



TARGET: TERROR GOLD™
TARGET: FORCE GOLD™

**CONVERSION
KIT MANUAL**

Target: Terror Gold™

Target: Force Gold™



For Parts or Service contact your local Distributor or:

Betson Enterprises
303 Paterson Plank Road
Carlstadt, New Jersey

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

CAUTION:

- The specifications of this product are subject to change without notice for reasons such as performance.
- The content of this game, its main devices and design are protected under each federal law concerning patent, copyright and other intellectual properties.
- Unauthorized reproduction of this document or any of its contents is strictly forbidden.

Safety Instructions

Safety instructions apply to operators and service personnel. Read these instructions before preparing the video game video game conversion. Other safety instructions appear throughout this manual.

WARNING: TRANSPORTING THE VIDEO GAME MACHINE (VGM).

The VGM contains glass and fragile electronic devices. Use appropriate care when transporting . Avoid rough handling when moving the VGM.

WARNING: DISCONNECT POWER.

Always turn the power OFF and unplug the VGM before attempting service or adjustments unless otherwise instructed. Installing or repairing components with the power switched ON can damage the components and void warranty.

WARNING: GROUND GAMES.

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

WARNING: AVOID ELECTRICAL SHOCKS.

This VGM does not utilize an isolation transformer. Internal cabinet AC is not isolated from the external AC line.

WARNING: HANDLE FLOURESCENT TUBE AND CRT WITH CARE.

If you drop a fluoresecent tube or CRT and it breaks, it will implode! Shattered glass can fly eight feet or more from the implosion.

WARNING: CHECK 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.

WARNING: USE PROPER FUSE.

Avoid electrical shock! Replacement fuses must be identically rated to the original fuse!

WARNING: ATTACH CONNECTORS PROPERLY.

Be sure 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.

WARNING: USE EXTREME CARE WHEN HANDLING PC.

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

TABLE OF CONTENTS:

SECTION 1: INTRODUCTION

SECTION 2: INSTALLATION PROCEDURE

SECTION 3 : GAME TEST AND OPTIONS MENU

SECTION 4: TROUBLESHOOTING GUIDE

SECTION 5: PARTS

APPENDIX A: HARD DRIVE RECOVERY

APPENDIX B: BIOS SETTINGS

APPENDIX C: BASIC DISPLAY ADJUSTMENTS

APPENDIX D: VIOLENCE LEVEL SETTINGS

APPENDIX E: JAMMA PINOUT

SECTION 1: INTRODUCTION

Please read this manual carefully before you begin the installation process. Verify that the cabinet to be used for conversion is fully functional. This kit conversion requires some familiarity with AC voltage and safety around electronic devices. If at any point you are uncertain as to how to proceed during this conversion, **STOP** and call Betson Enterprises at 1-800-524-2343.

Please refer to the basic conversion cabinet checklist below before you continue.

1. Cabinet is structurally sound.
2. Inside cabinet is free of loose debris and exposed wiring.
3. Game currently installed is fully functional. Check to make sure that:
 - Player 1 and 2 Start Buttons working.
 - Coin 1 and 2 switches are working.
 - Coin meter is working.
 - Coin door lamp is correct voltage type and working.
 - Picture is adjusted for proper linearity, brightness, contrast and color
 - 5 and 12 JAMMA Voltages are set correctly. They should read between 4.9 – 5.1VDC and 11.8 – 12.2VDC, respectively at the JAMMA connector while connected to the old game CPU.
 - Sound from cabinet speakers is present.

Please correct any problems found before you continue. This will help to ensure an easy and successful Conversion Kit installation.

Kit Contents:

Please make sure that you have all the following items from your kit. If you are missing any of these items, **STOP** and call Betson Enterprises at 1-800-524-2343.

1. Kit Chassis Bracket
2. Manual
3. Restore DVD
4. Hardware Kit Set
5. "Target: Terror" Marquee Graphics
6. "Target: Force" Marquee Graphics
7. Left Side Cabinet Decal
8. Right Side Cabinet Decal
9. Control Panel Overlay
10. Red Gun
11. Blue Gun
12. Holsters (Qty 2)
13. Hard Drive

SECTION 2: INSTALLATION PROCEDURE

1. Unplug the game and move it to a safe work area.
2. Remove the following items from the cabinet
 - game logic PCB
 - marquee graphic insert
 - control panel if converting from a game other than a gun game

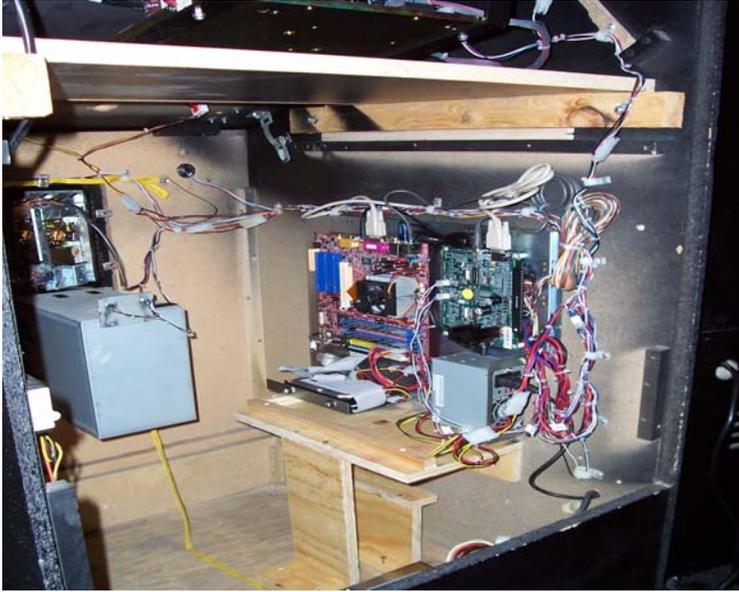
Note: Leave the existing power supply, JAMMA harness and all associated game wiring harness in the cabinet. Modifications to the control panel may be required if converting from a non-gun game.

3. Determine mounting location and orientation of the kit chassis into the cabinet. When doing so, take into consideration the orientation of the game JAMMA connector and harness relative to the mounting position of the kit chassis for best fit. Routing of the game harness may need to be modified but should be minimal.
4. Use the wood screws provided to mount the chassis. The pictures below illustrate how the kit chassis might be mounted on an Area51, Lethal Enforcers and Gauntlet Legends dedicated game cabinet.

Area 51 Cabinet Conversion



Lethal Enforcers Cabinet Conversion



Gauntlet Legends Cabinet Conversion



Making the Electrical Connections

NOTE: Make sure the game is unplugged and with the game power switch to the OFF position before you begin. Please refer to Fig. A “Kit Chassis Block Diagram” for connector locations.

AC Service to Power Supply

1. Locate the AC line cord and the terminal block provided with the kit.
2. Use the terminal block as a means of connecting the stripped end of the line cord to the game AC line. Do not bypass the game cabinet main fuse and main power switch when making the AC connection!
3. Connect the IEC plug end of the line cord to the uATX power supply on the kit.
4. Double-check your AC connections before you proceed.

Hard Drive Installation

1. Locate the hard drive and the mounting screws from the hardware bag.
2. Mount the hard drive to the kit mounting bracket using the supplied thumbscrews.
3. Connect the ribbon cable from the motherboard to the hard drive.
4. Connect power to hard drive from the uATX power supply.

Watchdog Harness Connection

Note: The game will not be playable unless the Watchdog Harness is connected and enabled. For stable game operation this procedure must be done correctly. The Watchdog mechanism allows the game to automatically recover in case a problem is encountered. Refer to Appendix E for JAMMA pin locations.

1. Locate two JAMMA pin terminated wires originating from the Watchdog Harness on the kit chassis (Violet and Black).
2. Connect the Violet wire to pin A9 (Coin Lockout 1) on the JAMMA connector.
3. Connect the Black wire to any available ground pin on JAMMA connector at location A1, A2, B1, B2, A27, A28, B27, B28.
4. Double-check your connection before you proceed. The game will test for this connection the first time it boots up, and will issue an error message if it fails.

JAMMA Edge Connector

Note: JAMMA Connector should be secured with a strain relief or its harness secured by a cable clamp close to the JAMMA connector to prevent loose connections. Take care that JAMMA connector oriented correctly, just in case the polarizing key is missing!

Gun JAMMA I/O Input Connection

1. Connect the Player 1/Red Gun connector to JAMMA I/O board at connector labeled "Player 1 Gun".
2. Connect the Player 2/Blue Gun connector to JAMMA I/O board at connector labeled "Player 2 Gun".
3. Double-check your connections before you proceed.

Set DIP Settings for Correct Display Resolution

Note: Game display output resolution is determined by two DIP switch settings on the JAMMA I/O board. The Kit supports VGA, Medium (EGA) and Standard (CGA) resolutions. Sync polarity is also determined by two DIP switch settings. Do not use objects that could damage the DIP switches such as sharp metal objects.

1. Locate the DIP switch on the JAMMA I/O board.
2. Set **DIPSW1**, **DIPSW2**, and **DIPSW3** according to the chart in Figure A (next page)
3. Set the *initial* sync polarity settings (these may need to be altered later)
 - a. For a VGA monitor, leave both **HSYNC** and **VSYNC** in the OFF position.
 - b. If using CGA or EGA, set both **HSYNC** and **VSYNC** to the ON position.
4. Compare your settings to the chart for accuracy.

Fully Assembled Kit Chassis

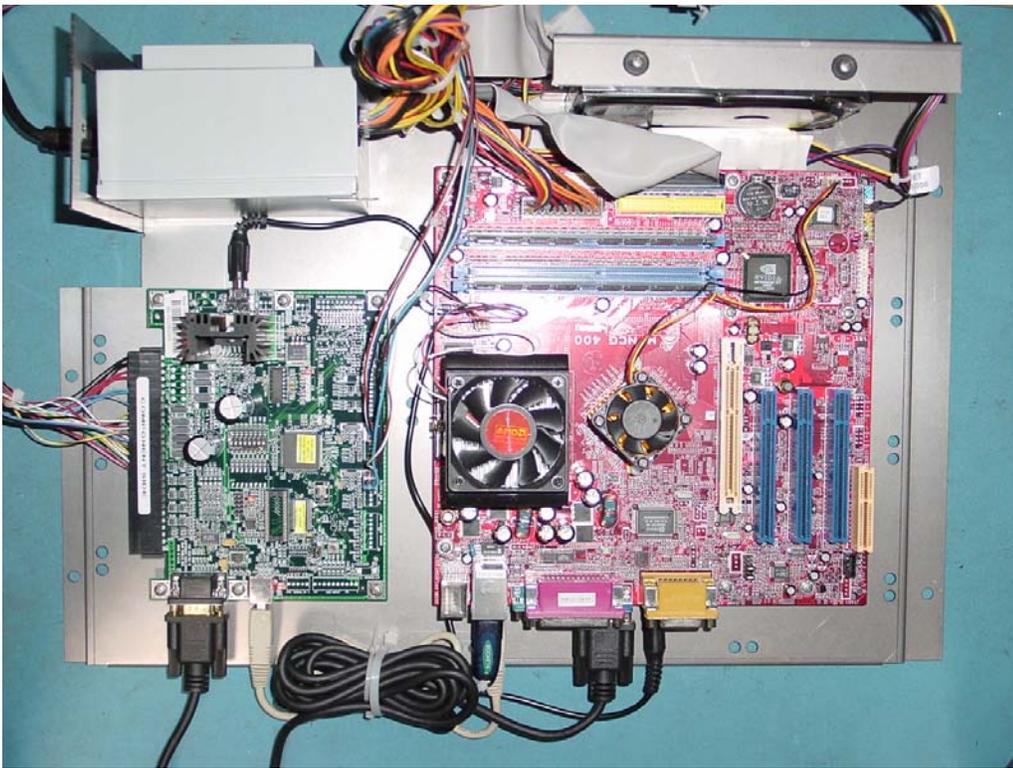
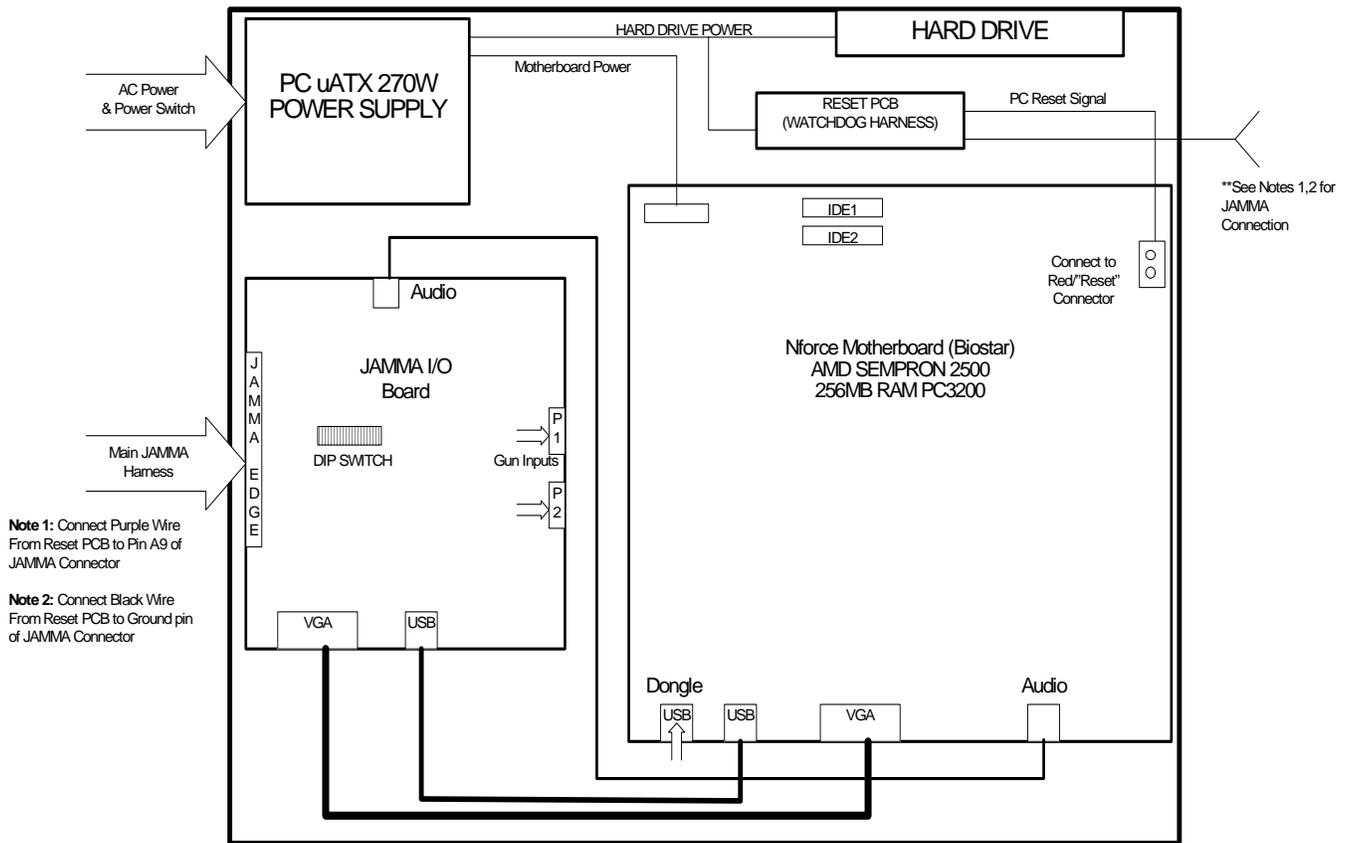


FIGURE A: Kit Chassis Block Diagram



JAMMA I/O DIP SWITCH SETTING:

- 8 Watchdog Defeat (Important: Always set to OFF for normal operation)**
- 7 OFF**
- 6 OFF**
- 5 VSYNC POLARITY**
- 4 HSYNC POLARITY**
- 3 DIPSW3 (see below)**
- 2 DIPSW2 “**
- 1 DIPSW1 “**

DIPSW1	DIPSW2	DIPSW3	DISPLAY RESOLUTION
OFF	OFF	OFF	VGA (640x480)
ON	OFF	OFF	MEDRes (EGA 400x256)
ON	ON	ON	STDRes (CGA 320x240)

Power Up and Startup Sequence

1. Double check all your connections before turning the game on.
2. Turn the game ON.
3. The start up sequence is as follows:
 - NOTE:** All video output is VGA during this sequence. Your monitor may display a scrambled image, no image, or “NO SIGNAL” if it is CGA or EGA)
 - a. BIOS screen appears.
 - b. Boot splash screen “Loading Please Wait” approx. 30 sec.
 - c. Error Message Screen if any error present. Refer to troubleshooting guide to message definition and fix.
4. Display blanks out for approximately 30 seconds as resolution is being detected and setup. Monitor may display “No Signal” message.
5. Black/Gray screen with X at the center appears briefly.
6. “Loading Please Wait” with version information and build date appears for 45 seconds.
 - NOTE:** At this time the image should be visible on the monitor if the DIPswitch settings are correct.
7. Either the game’s attract mode or the Hard Drive CRC check will come up. The CRC check takes approximately 2.5 minutes. The game then tests the watchdog connection and reboots.

NOTE: If the video image is scrambled, scrolling, or absent after four minutes, try different combinations of the VSYNC and HSYNC DIPswitch settings.

Calibration and Functional Test

Note: If the game has a slide or toggle switch for the Test Button, activate switch and return to OFF position. The game may exit the Test Menu if the Test Button is active or left on the ON position for more that 3 seconds.

1. Perform gun calibration. Please refer to Section 3.5 of this manual.
2. Perform Switch Test. Please refer to Section 3.4 of this manual.

SECTION 3: TEST AND OPTIONS MENU

Press the **TEST** button to access the **Test Menu**.

Menu Navigation:

Button	Action
Service, Left Start Button	Cycle Through Menu/Options
Test, Right Start Button	Enter Item

The gun can also be used to perform the above functions. Shoot the menu item to Select and shoot twice to Enter. The selected item is highlighted.

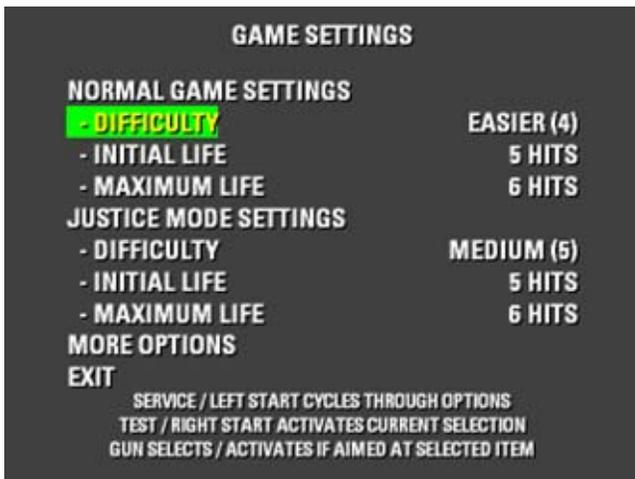
SECTION 3.1: MAIN MENU

The *Main Menu* appears when the **TEST** button is pressed.



SECTION 3.2: GAME SETTINGS

From the *Main Menu*, select *Game Settings* and Enter to view options.



	<i>Default Settings</i>		<i>Default Settings</i>	
	NORMAL	NORMAL	JUSTICE	JUSTICE
DIFFICULTY	1(Easiest)-10(Hardest)	Easier(4)	1(Easiest)-10(Hardest)	Medium(5)
INITIAL LIFE	1-6 HITS	5 HITS	1-6 HITS	5 HITS
MAXIMUM LIFE	1-6 HITS	6 HITS	1-6 HITS	6 HITS

SECTION 3.2.1: MORE OPTIONS

From the **Game Settings** menu, select **More Options** and enter to view more options. Return to **Game Settings** by selecting **Previous Options**.



Default Settings

GAMEPLAY DURING ATTRACT	Disabled- Enabled	Enabled
VIOLENCE LEVEL	Red Label(1-5), Yellow Label	Red Label LV5
HIGH SCORE NAME LENGTH	3-6 Characters	6 Characters
GAME TITLE	Target: Terror Target: Force	Target: Terror

SECTION 3.3: PRICING OPTIONS

Select **Pricing Options** from the **Main Menu** and enter to view options.

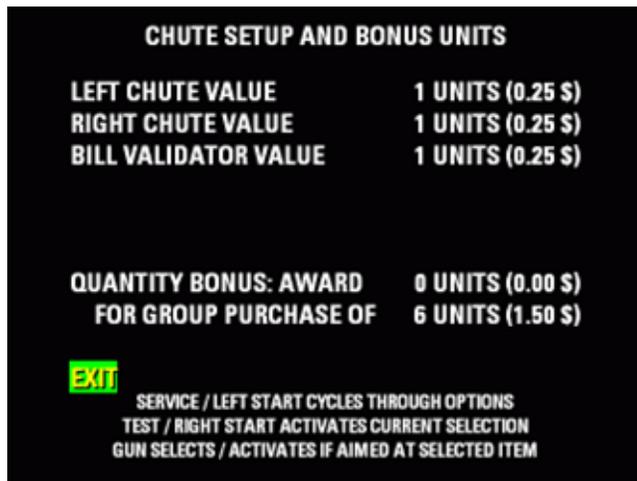


Default Settings

FREE PLAY	OFF-ON	OFF
MONETARY UNIT	Select Currency	Dollars
ONE UNIT EQUALS	Select Unit	0.25\$
REGULAR START	1-10 UNITS	2 UNITS (0.50\$)
REG. CONTINUE	1-10 UNITS	2 UNITS (0.50\$)
JUSTICE START	1-10 UNITS	2 UNITS (0.50\$)
JUSTICE CONTINUE	1-10 UNITS	2 UNITS (0.50\$)
MAX CREDITS	10-200	50 Credits (100 UNITS)

SECTION 3.3.1: CHUTE SETUP AND BONUS UNITS

From the *Pricing Options* menu, select and enter *Chute Setup and Bonus Units* to view options. Select *Exit* twice to return to the *Main Menu*.

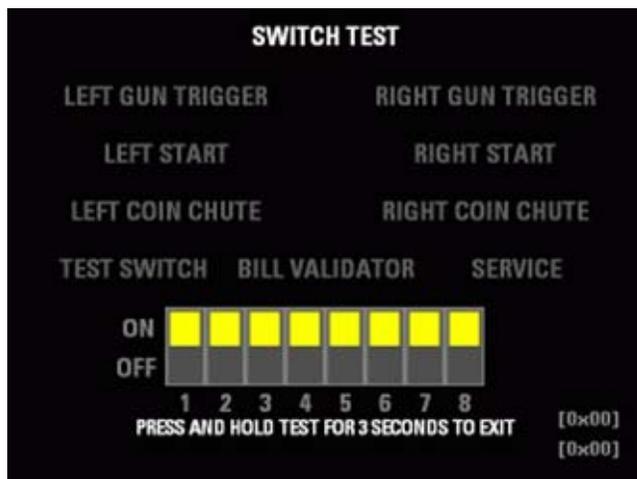


Customize individual chute and bill validator values independently. Select from 1-10 units.

Reward volume purchase by setting bonus to purchase ratio.

SECTION 3.4: SWITCH TEST

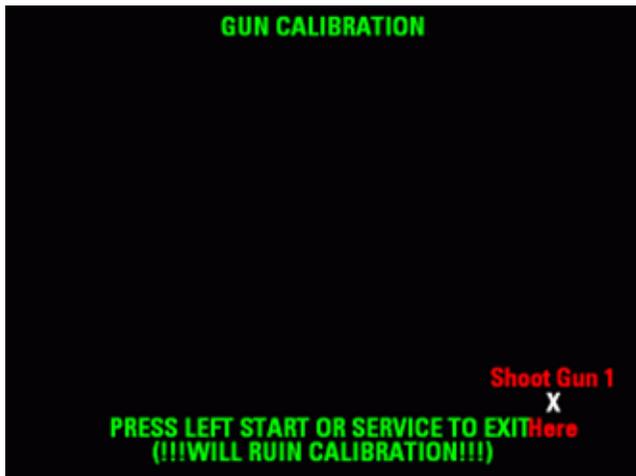
From the *Main Menu* select and enter *Switch Test*. Verify proper switch input function using this menu. Each switch activated will be indicated on the test screen in yellow text and will be accompanied by a switch active sound indicator. Press and hold the **Test Button** for three seconds to return to the *Main Menu*.



SECTION 3.5: GUN CALIBRATION

From the *Main Menu*, select and enter *Gun Calibration*. Follow the instructions as they appear on the screen. Press **Left Start** or **Service** to accept the calibration. If gun calibration is unsuccessful, the game automatically returns to the calibration screen. If successful, a verification screen will appear. Move the cross hairs about the screen to verify proper gun calibration.

NOTE: If the screen flashes when shooting the screen but the “Shoot Gun X Here” sequence does not advance, try switching *both* the HSYNC and VSYNC DIPswitches to their opposite positions. This can be done while in the Gun Calibration screen.



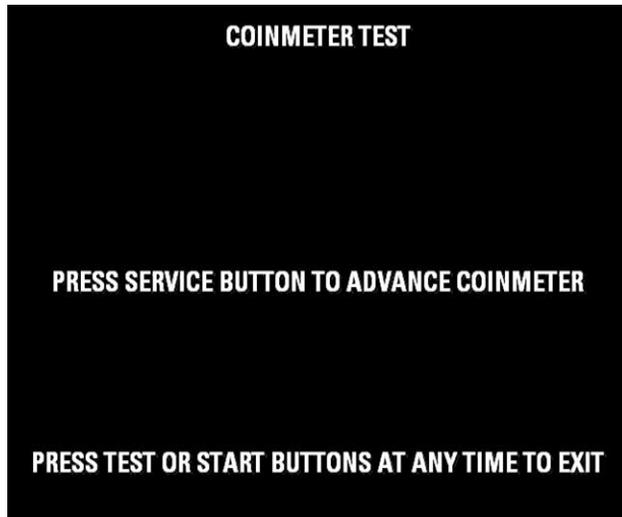
SECTION 3.6: WATCHDOG TEST

From the *Main Menu*, select and enter *Watchdog Test*. The test will begin automatically and will reset the CPU if successful. An error message will appear if the test fails.



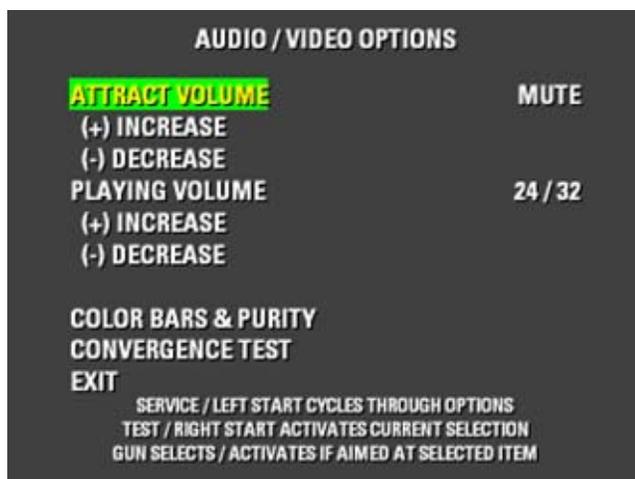
SECTION 3.7: COIN METER TEST

From the *Main Menu*, select and enter *Coin Meter Test*. Press the **Service** button to advance the mechanical coin meter. Press **Test** or **Start** to return to the *Main Menu*.



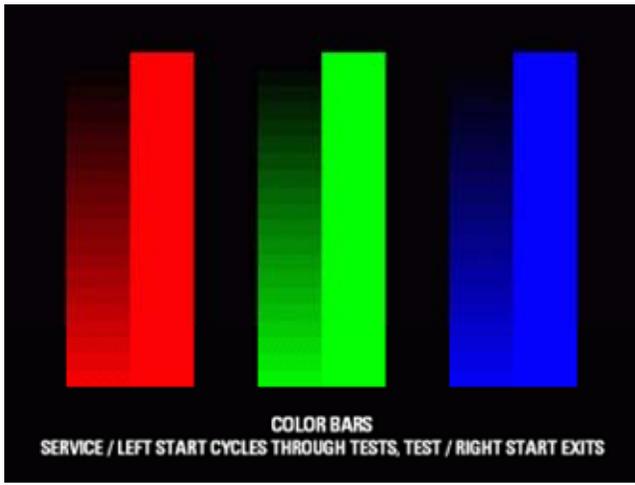
SECTION 3.8: AUDIO/VIDEO OPTIONS

From the *Main Menu*, select and enter *Audio/Video Options*. Select *Increase* or *Decrease* to change volume setting.



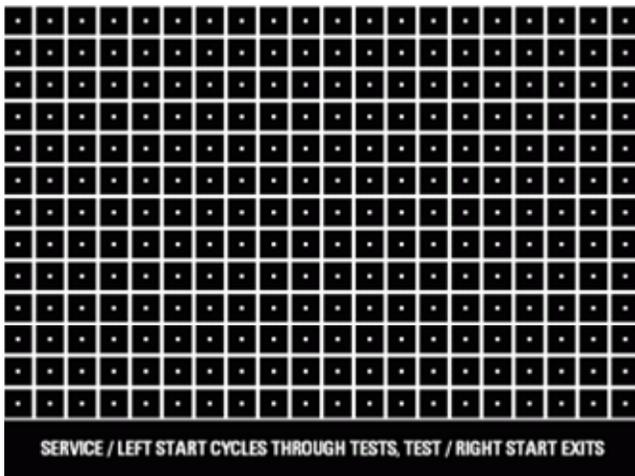
SECTION 3.8.1: COLOR BARS AND PURITY

From the *Audio/Video Options* menu, select and enter **Color Bars & Purity**. Verify correct color and purity for Red, Blue and Green screens.



SECTION 3.8.2: CONVERGENCE TEST

From the *Audio/Video Options* menu, select and enter **Convergence Test**. Verify proper screen contrast and size.



SECTION 3.9: VIEW AUDITS

From the *Main Menu*, select and enter *View Audits*. Press **Service Left Start** or **Service** to cycle through *Audits Page 1 to 5*.

Audit Page 1:

AUDITS PAGE 1 -- GENERAL	
COIN TRIGGERS (L/R/DBV)	0/0/0
TOTAL STARTS	0
TOTAL CONTINUES	0
TOTAL PLAYS	0
SINGLE PLAYER PLAYS	0
DOUBLE PLAYER PLAYS	0
JUSTICE MODE PLAYS	0
SERVICE / LEFT START CYCLES THROUGH PAGES TEST / RIGHT START EXITS	

Audit Page 2:

AUDITS PAGE 2 -- TIMES	
TOTAL POWERED TIME	00:00:00:53
POWERED TIME IN GAME	00:00:00:00
- IN SINGLE PLAYER	00:00:00:00
- IN DOUBLE PLAYER	00:00:00:00
- IN JUSTICE MODE	00:00:00:00
AVERAGE TIME PER PLAY	----
- FOR SINGLE PLAYER	----
- FOR DOUBLE PLAYER	----
- FOR JUSTICE MODE	----
SERVICE / LEFT START CYCLES THROUGH PAGES TEST / RIGHT START EXITS	

Audit Page 3:

AUDITS PAGE 3 -- PLAYS BY LEVEL	
1: BAGGAGE	0
2: TERMINAL	0
3: CONTROL	0
4: TOWER	0
5: ROADWAY	0
6: TANKER	0
7: PERIMETER	0
8: REACTOR	0
9: SILO	0
10: HIJACK	0

SERVICE / LEFT START CYCLES THROUGH PAGES
TEST / RIGHT START EXITS

Audit Page 4:

AUDITS PAGE 4 -- MINIGAME PLAYS	
1: BAGGAGE	0 / 0 / 0
2: TERMINAL	0 / 0 / 0
3: CONTROL	0 / 0 / 0
4: TOWER	0 / 0 / 0
5: ROADWAY	0 / 0 / 0
6: TANKER	0 / 0 / 0
7: PERIMETER	0 / 0 / 0
8: REACTOR	0 / 0 / 0
9: SILO	0 / 0 / 0
10: HIJACK	0 / 0 / 0

SERVICE / LEFT START CYCLES THROUGH PAGES
TEST / RIGHT START EXITS

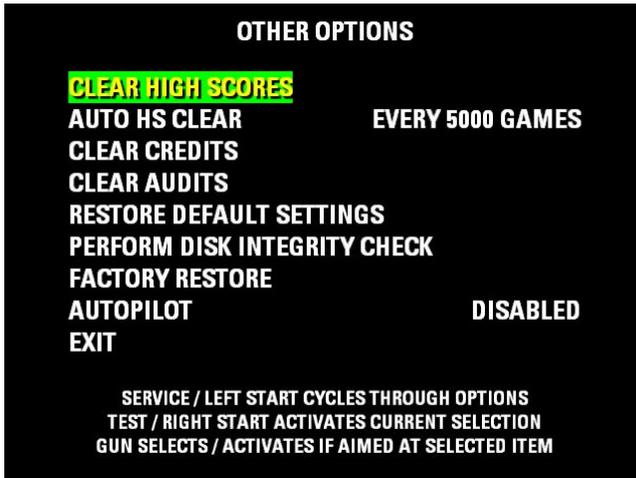
Audit Page 5:

AUDITS PAGE 5 -- OTHER	
HIJACKING STARTS/CONTINUES	0 / 0
HIJACKING COMPLETIONS	0
NUMBER OF BOOTS	0
NUMBER OF AUTOBOOTS	0
NUMBER OF INTERRUPTED GAMES	0

SERVICE / LEFT START CYCLES THROUGH PAGES
TEST / RIGHT START EXITS

SECTION 3.10 OTHER OPTIONS

From the *Main Menu*, select and enter *Other Options*.



OPTION	DESCRIPTION
Clear High Score	Clear high score tables
Auto HS Clear	Adjust number of games before high score tables get cleared
Clear Credit	Zero any existing game credits
Clear Audits	Zero all game play statistics
Restore Default Settings	Resets game & pricing settings, high score tables, gun calibration, audits
Perform Disk Integrity Check	Performs hard drive test
Factory Restore	**See notes below
Autopilot	Auto Game Play / Burn-In Test

**Factory Restore: This option will clear all credit, audit, calibration and game settings information. The game hard drive will be in the state that it was shipped from the factory. After reset, the game will commence with the process described in the START UP SEQUENCE section of the manual.

SECTION 4: TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Game will not power up.	Game not plugged in.	Plug game into receptacle.
	Game not turned on.	Turn ON main power switch.
	Game fuse is blown.	Check game fuse.
	No power to receptacle.	Plug game into powered receptacle.
	PC power switch is OFF.	Turn PC power switch ON.
“No Signal” Message	PC BIOS set incorrectly.	See Appendix B.
	Video cable not secure.	Check and secure video connector.
	PC not turned ON.	Turn ON power to PC.

	Sync Polarity incorrect.	see <i>Scrambled or scrolling display</i>
Scrambled or scrolling display	Sync Polarity incorrect.	Try various DIPswitch settings for HSYNC and VSYNC.
No video display.	No power to video display.	Check power to video display.
	Sync Polarity incorrect.	see <i>Scrambled or scrolling display</i>
		see <i>Game will not power up.</i>
No sound.	Audio cable not connected.	Check audio cable connection.
	Speaker not connected.	Check speaker connection.
Game will not load.	New Hard Drive installed.	Perform Hard Drive Recovery - see Appendix A
	Hard Drive data corrupted.	Refer to Appendix A of this manual.
Gun not registering or functions poorly.	Bad gun calibration.	Calibrate gun. See Section 3.5
	Dirty/damaged lens.	Clean or replace lens.
	Bad gun optic board.	Replace gun optic board.
	Gun not connected.	Check gun connection.
	Bad gun.	Replace gun.
	Monitor Glass dirty.	Clean monitor glass.
	Display out of adjustment.	Adjust picture. Refer to Appendix C.
	Sync Polarity incorrect.	see <i>Scrambled or scrolling display</i>
	DIPSW3 set incorrectly on JAMMA I/O board.	see DIPswitch chart in Figure A
Game resets.	Low DC voltage.	Check for proper voltage(+5V,+12V)
	Door lamp is wrong rating.	Use only 5volt lamps.
	Cabinet/PC temperature is too high.	Check that vents and fans are functioning and not obstructed.
	Earth ground not connected or has bad connection.	Check earth ground connection to game.
	Hard Drive data corrupted.	Refer to Appendix A of this manual.
“Connect I/O Board” or “I/O Board Missing”	USB cable not connected.	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.
“Dongle Not Present”	Dongle missing or not connected.	Connect Dongle to USB port on PC motherboard.
“Watchdog Disabled” or “Watchdog Failed”	Watchdog defeated by JAMMA I/O DIPswitch.	Set DIPswitch 8 to OFF
	No power to Reset PCB.	Connect power to Reset PCB.
	Reset input to motherboard not connected.	Connect 2-pin reset connector from Reset PCB to motherboard reset pin input.
	Violet or Black wire from Reset PCB not connected or has bad connection.	Check reset wire connection to JAMMA Connector. Please refer to Fig. A
Exits Test Mode Every 3 seconds.	Test button stuck to ON position.	Slide or toggle to OFF position after Test Menu Appears.

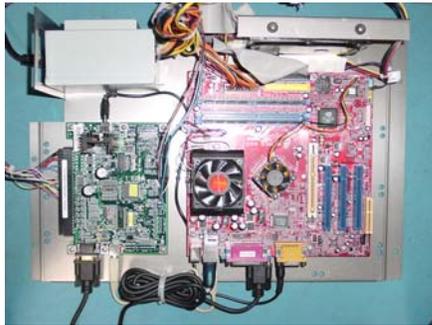
Warning: Do not connect or disconnect any cables or connectors on this game with the power on. This could potentially damage the game.

SECTION 5: PARTS

PART DESCRIPTION	PART NUMBER
TT KIT ASSEMBLY	1-7-01-00-00-000
TT MARQUEE GRAPHIC	1-7-01-00-00-001
TF MARQUEE GRAPHIC	1-7-01-00-00-002
LEFT SIDE DECAL	1-7-01-00-00-003
RIGHT SIDE DECAL	1-7-01-00-00-004
CONTROL PANEL	1-7-01-00-00-005
TT CHASSIS ASSY	1-7-02-00-00-000
NFORCE MOTHERBOARD(BIOSTAR)	1-7-02-00-00-001
256MB RAM PC3200	1-7-02-00-00-002
20G HARD DRIVE 7200RPM	1-7-02-00-00-003
AMD SEMPRON 2500	1-7-02-00-00-004
PC uATX 270W Power Supply	1-7-02-00-00-005
ATHLON SEMPRON FAN	1-7-02-00-00-006
GAME CHASSIS BRACKET	1-7-02-00-00-007
DONGLE(FEITIAN)	1-7-02-00-00-008
JAMMA I/O – TT KIT	1-7-02-00-00-009
USB CABLE 3FT/1 M	1-7-02-00-00-010
1/8" RCA AUDIO CABLE 3FT/1 M	1-7-02-00-00-011
VGA CABLE	1-7-02-00-00-012
WATCHDOG HARNESS	2-1-02-00-00-007
JAMMA RESET JUMPER	1-7-02-00-00-013
TT KIT MANUAL	1-7-03-00-00-000
TT KIT RESTORE DVD	1-7-04-00-00-000
TT KIT HARDWARE SET	1-7-05-00-00-000
RED GUN ASSY	1-1-01-00-00-018
BLUE GUN ASSY	1-1-01-00-00-019
HOLSTER	1-1-01-00-00-020

INCLUDED PARTS

(NOT SHOWN: MANUAL & RESTORE DVD)



Kit Chassis Bracket



Guns & Holsters



2 X Marquee Graphics
1 X Control Panel Overlay



Left & Right Side Decals



Mounting and Power
Hardware Set



Hard Drive & Mounting
Screws

Appendix A: Hard Drive Recovery

NOTE: Target: Terror is shipped with a recovery DVD disk. Hard drives have been known to occasionally fail for many reasons. Follow the procedure below to restore data on the hard drive if a disk failure should occur. Use extreme care when performing the following procedure and avoid rough handling of PC components or DVD disk. Please check the Troubleshooting Guide section of this document. Have the recovery DVD disk ready before you begin.

The following are some symptoms which may indicate a possible bad hard drive:

- Hard Drive Test reports “bad” or “missing” files.
- The game fails to finish loading.
- A boot error is reported after game is power cycled or reset.
- The game is looking for a boot CD to be inserted.
- Erratic game play or attract mode.

Hard Drive Recovery Procedure:

Note: Disable the watchdog by setting DIPswitch8 (Watchdog defeat) to the ON position before you begin.

1. Turn the game OFF.
2. Connect power to a known good DVD-ROM drive and attach to the unused IDE2 ribbon cable connector on the PC motherboard.
3. Turn the game ON.
4. If game fails to boot, check to make sure that the BIOS is set correctly. See AppendixB: BIOS Settings.
5. Insert the restore DVD into the drive and power cycle the game.
6. Image process should begin automatically. NOTE: This may take 30-40 minutes.
7. Remove the DVD when prompted .
8. Turn DIP switch 8 back to the OFF position.
9. Power cycle the game.
10. Game will initiate startup sequence.

NOTE: The screen will blank out for approx. 35 sec. as the video resolution is being setup.

11. The hard drive recovery process is complete after the game finishes the hard drive integrity check, reboots, and enters attract mode.
12. Proceed with gun calibration and make necessary game adjustments.

-- End of Procedure--

AppendixB: BIOS SETTINGS

NOTE: Target: Terror Kit is shipped with the correct BIOS settings. Any changes made to the BIOS other than what is described below may adversely affect the game.

Procedure:

1. Turn game *OFF*.
2. Connect a PS/2 or USB keyboard to the PC.
3. Hold the DELETE key while turning the PC *ON*.
4. BIOS Setting Menu Appears.
5. Set BIOS to the following settings:

Recommended settings appear in **BOLD** text.

- Standard CMOS Features > HALT ON [**NO ERRORS**]
- Advance BIOS Features > Boot Sequence > **1)CDROM 2) HDD**
- Advanced Chipset Features>FSB Freq> [**166Mhz**] >Frame Buffer> [**8M**]
- Power Management Setup >PWRON After PWR- Fail [**ON**]

Appendix C: Basic Display Adjustments

WARNING: Extremely high voltage is present on the monitor assembly. The monitor does not contain any user serviceable parts. Do not attempt to service the monitor.

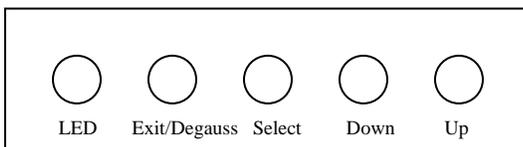
Target: Terror utilizes gun optic boards which rely on signals being detected from the display to operate properly. The quality of the display is an important element in making sure that the guns operate correctly and reliably.

The following are display settings which you should become familiar with. It is important to note that settings may differ slightly between manufacturers and even between displays of the same manufacturers. Certain factors like age of the display could also be a factor. Therefore, the information below should only serve as a reference as actual settings may not be practical in most cases.

Setting	Adjustment
Brightness	Function: Background Brightness or Black Level. Set Level: Black background should appear dark and not gray.
Contrast	Function: Definition/ Sharpness of character against background. Set Level: Outer edges of character or text should not be distorted.
H-Position	Function: Horizontal Position. Side/side centering. Set Level: Picture should be centered from side to side.
H-Size	Function: Horizontal Size. Side/side dimension. Set Level: Picture should be full from side to side.
V-Position	Function: Vertical Position. Up/down centering. Set Level: Picture should be centered up and down.
V-Size	Function: Vertical Size. Up/down dimension. Set Level: Picture should be full from top to bottom.
Pin Cushion	Function: Degree of straightness along both vertical sides of the picture. Set Level: Both sides of the picture should be straight, without curvature.
Degauss	Function: De-magnetizes the picture tube when activated. This eliminates picture discoloration caused by magnetic disturbance around the picture tube.

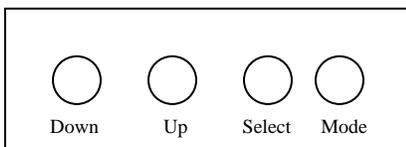
Digital displays are adjusted using a button type remote adjust board. Below are functional diagrams for Kortek and Wells Gardner 27" digital displays:

Kortek Remote:



Exit/Degauss: Exit Menu or Degauss
Select: Select setting to be adjusted.
Down: Cycles downward thru levels
Up: Cycles upward thru levels

Wells Gardner:



Down: Cycles downward thru levels
Up: Cycles upward thru levels
Select: Select setting to be adjusted.
Mode: Menu/Exit

Appendix D: Violence Level Settings

The information below contains details of each Violence Level Setting available on Target: Terror. For information on how to change the Violence Level, please refer to Section 3 to Section 3.2.1 of this manual.

Violence Level	Mode
Yellow	Paintball
Red 1	Minimal Violence
Red 2	Low Violence
Red 3	Medium Violence.
Red 4	Medium-High Violence
Red 5	High Violence

Yellow:

Paintball mode. Guns replaced with paintball guns, enemies do not react and can be painted. Effects like explosions replaced with paint effects. Flamethrower, shock gun, freeze gun, and smart bomb disabled.

Red 1:

Minimal violence. Players use bullets, but enemies react minimally. No blood, enemies cannot be hit multiple times. All weapons available but do not cause special effects.

Red 2:

Low violence. Special weapons cause attenuated special effects. For example, burning from flame thrower does not last long and does not darken enemy. Enemies can be hit multiple times and react to hits.

Red 3:

Medium violence. Blood shown and weapons cause full special effects. Frozen enemies can be shattered, and enemies hit by explosion can turn into skeletons. Innocents react to being hit. Violent ending shown.

Red 4:

Medium-high violence. White House ending enabled. Frozen enemies will melt.

Red 5:

High violence. Player can decapitate enemies. Enemies hit by explosions or by repeated shocks can turn into body parts. Hijacking hostage shows blood when shot.

NOTE: It is important that you change the AAMA Parental Advisory Disclosure label on the game marquee to reflect actual game Violence Level setting.

Appendix E: JAMMA Pinout

JAMMA CONNECTOR PINOUT

SOLDER SIDE			COMPONENT SIDE
GND	B1	A1	GND
GND	B2	A2	GND
+5V	B3	A3	+5V
+5V	B4	A4	+5V
-5V	B5	A5	-5V
+12V	B6	A6	+12V
Key	B7	A7	Key
Coin counter 2	B8	A8	Coin counter 1
Coin lockout 2	B9	A9	Coin lockout 1
speaker (-)	B10	A10	speaker (+)
NC	B11	A11	NC
green	B12	A12	red
composite sync	B13	A13	blue
Service switch	B14	A14	Video ground
Tilt	B15	A15	Test
Coin 2	B16	A16	Coin 1
Player 2 Start	B17	A17	Player 1 Start
Player 2 Up	B18	A18	Player 1 Up
Player 2 Down	B19	A19	Player 1 Down
Player 2 Left	B20	A20	Player 1 Left
Player 2 Right	B21	A21	Player 1 Right
Player 2 Button 1	B22	A22	Player 1 Button 1
Player 2 Button 2	B23	A23	Player 1 Button 2
Player 2 Button 3	B24	A24	Player 1 Button 3
Player 2 Button 4	B25	A25	Player 1 Button 4
	B26	A26	
GND	B27	A27	GND
GND	B28	A28	GND