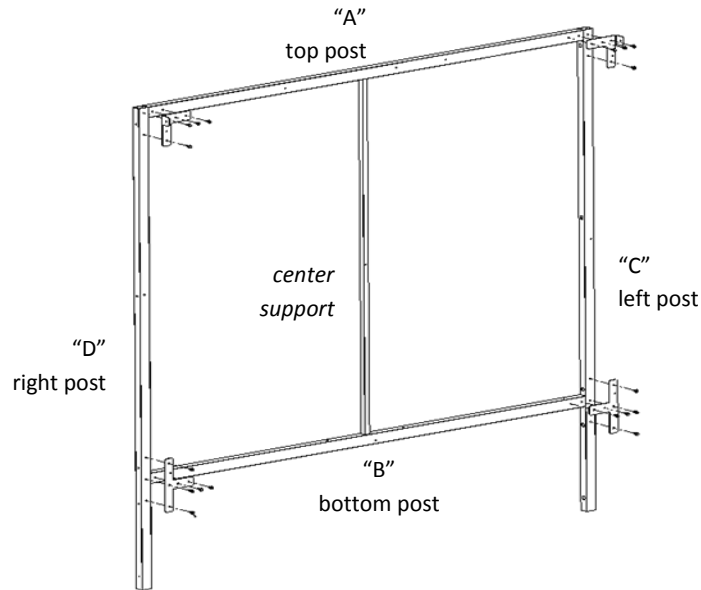


Figure 1: Arrange front screen frame posts on floor and fasten with corner brackets, T-brackets and bolts. Note that during final assembly, orientation will be reversed. In this image, the right post ("D") is on the left side.

Arrange Front Screen Frame Posts

1. On the floor in front of the screen base, arrange and identify the front screen frame posts:
 - Top (stamped "A"),
 - Bottom ("B"),

This post has four holes to accommodate bolts fastening it into the screen base.
 - Left ("C"),
 - Right ("D")

The left and right posts each have two holes just near the top.
 - Center support

The top and bottom posts each have a square hole to accommodate this post.
2. Turn the four black posts so that the sides with the female snaps (which will hold the screen in place) face the floor.

Note that the center support post has no snaps or holes.
3. Orient the posts so the female snaps will be on the outside of the finished frame assembly.

Snaps on the left and right posts form a straight line with snaps on the top and bottom posts.
4. Turn all the posts so the snaps face the floor.
5. Insert the center support post into the top and bottom posts.
6. Abut the left and right posts to the top and bottom posts.

On the floor, the right and left posts are reversed. D is on the left and C is on the right. Refer to Figure 1.

Big Buck Safari Super Deluxe

Assemble Front Screen Frame

1. Align holes of "A" corner bracket with holes in top and right posts.
The perpendicular wing should point up. See Figure 1A.
2. Insert four ③ bolts through "A" corner bracket into posts. Do not tighten.
3. Repeat steps 1-2 for corner "B" bracket and top and left posts.

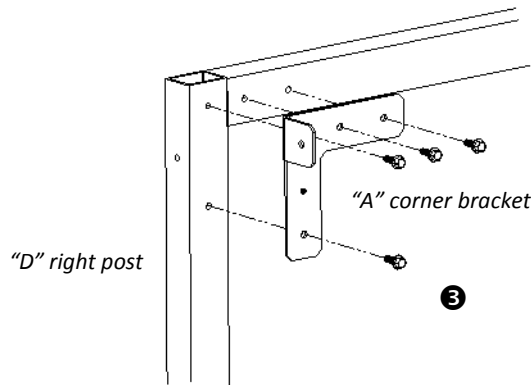


Figure 1A: Close-up of right and top posts and "A" corner bracket. Align holes in brackets with holes in posts and fasten bolts. Note orientation of perpendicular flap on the right of the assembly.

4. Align T bracket with right and bottom posts.
5. Insert five ③ bolts through T bracket. Do not tighten.
6. Repeat steps 4-5 with left and bottom posts.
7. Tighten all bolts.
8. Align hole in a cross joiner with hole in perpendicular flap of an "A" corner bracket.
9. Affix one ③ bolt through the corner bracket flap into the cross joiner. Tighten bolt.
See Figure 2.
10. Repeat steps 8-9 with remaining cross joiner into a "B" corner bracket.

Assemble Front Screen Frame Assembly into Screen base

1. With an assistant, carefully insert the left and right posts of the front screen frame assembly into holes on top of screen base.
Snaps face away from the wall; cross joiners point to the wall. See Figure 2.
2. Lift the left post slightly to align the top holes on the side of the screen base with the top hole in the left post.
3. Affix one **6** bolt with **1** washers through screen base into the left post.
4. Repeat steps 2-3 for right post. Do not tighten bolts.
5. Insert four **6** bolts with through holes of bottom post into screen base.
6. Tighten all bolts.

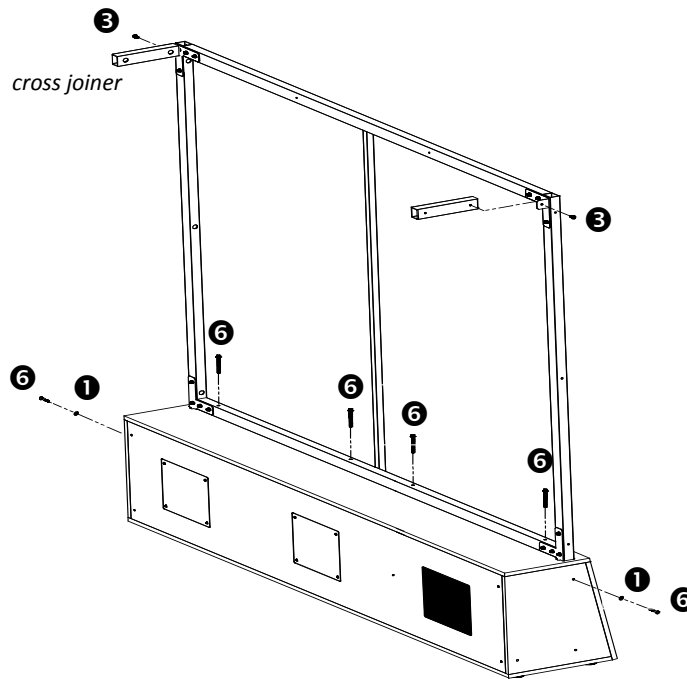


Figure 2: Rear of screen base assembly with front screen frame assembly inserted into screen base. Left access door has been removed.

Big Buck Safari Super Deluxe

Assemble Rear Screen Frame

1. Identify the three rear screen frame posts:
 - The top post, marked "G," has four evenly spaced holes.
 - The left ("E") and right ("F") posts have two holes at the top and one near the bottom.
2. Lay out three posts of rear screen frame on the ground according to Figure 3.
When laid out properly, the bolt holes on the left and right posts face outward.
3. Align holes of remaining "A" corner bracket with holes of top and left posts.
See Figure 1A.
4. Insert four ③ bolts through the "A" bracket into posts. Do not tighten.
5. Repeat steps 3-4 for the remaining "B" corner bracket and top and right posts.
6. Tighten all bolts.

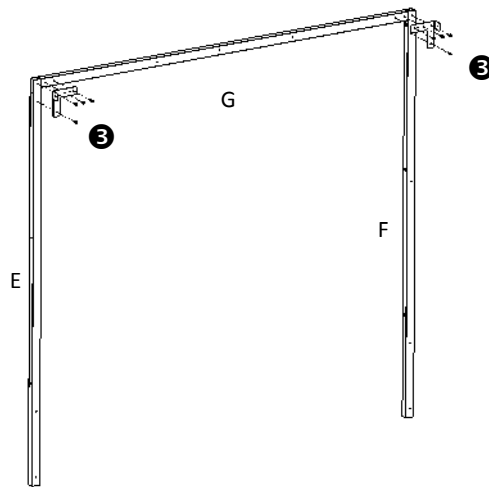


Figure 3: Rear screen frame assembly and corner brackets.

Attach Rear and Front Screen Frames

1. Align holes at bottom of rear screen frame assembly posts with holes in rear of screen base.
The perpendicular flaps on the rear screen frame assembly should be very near the cross joiners.
See Figure 4.
2. Affix two ⑥ bolts through each post into the screen base. Do not tighten bolts.
3. Align hole on left cross joiner with hole on “A” corner bracket on rear screen frame.
4. Insert ③ bolt through flap into cross joiner. Do not tighten.
5. Repeat steps 3-4 through “B” corner bracket.
6. Tighten all bolts.

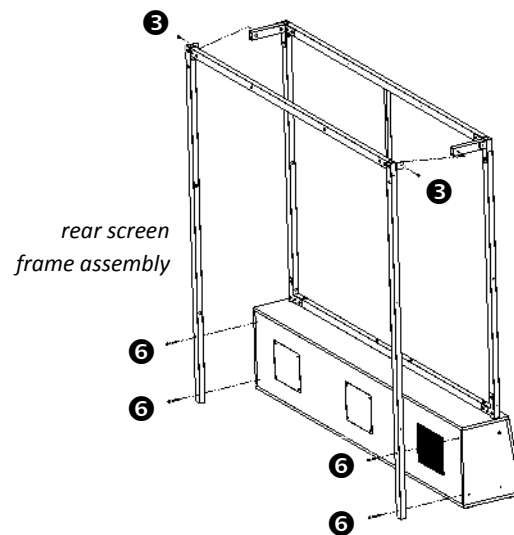


Figure 4: Rear view of rear screen frame assembly connecting to rear of screen base and front screen frame assembly (via cross joiners).

Big Buck Safari Super Deluxe

Connect Screen Base Cables

1. Move the left floor support near the left side of the screen base.
See Figure 7.
2. Gently pull out the two cables from the left floor support so they reach inside the screen base.
3. Connect the 3-pin switched AC power cable from the left floor support with its mate inside the screen base.
4. Connect the pair of 2-pin, 5V IR LED power cables with their mates inside the screen base.
5. Move marquee near the left side of the screen base.
6. Run the marquee power cable around the back of the screen frame assembly and rest of the bulk of the cable on the left side of the screen base.
7. Connect the marquee power cable to its mate inside the screen base.
8. Move the right floor support near the right side of the screen base.
9. Plug the AC power cord from the right floor support into a grounded outlet.
10. Carefully walk the screen base backwards until it is between two and four inches from the wall and is perpendicular to the wall.
11. Using a level, adjust the screen base leg levelers again to ensure it is level.
Keep screen base as low to the ground as possible, which will make centering the projector image easier later on.

Assemble Screen Frame Panels

1. Align holes of left side panel with holes on left of screen frame assembly.
2. Affix six 7 screws with 1 washers through left side panel into screen frame assembly. Tighten screws.
3. Repeat steps 1-2 for right side panel.

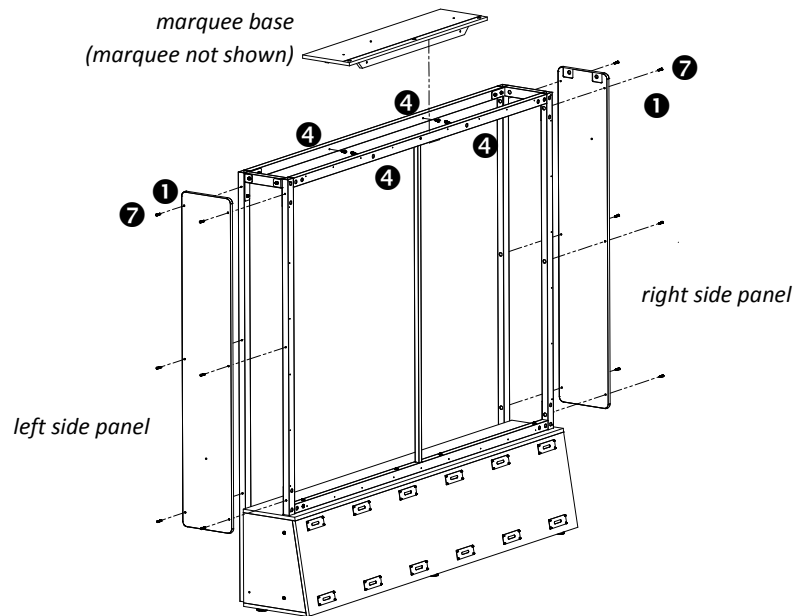


Figure 5: Front view of screen base. Attach left and right panels, marquee.

Assemble Marquee to Screen Frame Assembly

USE CAUTION CLIMBING LADDERS

The marquee assembly is heavy, bulky and fragile. Use extreme caution when you and a partner lift it to the top of the screen frame assembly while climbing ladders or step stools. Ensure ladders are stable and located on solid, flat ground.

1. Lift marquee assembly atop screen frame assembly and rest marquee roughly in center of screen frame assembly so that artwork faces forward.
Take care not to snag the connected power cable.
2. Align holes in marquee front bracket with holes in front of top post.
3. Affix two ④ bolts from inside the screen frame assembly through marquee front bracket into front top post. Do not tighten bolts.
4. Repeat steps 2-3 with rear top post. Tighten all bolts.

Affix Screen to Screen Frame Assembly

1. Unfold screen so that male snaps face the wall and the label is in the bottom left corner.
2. Starting at top corners, snap screen onto front of screen frame assembly.
Use ladders as needed. Screen material stretches to fit frame.

Attach Floor Supports to Screen base

1. Align holes on left floor support flange with holes on left side of screen base.
See Figure 7.
2. Insert two ⑥ bolts with ① washers through flange into screen base.
Do not tighten bolts.
3. Repeat steps 1-2 for right floor support.

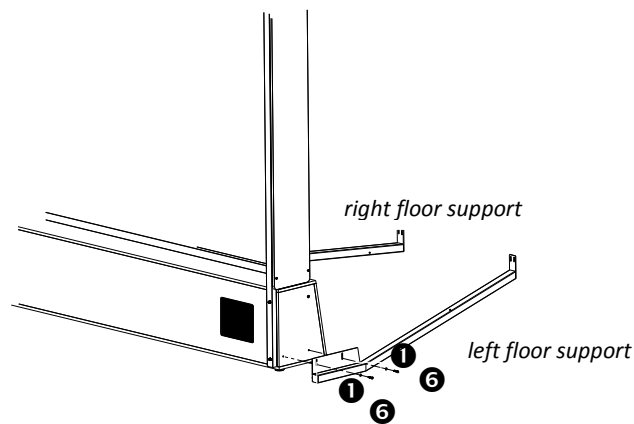


Figure 7: Close-up of left floor support attaching to left side of screen base.
Cables not shown.

Big Buck Safari Super Deluxe

Open Gun Pedestal Coin Door

1. Remove the coin door key from the coin return chute.
2. Open the coin door.
Note the position of the Service Button Panel.
3. Locate the keys for the projector access door and lower access door on the inside of the coin door. Remove the projector remote control from the cash box.



Projector Remote Control

Attach Floor Supports to Gun Pedestal

1. Insert pedestal lower access door key into lock.
2. Unlock and open pedestal lower access door.
3. Insert projector access door key into projector access door lock.
4. Unlock and open projector access door.
5. Move gun pedestal near front flanges of floor supports.
6. Position gun pedestal so that posts on gun pedestal mounting plate protrude through holes on front flanges of floor supports. *See Figure 8.*
7. Fasten a **2** nut and a **1** washer over each post.
Do not tighten nuts.
8. Adjust the six leg levelers in gun pedestal to raise the wheels just above the floor to keep the pedestal stable.

Leveling does not need to be perfect yet.

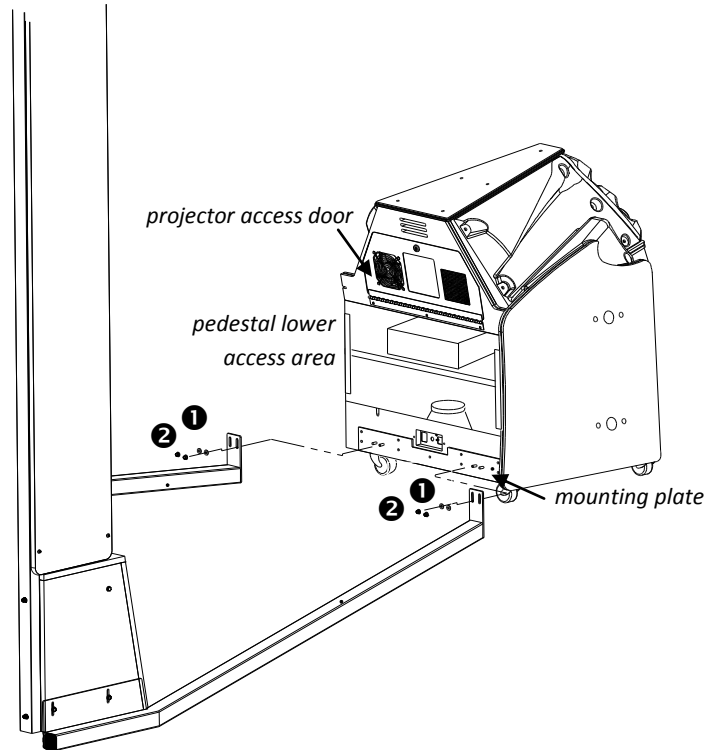


Figure 8: Floor supports attaching to gun pedestal, with lower access door removed.

Connect Floor Support Cables to Gun Pedestal Cables

1. Connect the 2-pin 5V IR cables from the left floor support to its mate inside the gun pedestal.
2. Connect the 2-pin AC plug from the left floor support to its mate inside the gun pedestal.
3. Repeat steps 1-2 for right floor support.

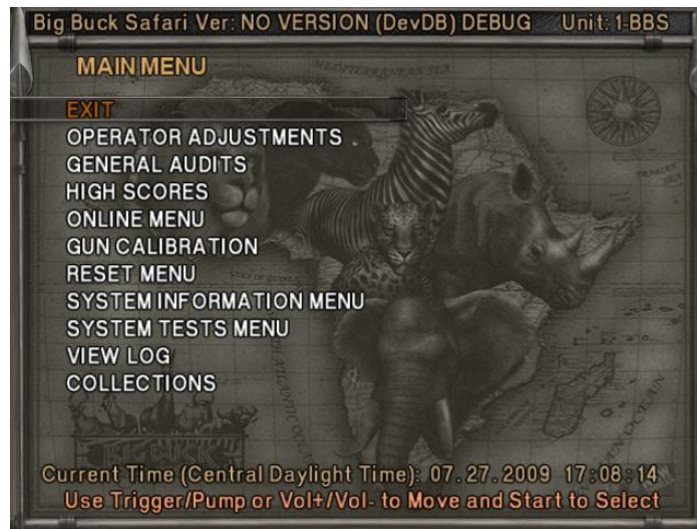
Connect Outrigger Cables to Gun Pedestal Cables

1. Remove six screws from rear door of left outrigger.
 2. Remove outrigger rear door and set aside.
 3. Move the left outrigger six inches away from the left side of the gun pedestal.
 4. Run the outrigger speaker connector (2-pin) and the fluorescent power connector (4-pin) through the lower hole in the left outrigger into the gun pedestal.
 5. Mate the speaker connector to the nearest 2-pin connector in the gun pedestal.
 6. Mate the power connector to the nearest 4-pin connector in the gun pedestal.
- warning: do not force cables!**
7. Repeat steps 1-6 for right outrigger.

Big Buck Safari Super Deluxe

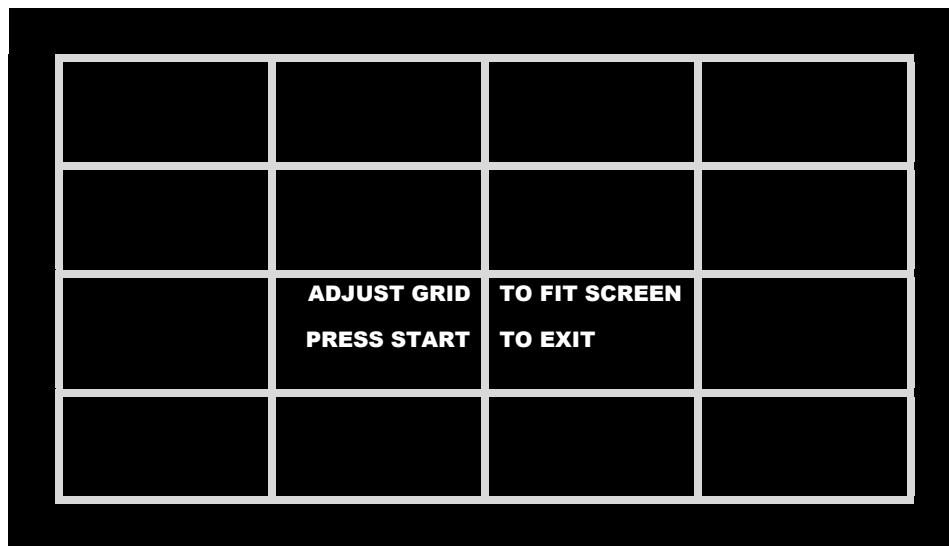
Access the Screen Adjustment Grid

1. Plug the AC cable at the front end of the right floor support into the I.E.C. outlet in the rear of the gun pedestal.
2. Check that the voltage switch is set properly.
3. Turn cabinet AC switch on rear of gun pedestal to ON.
4. Make sure all marquee and outrigger fluorescent lights are on and projector is on.
See Troubleshooting if anything fails.
5. Darken as many lights in the room as possible.
6. Press the TEST button on the Service Button Panel to access the Diagnostic Menu System.
7. Use the left gun pump to highlight the System Tests Menu.



8. Press the left Start button to select System Tests Menu.
9. Pump the gun to highlight Screen Tests.
10. Press the Start button to select Screen Tests.
11. Pump the gun to highlight Screen Adjustment.
12. Press the Start button to select Screen Adjustment.

The following grid appears.



Level the Projector

1. Adjust focus control (front ring near lens) on projector to sharpen screen image. See Figure 9.
2. Raise or lower the gun pedestal leg levelers to center the grid on the screen.
Grid lines should be parallel to the screen borders all around.
Gun pedestal wheels should not touch the ground.
3. Adjust the zoom control (rear ring) to enlarge the image on screen as much as possible without touching the screen edges.

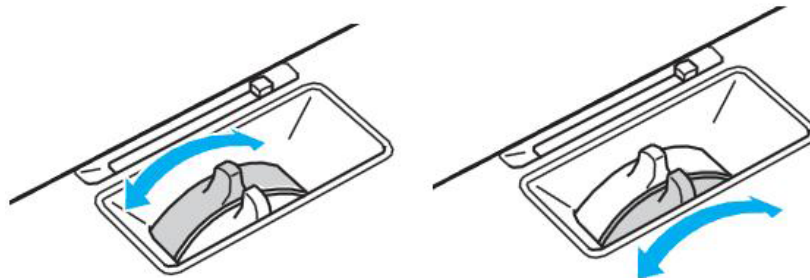


Figure 9: Left: Projector Focus dial Right: Projector Zoom Dial

4. If necessary, make horizontal adjustments to the projector by loosening the screws that hold the projector support tray to the gun pedestal shelf and moving the tray left or right.
5. Tighten screws when finished.
6. Make further, minor vertical adjustments by loosening the red thumbscrews on the projector support tray and lowering or raising the tray.
7. Tighten thumbscrews when finished.
8. While observing screen, close projector access door.
When door is closed, image should remain crisp and unobstructed.
9. If image is shadowed at the top or bottom of the screen, open the projector access door and repeat steps 1-7 until image is unobstructed.
10. Close and lock projector access door.
11. Press the Start button to exit the Screen Adjustment Menu.
12. Turn cabinet AC switch to OFF.
13. Tighten bolts at front and rear flanges of floor supports into base and pedestal.
Take care not to tilt base or pedestal.

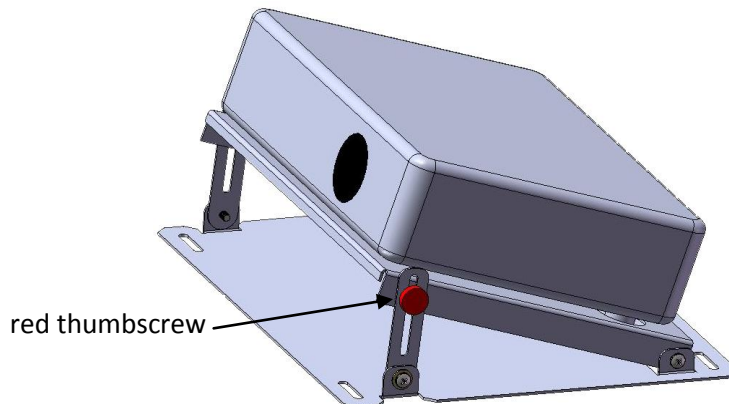


Figure 10: Projector on support tray

Big Buck Safari Super Deluxe

Attach Outriggers

1. Align holes of right panel of left outrigger with holes on left panel of gun pedestal.
2. Fasten four **5** bolts and **1** washers through the inside wall of the outrigger into gun pedestal.
3. Replace left outrigger door.
4. Fasten six screws to hold door to outrigger.
5. Repeat steps 1-4 for right outrigger.
6. Close and lock gun pedestal lower access door.

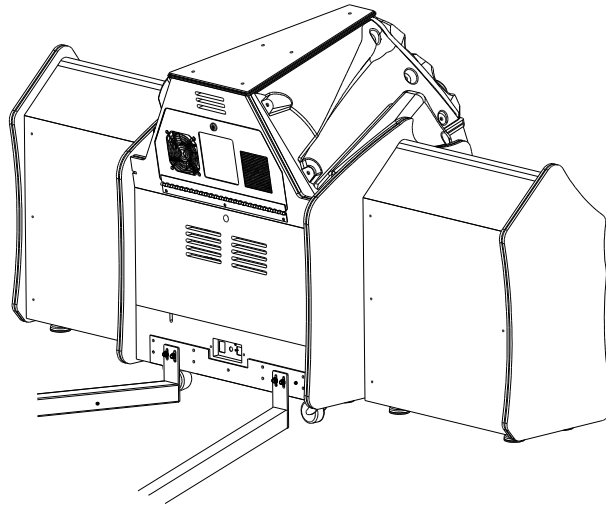
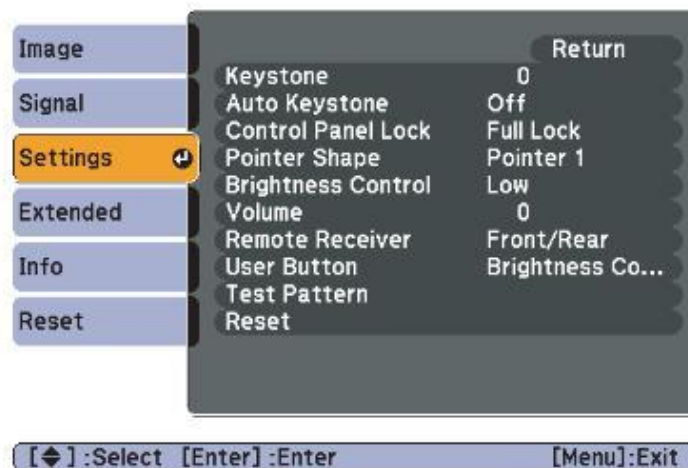


Figure 9: Outriggers attached to gun pedestal with all doors replaced.

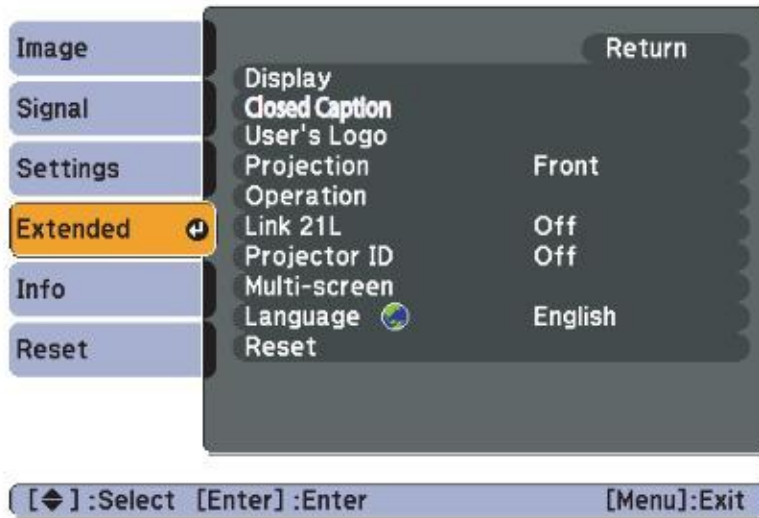
Make Final Adjustments

1. Turn cabinet AC switch to ON.
2. If necessary, repeat Screen Adjustment as described previously to ensure grid is still parallel to screen after attaching outriggers.
3. Press the Menu button on the projector remote control.
Refer to projector manual for details on adjusting the projector and using the remote.
4. Scroll to the Settings menu.



5. Highlight and adjust keystone to correct any trapezoidal shape to the screen.

6. Scroll to the Extended menu.



7. Verify that the Link21L setting is ON.
8. Scroll to the Reset menu.

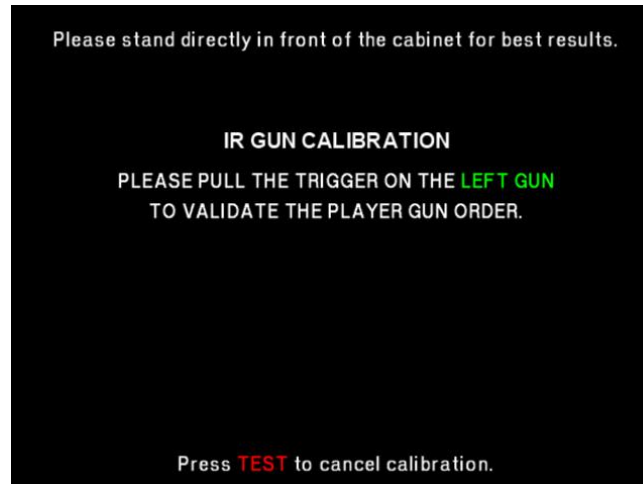


9. Highlight and execute Reset Lamp Hours.
Execute the Reset Lamp Hours function every time the projector bulb is replaced.
10. Exit the Projector menu system.

Calibrate Guns

1. Press the TEST button inside the coin door to enter the Diagnostic System.
2. From the Main Menu, use a gun pump to highlight Gun Calibration.
3. Press a Start button to enter calibration.

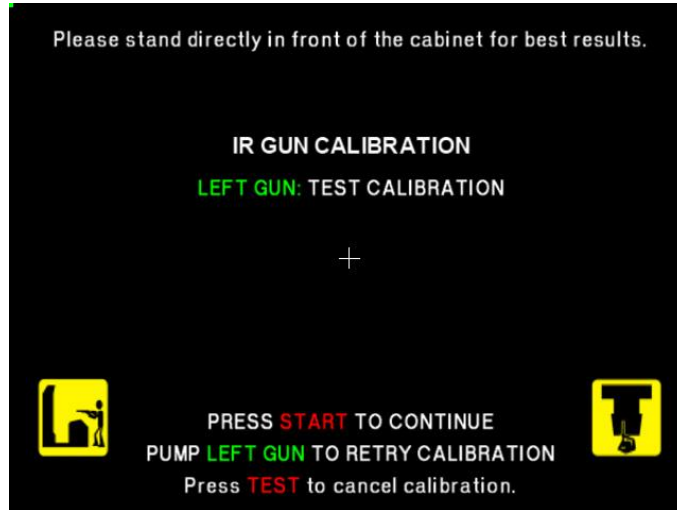
Big Buck Safari Super Deluxe



4. Stand directly in front of the gun pedestal and aim the left gun at the “+” sign and shoot.



5. Follow on-screen instructions on the gun tracking screen. The dot indicates the spot where the gun is aimed. Verify accuracy by pointing at different areas of the screen.
6. Accept calibration by pressing the left Start button.

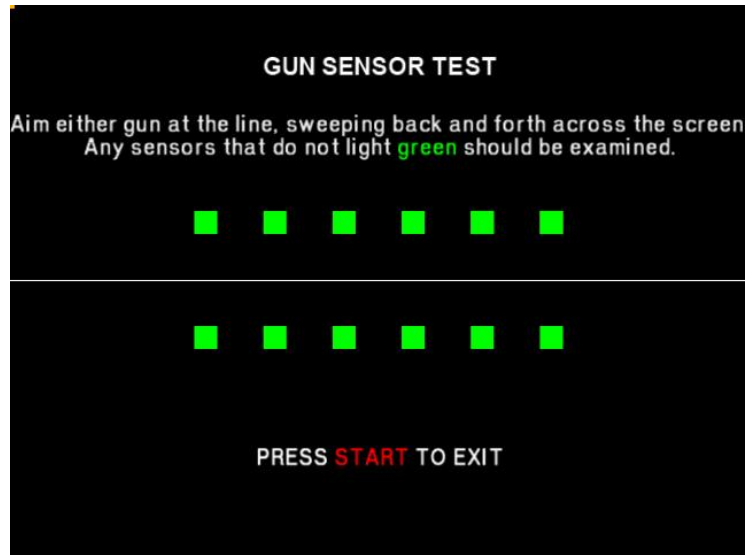


7. Repeat steps 5-9 for right gun.
8. Press Start button when finished.
9. From Main Menu, squeeze a gun trigger to cycle through choices until you reach System Tests.
10. Press a Start button to select System Tests.

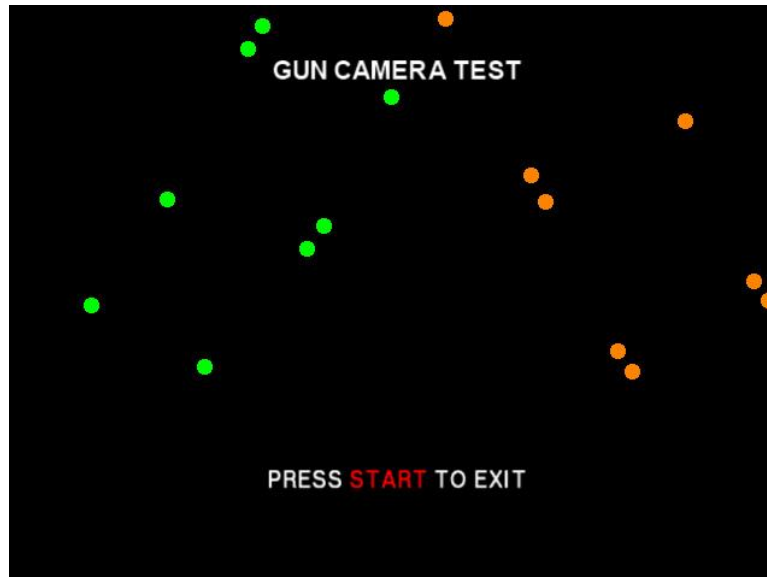


11. Squeeze the trigger to highlight the Gun Sensor Test.
12. Press the Start button to select the Gun Sensor Test.

Big Buck Safari Super Deluxe



13. Sweep the gun from left to right and back again and watch the squares on screen to ensure they all turn green.
If any squares remain red as the gun passes them, that particular IR sensor may be dirty or damaged.
14. Press the Start button to return to the System Tests menu.
15. Squeeze the trigger to highlight Gun Camera Test.
16. Press the Start button to begin the test.



17. You may use one or both guns for this test. Each gun controls a dual-track of colored dots. As you tilt each gun, the orientation of the tracks rotates, as the sensors perceive the change in angle. Note whether any of the dots disappear or flicker when near the center of the screen. This may indicate a dirty or poorly functioning camera inside the gun.
18. Press the Start button to return to the System Tests menu
19. Squeeze the trigger to highlight the Gun Electronics Test.

20. Press the Start button to begin the test.



21. Squeeze the trigger to see additional test results.



22. Ensure the guns pass all tests.
 23. Press the Start button to conclude the test and return to the System Tests menu.
 24. Press the Start button again to return to the Main Menu.
 25. Using the Diagnostic system, described later in this manual, run other diagnostics and make desired adjustments.

Big Buck Safari Super Deluxe

Adjustments, Audits and Diagnostics

Diagnostic Menu System

The Service Button Panel should have four buttons, three of which can navigate the menu system. But it is easiest to navigate with a Start button and trigger/ pump.

Service Panel TEST button enters diagnostic system.

Either Start button or
TEST button selects the highlighted option.

Service Panel VOL - button or
Squeezing either trigger moves down through menu or setting choices.

Service Panel VOL + button or
Pumping either gun moves up through menu or setting choices.

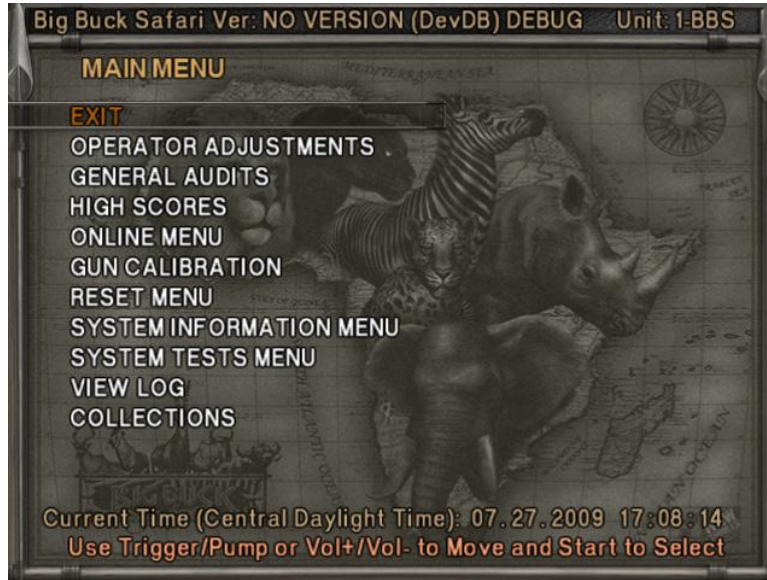
Highlight and select Exit to return to previous screen.

An on-screen message acknowledges changes or when you exit a selection without making a change.

At the bottom of each screen there is a brief description of the menu option's function. A complete description is available here for all menu functions.

Menu Screens and Descriptions

Main Menu



For clarity, subsequent menu screens will exclude the header, footer and background image.

Main Menu

Operator Adjustments Menu

This menu controls gameplay, coinage and sound adjustments.



You can improve collections by customizing performance with game adjustments. Each variable on an adjustment menu changes an aspect of game play or appearance. Optimizing these settings can maintain player interest and improve earnings. Monitor the effects of adjustments by comparing audit information and earnings before and after changes.

Big Buck Safari Super Deluxe

Main Menu

Operator Adjustments Menu

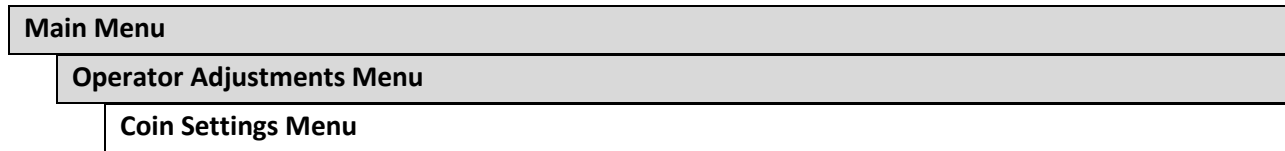
Game Adjustments Menu

This controls elements of the player experience and the time the game contacts the tournament server.

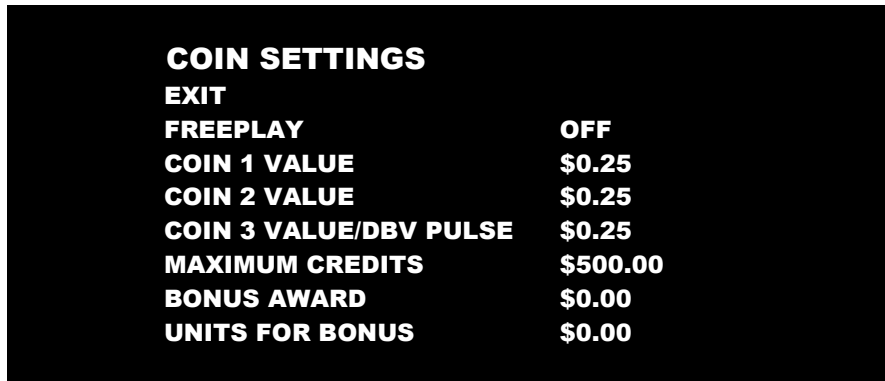


Settings, Defaults and Choices

Setting	Description	Default	Choices
Violence	<p>Changes visual effect of shot animals.</p> <ul style="list-style-type: none"> NORMAL. Some blood appears on shot animals. Red star appears on kills. NO BLOOD. No blood appears on shot animal. In No Blood Mode, small blue star replaces red star on kills. 	Normal	No Blood / Normal
Big Buck Girls	<p>This setting allows operator to permit or eliminate images of Big Buck Girls.</p> <ul style="list-style-type: none"> ON: Big Buck Girls appear in Attract and Gameplay modes OFF: No Big Buck Girls appear. 	On	On / Off
Skill Level	<p>Adjusts game difficulty by changing how shotgun reloads after each trigger pull.</p> <ul style="list-style-type: none"> EASY. After each trigger pull, shotgun reloads itself without pumping. To fire another shot, pull trigger again. NORMAL. After each trigger pull, reload by pumping. 	Normal	Normal / Easy
Initials Type	<p>Adjusts how players can enter their names.</p> <ul style="list-style-type: none"> FULL NAME. Players user two screens. The first name screen allows up to 13 characters. The last name screen allows up to 15 characters. INITIALS. Players can enter up to three characters. <p>Warning: changing to Initials Only clears high score tables.</p>	Initials Only	Full Name / Initials Only
Game Update Hour	The 60-minute period during which tournament-enabled games contact the server for updates.	4-5 AM	24 hours



This menu does **not** set game price, but specifies how much game credit is given for money added to the machine. The smallest accepted coin is a quarter, the typical setting for both coin values in the U.S. The DBV value is also a multiple of 25¢.



Settings, Defaults and Choices

Setting	Description	Default	Choices
Freeplay	Players can start games without money by pressing START. Use this for promotions, non-commercial applications or to test the machine.	Off	On / Off
Currency Type	Changing currency type resets coin door values. The denomination symbol changes on screen with each currency.	Dollar	Yen, Won, Ruble, Real, Peso, Krona, Guilder, Franc, Can. Dollar, Coins, Euro, NZ Dollar, Rand, Pound, Aus. Dollar
Coin 1 Value	Lets you set coin slot pricing.	\$0.25	\$0.25 - \$63.75 in \$.25 increments
Coin 2 Value	Lets you set coin slot pricing.	\$0.25	\$0.25 - \$63.75 in \$.25 increments
Coin 3 Value / DBV Pulse	The bill validator (DBV) translates bills into electronic pulses. Every \$1 bill results in four pulses; each \$5 bill is 20 pulses; \$10 bill is 40 pulses, etc. This setting determines how much game credit is awarded per pulse. With default setting of \$0.25, every \$1 bill will award \$1 in game credit. Set to \$0.50, every \$1 bill will award \$2 in game credit.	\$0.25	\$0.25 - \$63.75 in \$.25 increments
Maximum Credits	The highest number of unplayed credits allowed.	\$500.00	\$125 - \$500 in \$.25 increments
Bonus Award	The amount of credit awarded per bonus unit (see below).	\$0.00	\$0.00 - \$63.75 in \$.25 increments
Units for Bonus	The value a player must enter to get bonus credit.	\$0.00	\$0.00 - \$50.00 in \$.25 increments

Bonus Award/Units for Bonus example.

To give players \$1.25 in credit for every dollar put in the DBV, set Bonus award to \$.25 and Units for Bonus to \$1.

Big Buck Safari Super Deluxe

Main Menu

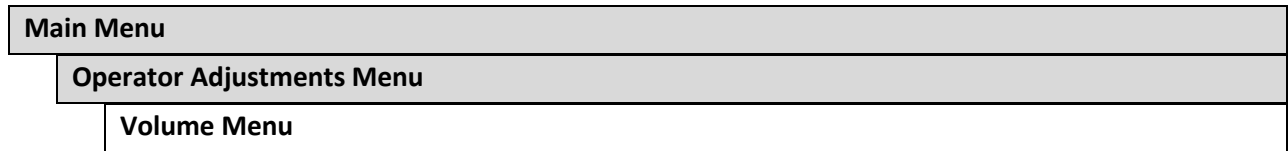
Operator Adjustments Menu

Player Cost Menu

PLAYER COST			
TYPE	OPER FEE	COINUP FEE	TOTAL
EXIT			
TREK	\$3.00	\$0.00	\$3.00
ADVENTURE	\$8.00	\$0.00	\$8.00
BONUS ONLY	\$3.00	\$0.00	\$3.00
TROPHY CLUB TREK	\$3.00	\$0.50	\$3.50
TROPHY CLUB ADV.	\$8.00	\$0.50	\$8.50
TROPHY BONUS ONLY	\$3.00	\$0.50	\$3.50
PLAYER CARD	\$0.25	\$2.75	\$3.00

Settings, Defaults and Choices

Setting	Description	Operator Fee Default	Choices
Trek	A <i>trek</i> lets players hunt at five sites and one bonus game.	\$3.00	\$0.00 - \$63.75 in \$0.25 increments
Adventure	An <i>adventure</i> is three treks (15 sites and three bonus games).	\$8.00	\$0.00 - \$63.75 in \$0.25 increments
Bonus Only	A <i>bonus only</i> is four bonus games.	\$3.00	\$0.00 - \$63.75 in \$0.25 increments
Trophy Club Trek	This is the online version of a trek (tracks player stats).	\$3.00	\$0.00 - \$63.75 in \$0.25 increments Only Operator Fee can be modified.
Trophy Club Adv.	This is the online version of an adventure (tracks player stats).	\$8.00	\$0.00 - \$63.75 in \$0.25 increments Only Operator Fee can be modified.
Trophy Bonus Only	This is the online version of bonus only.	\$3.00	\$0.00 - \$63.75 in \$0.25 increments Only Operator Fee can be modified.
Player Card	The card holds player login information.	\$0.25	Cannot be modified



Rather than requiring a manual dial or up/down buttons, all volume adjustments can be made digitally with this menu. However, during Attract Mode, pressing the Service Panel Vol + and Vol – buttons only adjust Attract Mode volume.



Settings, Defaults and Choices

Setting	Description	Default	Choices
Game Volume	This affects sound only while game is played.	9	0 – 32
Attract Volume	This can be silenced or turned up as an advertisement to draw in players.	7	0 – 32
Minimum Volume	Determines the lowest setting possible for both Game and Attract Volumes	4	0 – 32
Attract Sounds	This determines how often the game’s “advertising” sounds will be heard.	Occasionally	Off/Occasionally/Always

Big Buck Safari Super Deluxe

Main Menu

General Audits Menu

Audit screens help assess game performance, find intermittent problems, decide whether to adjust game difficulty and free game award and help maximize game earnings.

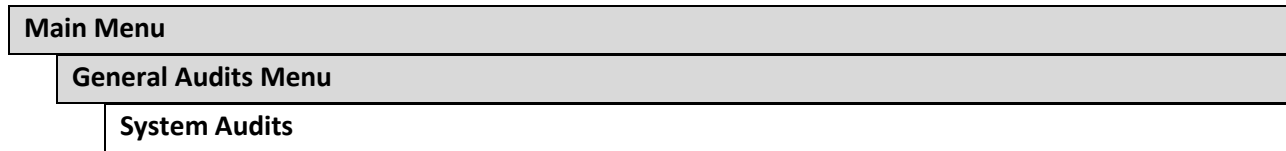
GENERAL AUDITS
EXIT
GAME AUDITS
SYSTEM AUDITS
GAME PURCHASE AUDITS
ADVENTURE PURCHASE AUDITS
BONUS ONLY AUDITS
COIN AUDITS

Main Menu

General Audits Menu

Game Audits

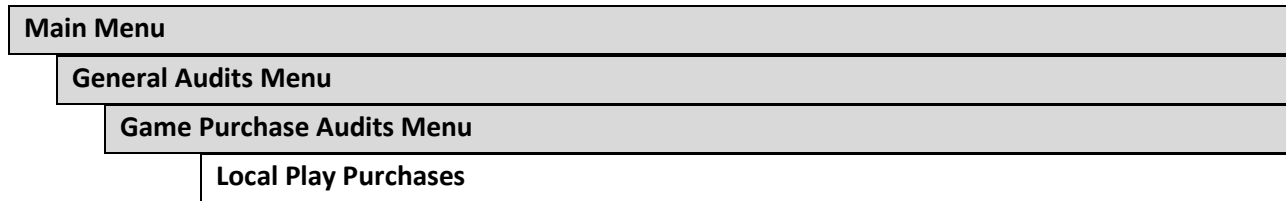
GAME AUDITS
EXIT
1 PLAYER GAMES **0**
2 PLAYER GAMES **0**
3 PLAYER GAMES **0**
4 PLAYER GAMES **0**
SHOOTOUT GAMES **0**
PLAYER STARTS **0**
GAMES ENDED **0**
GAME WINS **0**
CONTINUES **0**
CONTINUES OFFERED **0**
SHOOTOUT CHALLENGES **0**



```
SYSTEM AUDITS
EXIT
PLAY TIME          0 yr 0 dy—0:00:00
UP TIME            0 yr 0 dy—0:00:00
WATCHDOGS         0
EXCEPTIONS        0
BAD TRAPS         0
```



```
GAME PURCHASE AUDITS
EXIT
LOCAL PLAY PURCHASES
ONLINE PLAY PURCHASES
```



```
LOCAL GAME PURCHASE AUDITS
EXIT
TREKS PURCHASED      0
ADVENTURES PURCHASED 0
BONUS ONLY PURCHASED 0
SHOOTOUT TREK        0
SHOOTOUT ADVENTURE   0
SHOOTOUT BONUS ONLY  0
```

Big Buck Safari Super Deluxe

Main Menu
General Audits Menu
Game Purchase Audits Menu
Online Game Purchase Audits

ONLINE GAME PURCHASE AUDITS	
EXIT	
TROPHY CLUB TREKS PURCHASED	0
TROPHY CLUB ADV. PURCHASED	0
TR. CLUB BONUS ONLY PURCHASED	0
TC SHOOTOUT TREK PURCHASED	0
TC SHOOTOUT ADV. PURCHASED	0
TC SHOOTOUT BONUS ONLY PURCHASED	0
TOURNAMENTS PURCHASED	0
NATIONAL TOURNAMENTS PURCHASED	0
PLAYER CARDS PURCHASED	0

Main Menu
General Audits Menu
Adventure Purchase Audits Menu

ADVENTURE PURCHASE AUDITS	
ADV PURCHASE AUDITS: TURN-BASED	
ADV PURCHASE AUDITS: SHOOTOUT	

Main Menu
General Audits Menu
Adventure Purchase Audits Menu
Turn-Based Adventure Purchase Audits

ADVENTURE PURCHASE AUDITS: TURN-BASED				
ADVENTURE	WHOLE	TREK 1	TREK 2	TREK 3
EXIT				
SABLE	0	0	0	0
KUDU	0	0	0	0
WILDEBEEST	0	0	0	0
GEMSBOK	0	0	0	0
AFRICAN BUFFALO	0	0	0	0

Main Menu
General Audits Menu
Adventure Purchase Audits Menu
Shootout Adventure Purchase Audits

ADVENTURE PURCHASE AUDITS				
ADVENTURE	WHOLE	TREK 1	TREK 2	TREK 3
EXIT				
SABLE SHOOTOUT	0	0	0	0
KUDU SHOOTOUT	0	0	0	0
WILDEBEEST SHOOTOUT	0	0	0	0
GEMSBOK SHOOTOUT	0	0	0	0
AFRICAN BUFFALO SHOOTOUT	0	0	0	0

Main Menu
General Audits Menu
Bonus Only Audits Menu

BONUS ONLY AUDITS			
BONUS NAME	PLAYED	BONUS NAME	PLAYED
EXIT			
MONKEY DROP	0	DRUM BEAT	0
WATERFALL	0	BOOBY TRAP	0
SHRUNKEN HEAD	0	HYENA	0
FROG HOP	0	TURTLE CROSS	0
OSTRICH	0	CHAMELEON	0
TARANTULA	0	ANT	0
PINWHEEL	0	PYGMY BIRD	0
MEERKAT	0		

Main Menu
General Audits Menu
Coin Audits Menu

COIN AUDITS	
EXIT	
TOTAL COIN 1	\$0.00
TOTAL COIN 2	\$0.00
TOTAL COIN 3 DBV	\$0.00
BONUS COINS	\$0.00
LIFETIME COIN COUNT	\$0.00
SERVICE CREDITS	\$0.00

Big Buck Safari Super Deluxe

Main Menu

High Scores Menu

High Scores: Turn-Based Menu

HIGH SCORES: TURN-BASED

EXIT

SABLE ADVENTURE

KUDU ADVENTURE

WILDBEEST ADVENTURE

GEMSBOK ADVENTURE

AFRICAN BUFFALO ADVENTURE

PERFECT STREAK

PERFECT SITES

Main Menu

High Scores Menu

High Scores: Shootout Menu

HIGH SCORES: SHOOTOUT

EXIT

SABLE SHOOTOUT

KUDU SHOOTOUT

WILDBEEST SHOOTOUT

GEMSBOK SHOOTOUT

AFRICAN BUFFALO SHOOTOUT

Main Menu

High Scores Menu

Animal Scoreboard

The high scores for a particular game are displayed in this format.

ANIMAL ADV. (or shootout) SCOREBOARD

SCORE - - - - - NAME - - - - - ANIMAL

EXIT

--	--	--
--	--	--
--	--	--
--	--	--
--	--	--
--	--	--

Main Menu

Online Menu

See the CoinUp™ manual for a full explanation of these menu functions.

Main Menu

Gun Calibration Menu

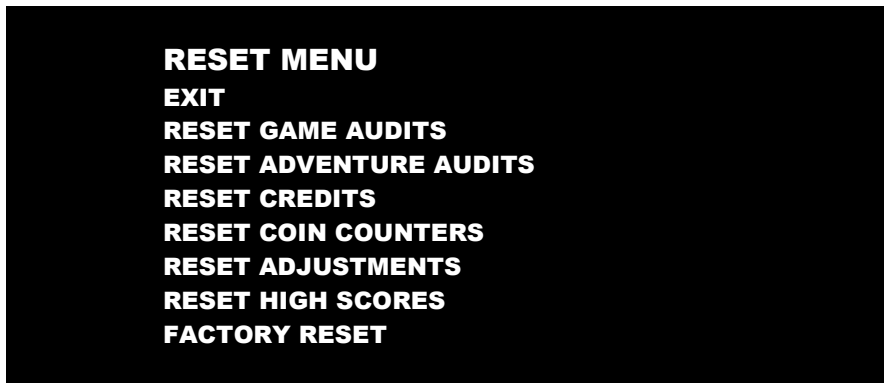
This is the same procedure described earlier in the **First Calibration** section.

Main Menu

Reset Menu

In addition to resetting individual counters and audits, this menu erases most of your changes. *Factory Reset* clears all audit data and restores most defaults. The following data, however, is not cleared:

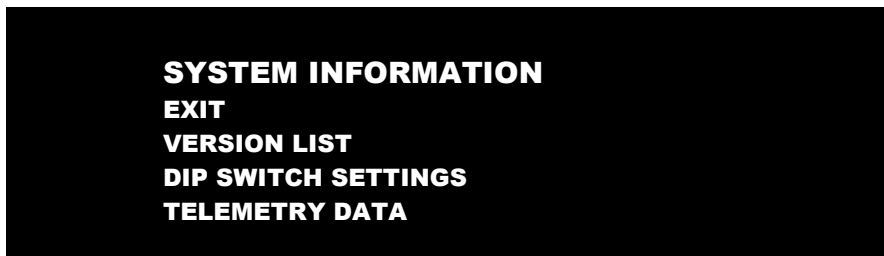
- Calibration
- Registration
- Game activation
- Lifetime coin count



Main Menu

System Information Menu

These tests verify system version and check the functioning of peripherals.



Big Buck Safari Super Deluxe

Main Menu

System Information Menu

Version List Menu

This checks the game's hardware and software versions.

VERSIONS	
EXIT	
SOUND	1.9.3
JAMMA	25q.H00.F00 D
PMNET	00.00.00
SOFTWARE	01.02.13.US D PRJ
LINUX KERNEL	N/A
PROCESSOR	N/A
BIOS	N/A
PLAYER 1 GUN	3
PLAYER 2 GUN	3

Main Menu

System Information Menu

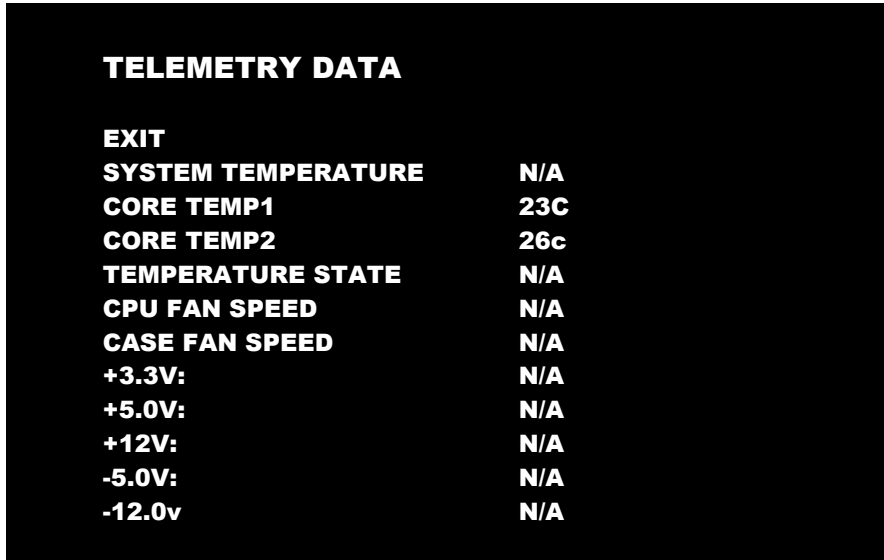
DIP Switch Test Menu

This checks the DIP Switch settings on the I/O Board

DIP SWITCH SETTINGS		
DIPSWITCH 1	OFF	RESOLUTION
DIPSWITCH 2	OFF	GUN SCAN CGA
DIPSWITCH 3	OFF	HSYNC/VSNC POLARITY
DIPSWITCH 4	OFF	UNUSED
DIPSWITCH 5	OFF	UNUSED
DIPSWITCH 6	OFF	UNUSED
DIPSWITCH 7	OFF	UNUSED
DIPSWITCH 8	OFF	UNUSED
PRESS START TO EXIT		

Main Menu
System Information Menu
Telemetry Stats

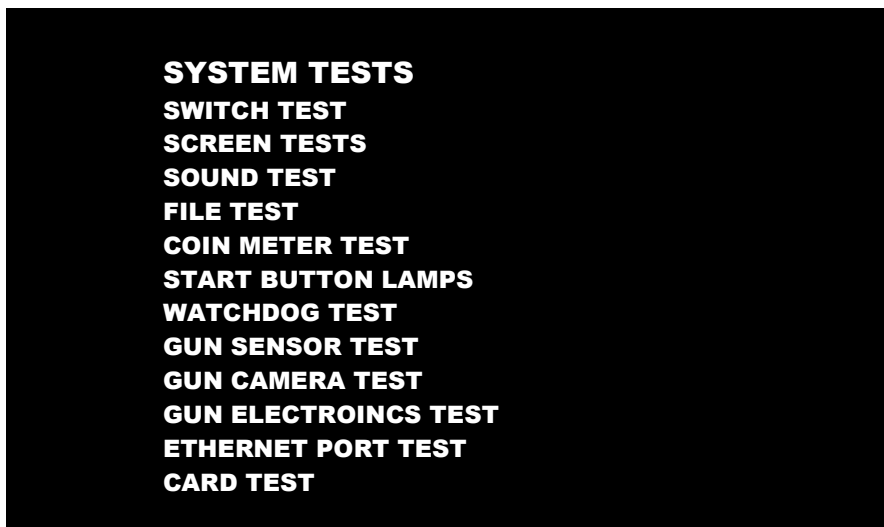
These tests check thermal qualities and electrical conductivity.



TELEMETRY DATA	
EXIT	
SYSTEM TEMPERATURE	N/A
CORE TEMP1	23C
CORE TEMP2	26c
TEMPERATURE STATE	N/A
CPU FAN SPEED	N/A
CASE FAN SPEED	N/A
+3.3V:	N/A
+5.0V:	N/A
+12V:	N/A
-5.0V:	N/A
-12.0v	N/A

Main Menu
System Tests Menu

These tests check the functioning of peripherals.



SYSTEM TESTS
SWITCH TEST
SCREEN TESTS
SOUND TEST
FILE TEST
COIN METER TEST
START BUTTON LAMPS
WATCHDOG TEST
GUN SENSOR TEST
GUN CAMERA TEST
GUN ELECTROINCS TEST
ETHERNET PORT TEST
CARD TEST

Big Buck Safari Super Deluxe

Main Menu

System Tests Menu

Switch Test Menu

This checks input switch performance. The activated switch is highlighted on screen and the system generates a “switch active” alert sound.

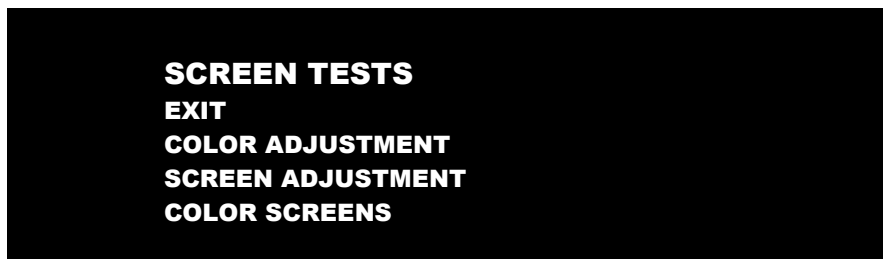


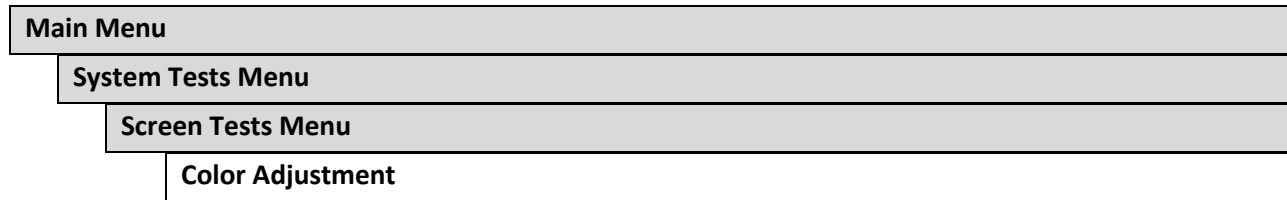
The Switch Test menu has a unique exit procedure because it checks the switches normally used for navigation. To exit to the main menu, simultaneously press a Start button and squeeze a trigger.

Main Menu

System Tests Menu

Screen Tests Menu





This color bar screen of gray, yellow, cyan, green, magenta, red and blue helps identify missing colors. Missing color bars may indicate bad video RAM in the PC, or a problem with the projector. Consult the projector manual for information on how to correct problems.

Color bars can also help

- Peak the brightness and black levels
- Balance red, green and blue drives
- Check purity problems (color contamination)
- Compensate for barrel or pincushion distortion
- Adjust size controls
- Test for video noise sources (such as bad cables)



Big Buck Safari Super Deluxe

Main Menu
System Tests Menu
Screen Tests Menu
Screen Adjustment Menu

This crosshatch screen helps adjust width and height, static convergence and purity, brightness and focus. This test is the best way to align the projector image with the screen assembly. See projector manual for information on making adjustments.

Width and Height

Adjust height and width of the crosshatch pattern until the grid fills the screen. Keep all the lines visible, though. If part of the grid goes off the screen, then the game image will, too.

Static Convergence and Purity

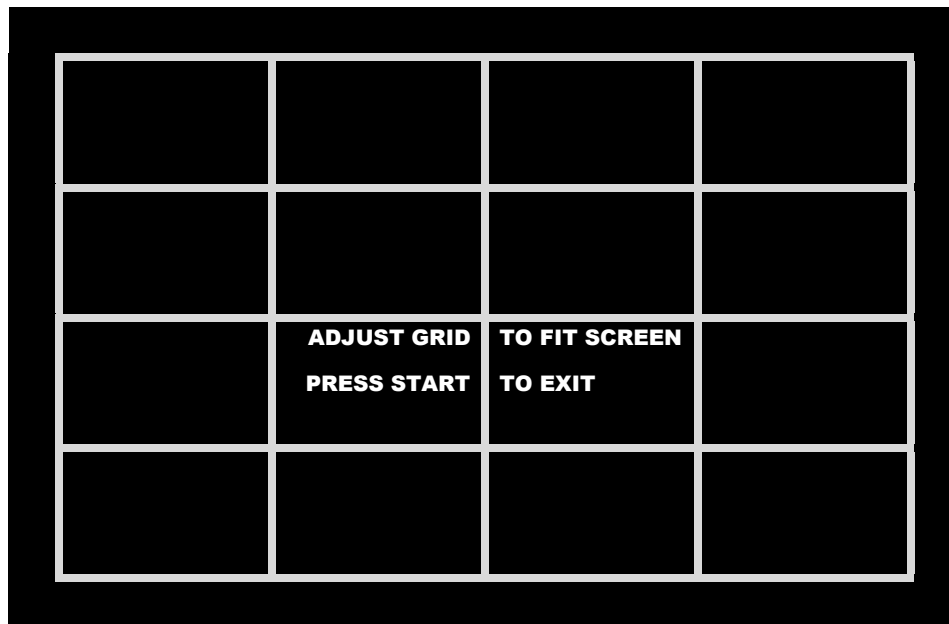
All lines in the crosshatch pattern must be white. Else, there is a convergence or purity problem. Slight color tinges at the extreme edges of the screen are okay.

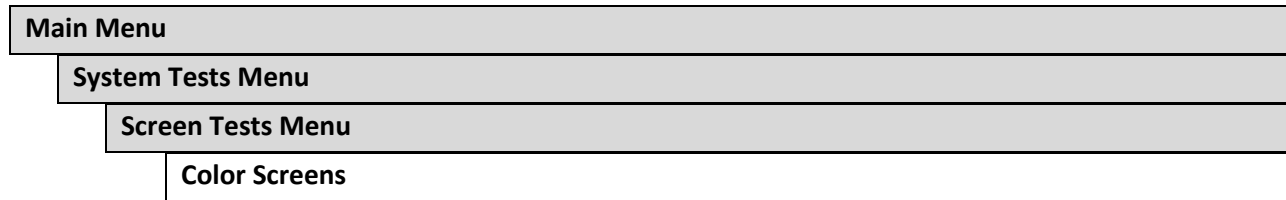
Brightness

Ensure the bars are a fairly strong white.

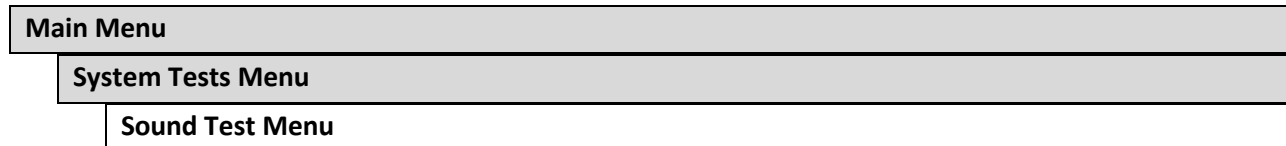
Focus

Bars with fuzzy edges indicate a focus problem. Adjust the focus control for best sharpness.

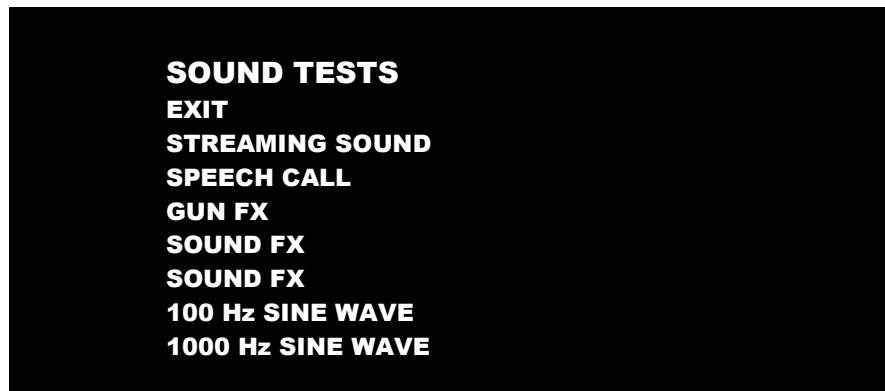




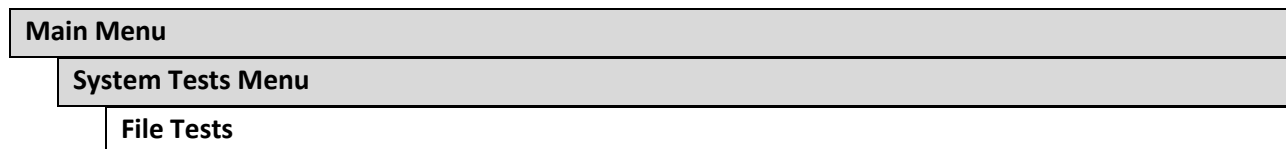
These are solid, one-color images that help adjust color drive controls for proper intensity. The screens are black, white, red, green and blue. Press the Start button to cycle through the screens. The white screen helps adjust brightness and color output balance.



This checks sound volume and quality. Missing sounds indicated digital flaws. Distorted sounds suggest analog flaws. Lack of sound suggests disconnected or bad cables or speakers.



- STREAMING SOUND is a sample of the game music.
- SPEECH CALL includes talking commentary.
- GUN FX is the shotgun blast.
- The first Sound FX is a whistle.
- The second Sound FX is a guitar riff.
- 100 and 1000 Hz Sine Waves generate specific frequency sounds. Cancel these sounds by selecting another test.



This tests the integrity of the contents of the hard drive, searching for corrupt or missing game files. Damaged or missing files register as failed and are listed. The only solution to this problem is to restore the system from the DVD-ROM, as described in the Restore the Hard Drive section.

Big Buck Safari Super Deluxe

Main Menu

System Tests Menu

Coin Meter Test

In this test, the System Tests Menu is the bottom-level menu. Watch the mechanical coin meter, which should increment by one count. If it does, it has passed the test. If it does not, it may not be receiving a pulse from the game. See Troubleshooting for more details.

Main Menu

System Tests Menu

Start Button Lamps

This tests for burned-out Start button lamps by alternately blinking the LEDs.

Main Menu

System Tests Menu

Watchdog Test

This tests the Watchdog circuit, which protects the game against screen freezes (infinite loops). After a countdown, the game resets. To exit before the reset, press either Start or Volume button, squeeze a trigger or pump a gun. If the test succeeds, the game resets normally. If the test fails, the reset process loops or ends abnormally. See the Troubleshooting Chapter to diagnose and correct this problem.

Main Menu

System Tests Menu

Gun Sensor Test

See Gun Calibration instructions in Setup section.

Main Menu

System Tests Menu

Gun Camera Test

See Gun Calibration instructions in Setup section.

Main Menu

System Tests Menu

Gun Electronics Test

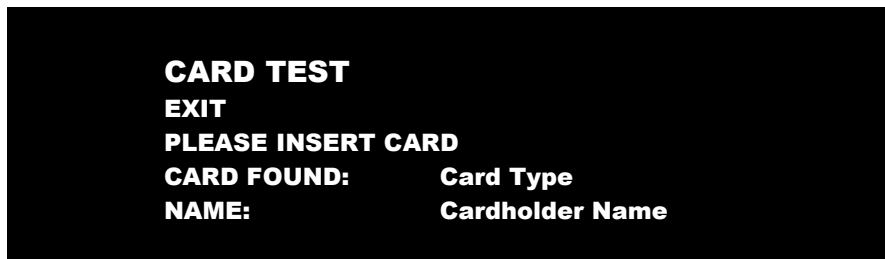
See Gun Calibration instructions in Setup section.

Main Menu
System Tests Menu
Ethernet Port Test

If Ethernet is used, this test sends attempts to send data packets to the server and reports on how many were received and how many were dropped. Note that running this test requires a loopback adapter.

Main Menu
System Tests Menu
Card Test

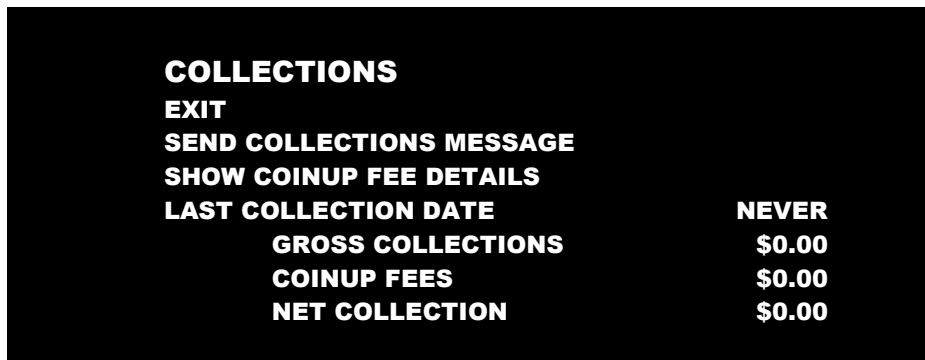
Insert a valid card to reveals the card type (player or operator) and the cardholder’s name.



Main Menu
View Log Menu

This lists history of significant events or errors in file system.

Main Menu
Collections



Send Collections Message contacts the server and delivers the latest collections information.

Big Buck Safari Super Deluxe

Main Menu

Collections Menu

CoinUp Fee Details

COINUP FEE DETAILS

EXIT

LAST COLLECTION DATE 2009-07-30 11:21:45

TROPHY CLUB PLAY \$0.00

CUSTOM CONTEST PLAY \$0.00

COINUP CONTEST PLAY \$0.00

PLAYER CARD PURCHASES \$0.00

CUSTOM CONTEST DOWNLOADS \$0.00

COINUP CONTEST DOWNLOADS \$0.00

CUSTOM ADVERTISEMENTDOWNLOADS \$0.00

COINUP ADVERTISEMENT DOWNLOADS \$0.00

COMMUNICATIONS CHARGE \$0.00

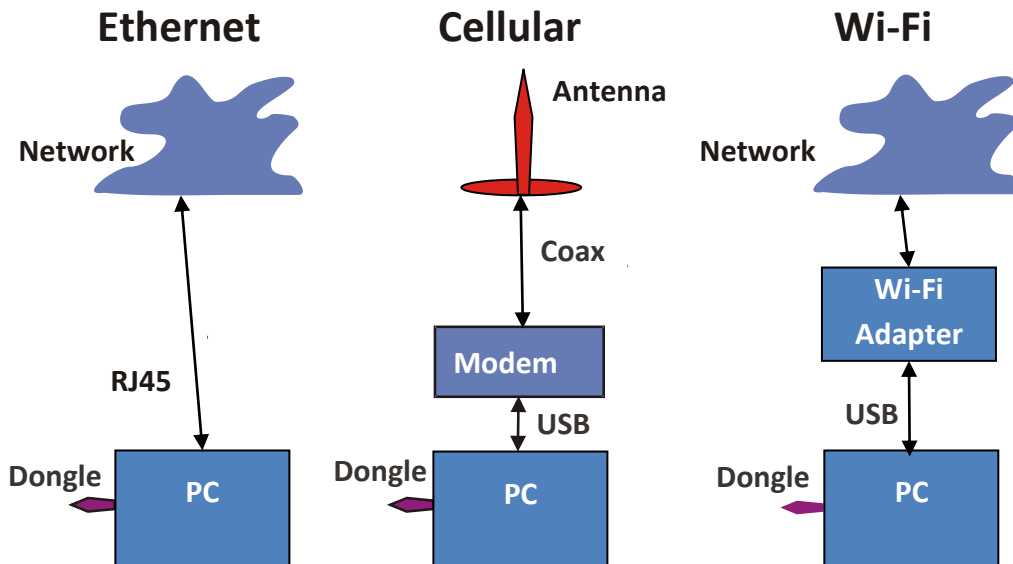
UPGRADE CHARGE \$0.00

TOTAL COINUP FEES \$0.00

Network Connectivity

In order to receive software updates and for the purpose of revenue sharing, the game requires Internet access. The following information will help you get the game online.

There are three communications protocols available: Ethernet, Cell Modem or Wi-Fi.



Ethernet Installation

1. Open a DSL account with an ISP.
2. Connect PC to the Ethernet cable from the DSL modem or router.

Refer to modem or router manual for instructions.

Cell Modem Installation

The Cell Modem Adder kit is purchased separately and requires completed modem activation form.

1. Turn off AC power.
2. Mount modem inside the gun pedestal with Velcro® strips.
3. Connect cell modem to a USB port on the PC.
4. Connect the antenna cable to the modem.
5. Mount antenna on the projector shelf.

Antenna should be near front of pedestal (player side), a safe distance from the projector.

6. Turn on AC power.
7. Install software from the kit DVD.

Big Buck Safari Super Deluxe

Wi-Fi Installation

1. Obtain one of the supported USB Wi-Fi adapters listed in the chart below.

Adapter Model	Supported Networks	Encryption Type/Compatible?							
		Disabled/None	WEP	WPA-Personal and TKIP encryption	WPA-Personal and AES encryption	WPA2-Personal (AES encryption)	WPA 2-mixed (TKIP and AES encryption)	WPA-Enterprise	Radius
Linksys WUSB54G (version 4)	802.11b/g	Yes	Yes	Yes	Yes	No	No	No	No
Rosewill RNX-G1 / RNX-G1W	802.11b/g	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Netgear WG111 (version 2)	802.11b/g	Yes	Yes	Yes	Yes	Yes	Yes	No	No
D-Link DWA-140 (version B1)	802.11b/g	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Belkin F5D8053 (version 3000)	802.11b/g/n	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Linksys WU SB600N (version 1.0)	802.11b/g/n	Yes	Yes	Yes	Yes	Yes	Yes	No	No

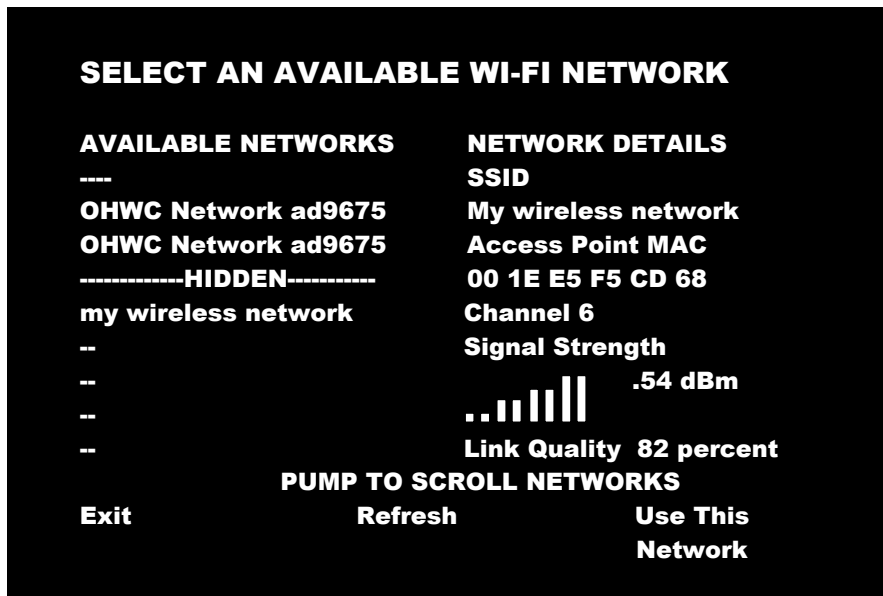
2. Turn off AC power.
3. Mount Wi-Fi adapter inside pedestal high as possible using Velcro®.
4. Do NOT install software that came with adapter. The PC already runs appropriate software.
5. Connect cable to a USB port on the PC.
6. Turn on AC power.
7. Log into wireless access point or router.
Contact your wi-fi network administrator for help logging into the access point or router.
8. Write down Wi-Fi network information on a sheet of paper:
 - SSID (i.e. network name)
 - Broadcast Channel
 - Encryption Type (e.g. WEP 64-bit, WEP 128-bit, WEP 256-bit, WPA-PSK + TKIP encryption, WPA-PSK + AES encryption, WPA2)
 - Encryption Key (Different encryption types require different types of keys).

Encryption Type	Key Details	Example
WEP (64-bit)	10 hexadecimal characters	5E2C6D4E24
WEP (128-bit)	26 hexadecimal characters	326C2D335A5A48386B5D763954
WEP (256-bit)	58 hexadecimal characters	373A786E625676266E7156345741 312F4433427C48536E7A695E7C3E75
WPA-PSK (AES)/ WPA-PSK (TKIP)/ WPA2 (AES + TKIP)	ASCII passphrase between 8-63 characters in length (Upper case letters, lower case letters, numbers and symbols allowed)	\$3CurE_pA\$sPhRa\$e

Wi-Fi Software Setup

Network

1. Enter Diagnostics mode.
2. Select Online Menu—Wi-Fi Menu—Wi-Fi Setup.
3. Select Scan Networks to look for nearby Wi-Fi networks.
*Depending on settings, network may not broadcast its SSID and are displayed as ***HIDDEN****
To use a hidden network, select it, then enter the SSID manually when prompted.



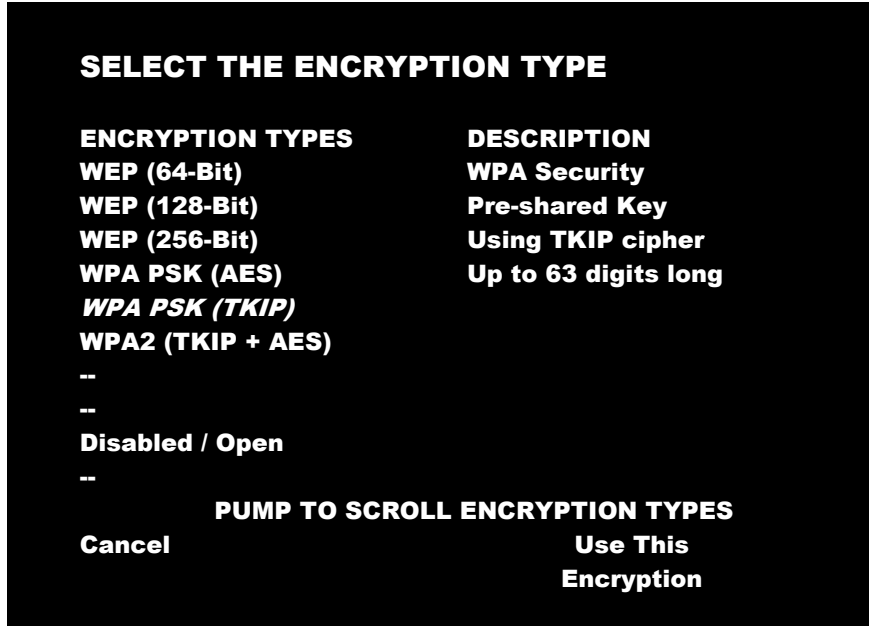
List of Available Networks

4. Scroll through the detailed list to locate your networks.
5. If network does not appear in list, Exit to previous menu and select Enter Manually, then enter SSID, encryption type, key and broadcast channel.
6. Select Use this Network to continue.

Big Buck Safari Super Deluxe

Encryption Type

1. From list of encryption types, scroll through and highlight appropriate type.



List of Encryption Types

2. Select Use This Encryption to continue.

Encryption Key:

If Encryption Type is Disabled/Open, skip this section, as there is no key.

1. On Enter WPA Key screen, enter access point or router WPA Key (from hand-written page).
Select yellow < and > symbols to switch between letters, numbers and symbols.
On the letters page, select UPPER or lower to change case of letters.



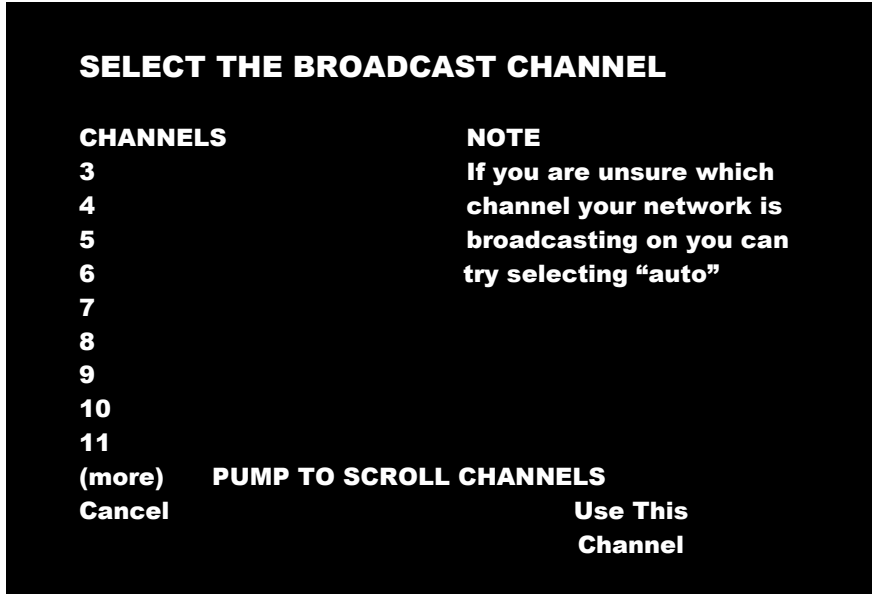
WPA Key Selection Screen

2. Select OK to continue.

Broadcast Channel

This applies if SSID was entered manually.

1. Scroll through list to highlight appropriate channel.



Broadcast Channel Selection Screen

2. If unsure of correct broadcast channel, select Auto.
3. Select Use This Channel to continue.

Confirm Settings

1. Note SSID, Encryption Type, Encryption Key and Channel on confirmation screen.



Wi-Fi Confirmation Screen

2. If information is incorrect, select Start Over to return to Wi-Fi Menu.
3. If information is correct, select Save Settings to store information.
The game automatically reboots.

Big Buck Safari Super Deluxe

Wi-Fi Details Status Messages

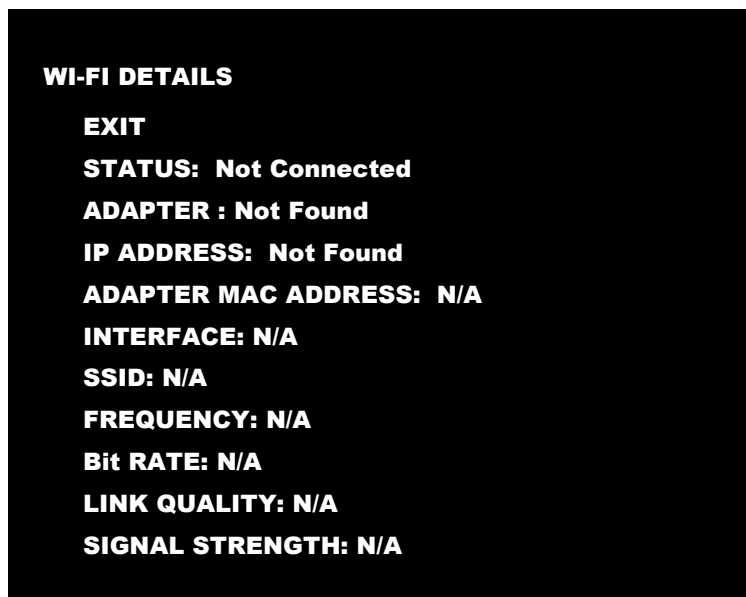
After reboot, game attempts to connect to wireless network using saved information. To see real-time connection status, enter Diagnostics Mode and select Online Menu—Wi-Fi Menu—Wi-Fi Details. Below are possible statuses. See Troubleshooting for further instructions.

Connected

Game has located wireless access point or router and successfully obtained an IP Address.
Game is online.

Ensure strong signal (the more green bars, the better the connection).

Not Connected



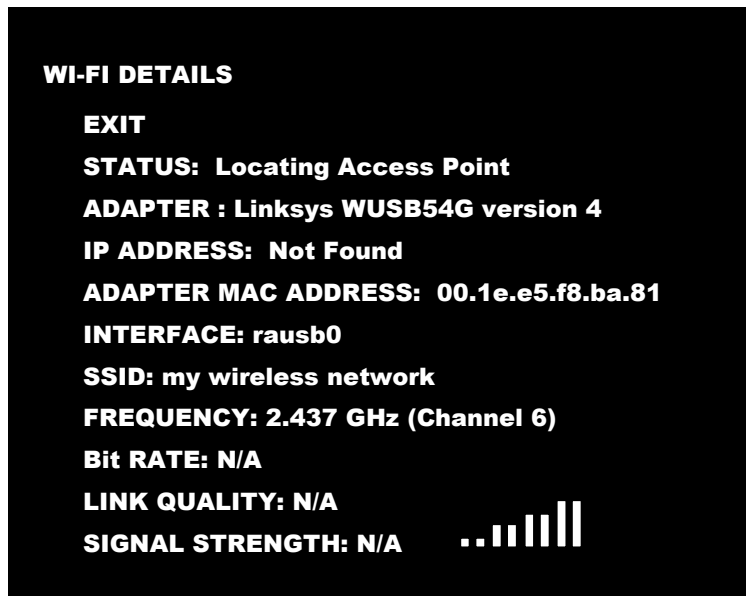
Wi-Fi Not Connected

The game is neither connected to a Wi-Fi network nor attempting to connect.

Either no Wi-Fi adapter is connected to the PC, or Wi-Fi Setup procedure was not completed.

1. If Adapter status is Not Found, ensure a supported Wi-Fi adapter with correct version is connected.
2. If Adapter status shows the name of the adapter connected to the PC, ensure SSID status is also correct.

Locating Access Point...



Locating Access Point

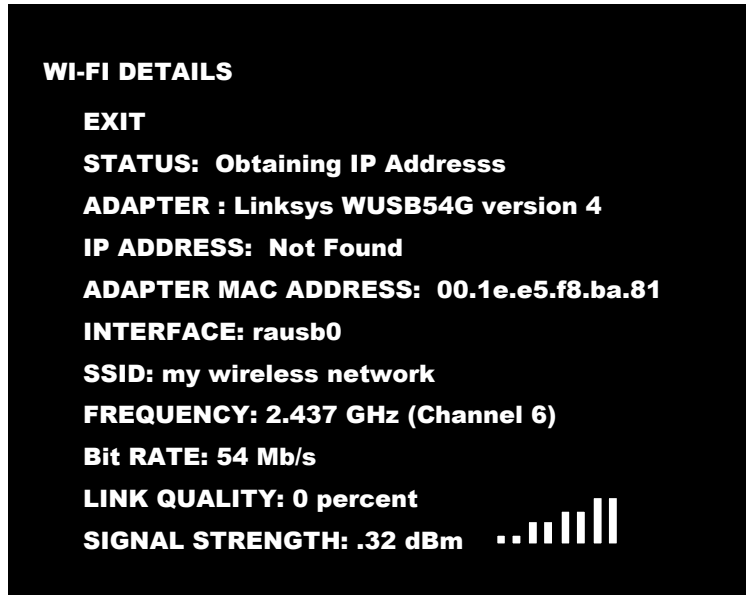
A Wi-Fi adapter is connected to the PC and network information was saved. The game is trying to find an access point broadcasting a network with the saved information.

If game remains in this status more than 5 minutes, either the network information entered was incorrect, or the game cannot communicate with the access point.

1. Reboot game and return to Wi-Fi Details again.
2. If another five minutes pass with the same status, return to Wi-Fi Setup and re-enter network information.
3. Check network signal strength by scanning for available networks in Wi-Fi Setup.
4. If signal is weak, unplug AC power and move cabinet closer to the access point.

Big Buck Safari Super Deluxe

Obtaining IP Address



Obtaining IP Address

Game has found wireless access point or router and is negotiating an IP Address through DHCP.

1. If this status displays for more than 5 minutes, reboot game.
2. Recheck status after reboot.

Maintenance

Hard Drive Recovery

Symptoms requiring hard drive recovery include

- File Test reports bad or missing files.
- Game fails to finish loading during startup.
- After resetting the AC power, an error is reported.
- You are prompted to insert a boot DVD.
- Erratic Game or Attract Mode.
- The following screen:



To identify corrupt files, press Test, choose System Test Menu and run the File Test.

The only way to repair corrupt files is to recover the hard drive, as detailed below.

COMPUTER

The computer contains sensitive components, including a hard drive. Do not handle roughly. Call your distributor before servicing its internal components. Ask about warranty information as it relates to the PC.

Do **not** use the PC on/off switch. Turn AC power on or off with the cabinet power switch.

1. With game and PC on, verify that the I/O board has power. If not, see Troubleshooting.
2. Open the Coin door.
3. Open the PC DVD-ROM tray by pressing the Open/Close button on the drive bay.
4. Insert the recovery DVD into the tray.
5. Close the tray by pressing the Open/Close button again.
6. Turn cabinet power switch to OFF. Wait 30 seconds.
7. Turn cabinet power switch to ON.
8. **Turn projector power switch to ON so as to monitor recovery process.**

Big Buck Safari Super Deluxe

9. Recovery begins automatically when PC boots up.
10. If recovery does not begin, check to ensure disc is inserted correctly and is not damaged.
11. After 30-40 minutes, check game progress.
Do not interrupt power or reset the game during recovery.
12. A message indicates that recovery is complete. When instructed to remove disk, open DVD-ROM drive tray and remove disk.
13. Turn cabinet power switch off.
14. After 30 seconds, turn cabinet power switch on.
15. Game will reboot and enter calibration mode.
16. Re-calibrate guns.

BIOS Settings/Power Management

NOTICE

The PC ships with correct BIOS settings. Making changes to the BIOS different from the description below may adversely affect game functions.

This BIOS setting lets the PC automatically power up. With the setting enabled, the PC reboots when it detects AC power. This eliminates the need to manually turn the PC back on after power disruption.

Do **not** use the PC on/off switch. Turn AC power on or off with the cabinet power switch.

1. Turn cabinet power switch off.
2. Open rear of cabinet.
3. Connect a USB keyboard to the PC.
4. While holding the Delete key on the keyboard down, turn cabinet power switch on.
5. When the BIOS menu screen appears, make the following adjustments.

Feature.....	Set to
Standard CMOS Features > Drive A.....	[none]
Standard CMOS Features > HALT ON.....	[No Errors]
Advanced BIOS Features > Boot Sequence.....	1 st CD-ROM 2 nd Hard Disk
Advanced BIOS Features > APIC Mode	Disabled
Advanced Chipset Features > Frame Buffer	[16M]
Advanced Chipset Features > PMU > CPU Frequency	[200.0]
Power Management Setup > PWRON After PWR-Fail.....	[On]

6. Follow instructions on screen to save and exit.
7. PC will reset and load the game.

Wiring

JAMMA I/O Board Connector Table

JAMMA Edge Connector Component Side			JAMMA Edge Connector Solder Side		
Function	Wire Color	Pin	Pin	Wire Color	Function
Ground	Black	1	A	Black	Ground
Ground	Black	2	B	Black	Ground
5 Volts	Red	3	C	Red	5 Volts
5 Volts	Red	4	D	Red	5 Volts
		5	E		
12 Volts	Orange	6	F	Orange	12 Volts
12 Volts	Orange	7	H	Orange	12 Volts
Coin Meter	Brown Yellow	8	J	Violet Brown	P1 Lamp
Reset	Violet	9	K	Violet Red	P2 Lamp
		10	L		
Speaker (+)	Brown Red	11	M	Brown Black	Speaker (-)
		12	N		
		13	P		
		14	R	Violet White	Service
Test	Blue	15	S		
Coin 1	Gray Brown	16	T	Gray Blue	Coin 2
P1 Start	White Brown	17	U	Green Brown	P2 Start
		18	V		
		19	W		
		20	X		
		21	Y		
		22	Z		
		23	a		
Volume (+)	Orange Red	24	b	Orange Green	Volume (-)
DBV	Gray Orange	25	c		
		26	d		
Ground	Black	27	e	Black	Ground
Ground	Black	28	f	Black	Ground

Big Buck Safari Super Deluxe

Troubleshooting

Warning: Review safety chapter before making any adjustments to game.

Problem	Possible Cause	Solution
Game will not power up	Game not plugged in.	Plug game into outlet.
	Game not turned on.	Turn on main power switch.
	Game fuse is blown.	Check and replace fuse.
	No power to receptacle.	Test outlet and plug game into powered outlet.
	PC not turned on.	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity.
	PC BIOS set incorrectly.	See BIOS Settings chapter.
Scrambled or scrolling display	Sync Polarity incorrect.	Change DIPswitch settings for HSYNC and VSYNC.
No video display	No power or signal to projector.	Check and secure all cables to projector. Consult projector manual for more information.
No sound	Bad Connection	Check connection to speakers.
Game does not load	Hard drive failure	Recover hard drive. See procedure at end of this chapter.
Hard drive test reports "bad" or "missing" files.		
Game fails to finish loading.		
After resetting, game still reports an error.		
Game suggests inserting a boot DVD.		
Erratic game mode or attract mode.		
<p style="text-align: center;">WARNING! Data Files Corrupted. (Game Operation May Become Unstable.) Use "Test" Switch to Enter Test Mode and Run "File Test." Press Start To Continue.</p>		

Message	Possible Cause	Solution
Guns won't register, or function poorly	Bad calibration	Calibrate guns.
	Dirty/damaged lens	Clean gun lens.
	Gun disconnected	Check USB connections.
	Faulty USB port.	Swap gun to another USB port to test.
	Display out of adjustment	Enter display diagnostics menu and repair.
Game resets	Bad file.	Run File Test. Restore hard drive.
Coin meter does not click during Test	No pulse to meter	Check all wiring from meter to I/O board
	Faulty meter	Replace coin meter
Exits Test Mode every 3 seconds	Test button stuck in ON position	Slide or toggle button off after Test Menu appears
<i>No Signal</i>	Video cable not secure.	Check and secure cable.
	PC not turned on.	Turn PC power switch on. Ensure IEC cable tightly plugged in. Trace cable back to source to ensure continuity.
	Sync Polarity incorrect.	Change DIPswitch settings for HSYNC and VSYNC.
<i>Dongle Not Present</i>	Dongle missing or disconnected	Find dongle and reseat in USB port
	Faulty USB port	Insert dongle in different USB port
<i>Connect I/O Board or I/O Board Missing</i>	USB cable disconnected	Check USB connection from PC to I/O board
	No power to JAMMA I/O board	Check for proper voltage (+5V, +12V) at JAMMA connector
<i>Watchdog Disabled or Watchdog Failed</i>	Watchdog defeated by JAMMA I/O DIP switch	Set DIP switch 8 to OFF
	No power to Reset PCB	Connect power to Reset PCB
	Reset input to motherboard disconnected	Connect 2-pin reset connector from Reset PCB to motherboard reset pin input
	Violet or black wire from Reset PCB disconnected or faulty	Check reset wire connection to JAMMA connector.

Big Buck Safari Super Deluxe

Cellular Troubleshooting Table

Problem	Possible Cause	Solution
Game cannot connect to server.	Poor connection between cell modem and PC.	Check that USB connections at cell modem and PC are tight. Turn off cabinet AC power. Wait 30 seconds and restart game. If no IP Address, enter diagnostics mode and go to Connection Menu. Select Cell Modem Details. If message is <i>No Modem Found</i> or <i>Collecting Data</i> call Betson service.
	Faulty modem.	Ensure PWR LED on cell modem glows green, which means PC is providing modem with power. If no power, swap with working modem. Check modem for obvious damage (dents, burns, smoke damage, broken connectors) If modem seems fine, call PlayMechanix® Service.
Cell modem connection is good and IP address appears at Test Connection screen. Under Cell Modem Details, signal is weak or nonexistent.	Poor antenna location	Turn off game and move it near window or exterior wall.
	Faulty connection.	Check connections between cell modem and antenna. If cable is frayed, broken or looks dried-up, replace it. Replace antenna if it appears damaged.
Game has IP address and screen says <i>Server Ping Success</i> but Test Connection screen reports Database Ping Failure.	Database is down.	Wait 30 minutes and revisit Test Connection screen.
	Bad dongle	Replace dongle or call Betson service.

Ethernet Troubleshooting Table

Problem	Possible Cause	Solution
Game cannot connect to server. No IP address appears under Test Connections menu	No broadband internet service	Contact a local ISP to setup either cable modem or DSL service.
	Wrong router configuration.	Configure router for DHCP (Dynamic Host Configuration Protocol).
	Disconnected Ethernet cable	Check that Ethernet cables are tightly connected at both ends. An audible click confirms tightness. Restart game. In Diagnostic mode, selection Online Menu—Connection Menu—Test Connection. Confirm that IP address appears. The phrase eth0 must follow IP address.
	Faulty Ethernet cable	Test cable by connecting it from another PC into router or wall jack. Replace cable if faulty.
	Faulty Ethernet wall jack.	Plug Ethernet cable into a different jack.
	Broadband service is down.	Contact ISP.
	Faulty router	Plug Ethernet cable into different jacks in router. Plug Ethernet cable directly into DSL or cable modem instead of router. Replace router if faulty
	Faulty network card	Call Betson service.
Game has IP address and screen says <i>Server Ping Success</i> but Test Connection screen reports Database Ping Failure.	Firewall is blocking communication with server.	Read firewall documentation. Ensure configuration allows ICMP Echo. If router has built-in firewall, check router configuration. Enable communication on ports 7786 and 7787.
	Database is down.	Wait 30 minutes and revisit Test Connection screen.

Big Buck Safari Super Deluxe

Wi-Fi Troubleshooting Table

Problem	Possible Cause	Solution
Wi-Fi Details status is <i>Not Connected</i> and Adapter is <i>Not Found</i> .	A supported USB Wi-Fi adapter is not connected.	Connect a supported Wi-Fi adapter. Turn cabinet AC power off for a minute and restart.
	Operating system has lost communication with the adapter.	Unplug Wi-Fi adapter from PC. Wait one minute, then plug it in. Turn off cabinet AC power. Wait one minute and restart.
Wi-Fi Details status is <i>Not Connected</i> , but a supported adapter is connected.	Wi-Fi network information was not saved.	Configure game to connect to Wi-Fi network at Wi-Fi Setup Menu.
Wi-Fi Details status remains <i>Locating Access Point ...</i> for more than 5 minutes.	Weak signal or interference causing delay in locating access point.	Restart cabinet AC power.
	Wireless access point or router is off or disconnected.	Ensure access point has power. Ensure it is connected to router. Restart access point. Ensure router has power and is connected to cable/DSL modem.
	Network information entered in Wi-Fi Setup does not match information stored in the wireless access point or router.	Re-enter network information. Configure game to connect to network in Wi-Fi Setup Menu. Ensure encryption type, encryption key, SSID and broadcast channel match what is stored in wireless access point or router.
Wi-Fi Details status remains <i>Obtaining IP Address...</i> for more than 5 minutes.	Weak signal or interference delaying negotiation of IP address with router.	Restart cabinet AC power.
	Wireless access point or router is off or disconnected.	Ensure access point has power. Ensure it is connected to router. Ensure router has power and is connected to cable/DSL modem.
Game has an IP address, but Test Connection menu shows that Server, Database and Fileserver pings all report failures.	Server information is outdated.	In Diagnostics Menu, select Online Menu—Online Debug Menu—View Online Debug Details—Server Details—Refresh Server Info. After refresh, new host names and IP addresses of servers are displayed.

Parts

Contact your Betson distributor for all replacement parts and service. When ordering Guns or Start buttons, clarify that you have a Super Deluxe Projector model and require the following numbers:

Orange gun: 820-00006-01

Green gun: 820-00007-01

Orange Start button assembly: F702-00008-01

Green Start button assembly: 702-00007-01

For an authorized distributor near you, check the Raw Thrills website at www.rawthrills.com

Contact Betson Enterprise Headquarters or your local Betson office for sales, technical information, warranty or repair. Betson can be reached at (800) 524-2343 Fax (201) 438-4837 www.betson.com

CoinUp™ Prize Claims or Service

PlayMechanix® www.playmechanix.com

800 Roosevelt Road, Suite D-103

Glen Ellyn, IL 60137

(866) 646-1975 fax (630) 942-1073

Betson Enterprises Headquarters

303 Paterson Plank Rd.

Carlstadt, NJ 07072

(800) 524-2343 or (201) 438-1300

fax (201) 438-4837

Betson West – Phoenix

2633 N. 37th Ave. Suite 7

Phoenix, AZ 85009

(602) 442-6630 Fax (602) 442-9501

Betson New England

560 Turnpike St.

Canton, MA 02021

(781) 821-8533 or (800) 274-6326

fax (781) 821-9082

Betson Philadelphia Distributing

310 Hansen Access Rd.

King of Prussia, PA. 19406

(610) 265-1155 fax (610) 265-0909

Betson Advance Distributing

6743 Thompson Rd.

Syracuse, NY 13211

(315) 437-2400 Fax (315) 437-6130

Betson West-Buena Park

5660 Knott Ave.

Buena Park, CA 90621

(714) 228-7500 fax (714) 228-7515

Betson Pittsburgh Distributing

2707 West Carson St.

Pittsburgh, PA 15204

(412) 331-8703 fax (412) 331-0712

Betson Midwest

1158 Tower Lane

Bensenville, IL 60106

(630) 238-9400 Fax (630) 238-9409

Betson Baltimore Distributing

3431-A Benson Ave.

Baltimore, MD 21227

(410) 646-4100 Fax (410) 646-7753

[Betson West](#)

3470 Depot Road

Hayward, CA 94545

(510) 293-9127 or (800) 526-7906

fax(510) 785-5317

Betson Texas Distributing

1127 Conveyor Lane

Dallas, TX 75247

(214) 638-4900 or (877) 638-4900

Fax (214) 638-4925