

## OWNER'S MANUAL

# SEGA PRESENTS EXTREME HUNTING 2 Tournament Edition™



AW25"UR



29"UR



50"DX

### 25" 29" and 50"DX VIDEO GAME DEDICATED CABINETS AND CONVERSION INSTRUCTIONS

#### IMPORTANT

- Before using this product, read this manual carefully to understand the contents herein stated.
- After reading this manual, be sure to keep it near the product or in a convenient place for easy reference when necessary.

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## **WARRANTY**

**ASSEMBLE VIEW, 28"SHOTGUN WISPEAKER**

**KIT LIST (3 KINDS)**

**NEW GUN SUB HARNESS (FOR KIT) WIRING DIAGRAM**

**GUN CONTROL PANEL (DEDICATED) WIRING DIAGRAM**

**CONVERSION INSTRUCTIONS (FROM SPORTS SHOOTING USA)**

**CABINET WIRING DIAGRAM**

**TOSHIBA 50"PTV (P503SGF) MONITOR ADJUSTMENT MANUAL (14 pages)**

## **SEGA AMUSEMENTS U.S.A., Inc.**

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# 1. SPECIFICATIONS OF CABINET

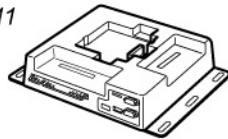
INPUT POWER: USA & CANADA. = 120VAC, 60Hz





## INSIDE VIEW OF CONTROL PANEL & INSTRUCTION PANEL, AW25"UR

Main PCB, AW  
Part#: 99-10-011



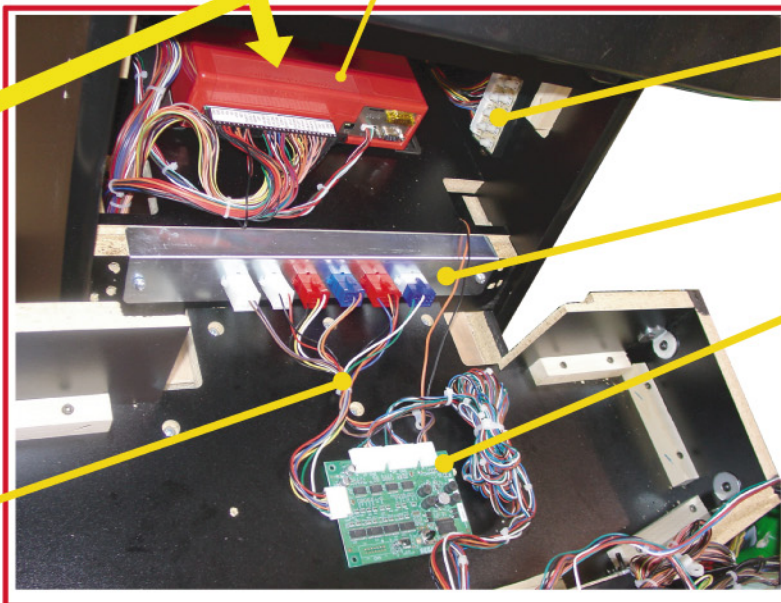
Expansion I/O Cartridge  
Part#: 99-20-005



ASSY LAN BOX CTRG  
Part#: 610-0751



ASSY ROM CTRG EH2  
Part#: 610-0752P  
> Game Cartridge,  
Extreme Hunting 2



Remote Controller  
for Monitor

Connector Bracket

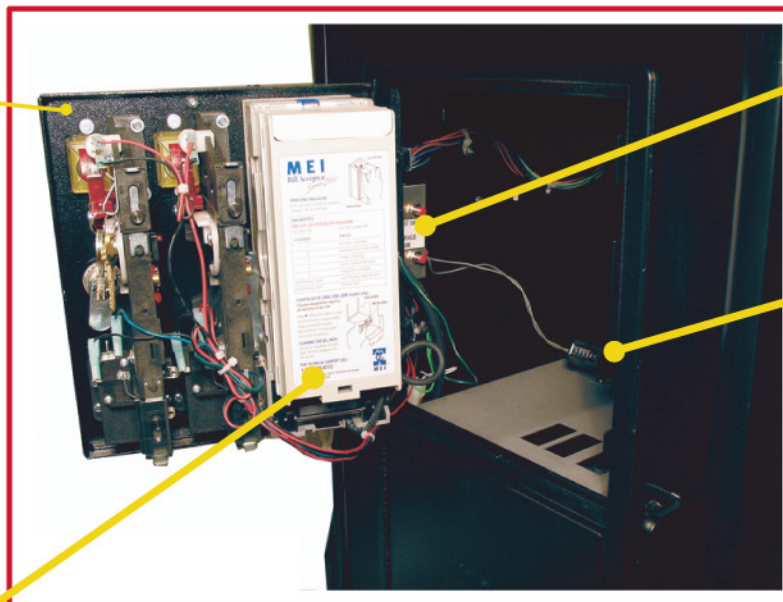
SOUND BD GUN  
Part#: 837-14593P

New Gun Sub Harness (DED)  
Part#: 99-60-683

## INSIDE VIEW OF COIN DOOR, AW25"UR & 29"UR

Coin Door Mid Width 40-3000  
Part#: 99-70-103

Security Bar KIT, MID  
(Option)  
Part#: 99-70-278



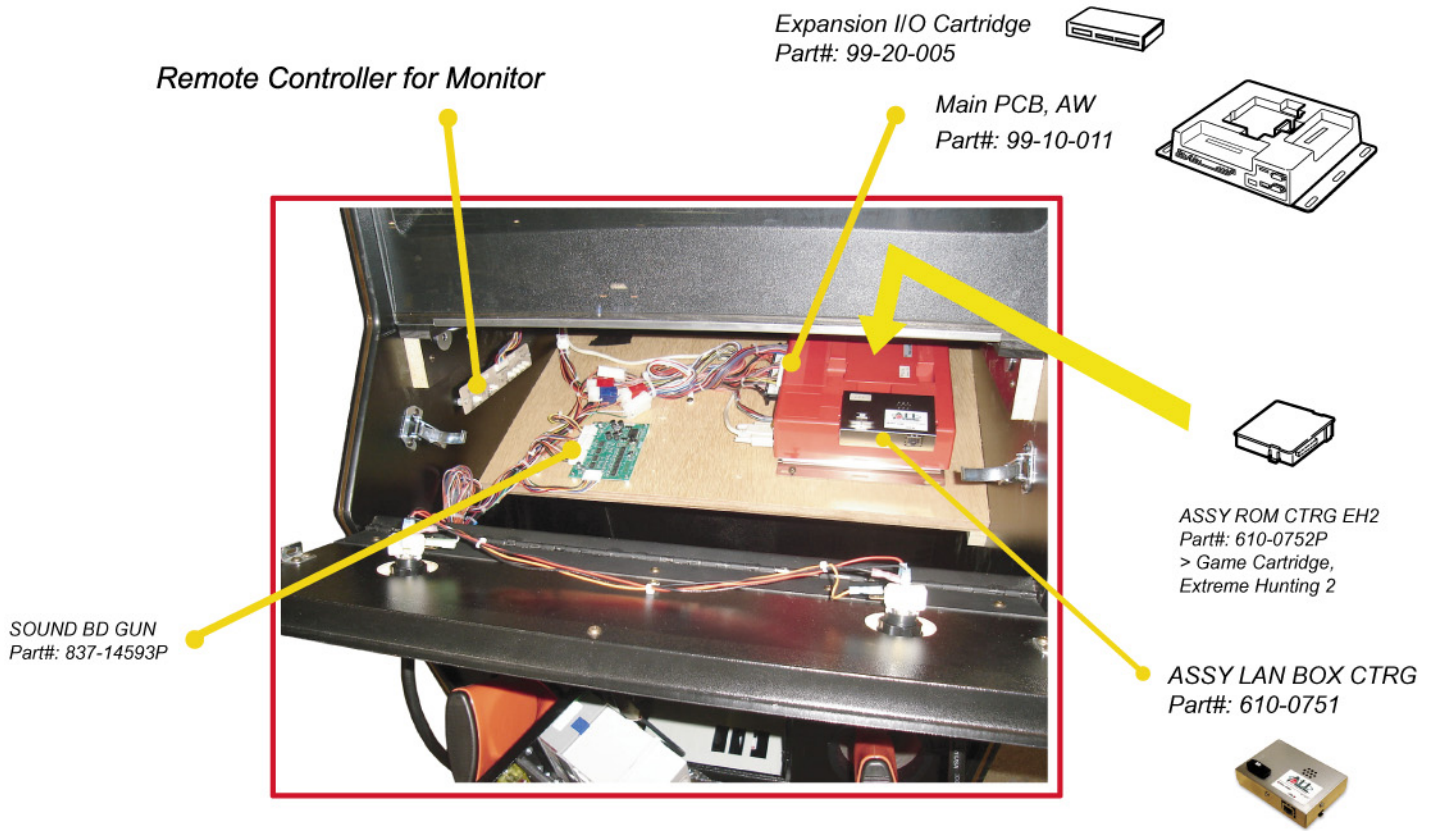
Test & Service  
Switch Bracket

Meter 12 Volt Coin Door  
Part#: 99-70-184

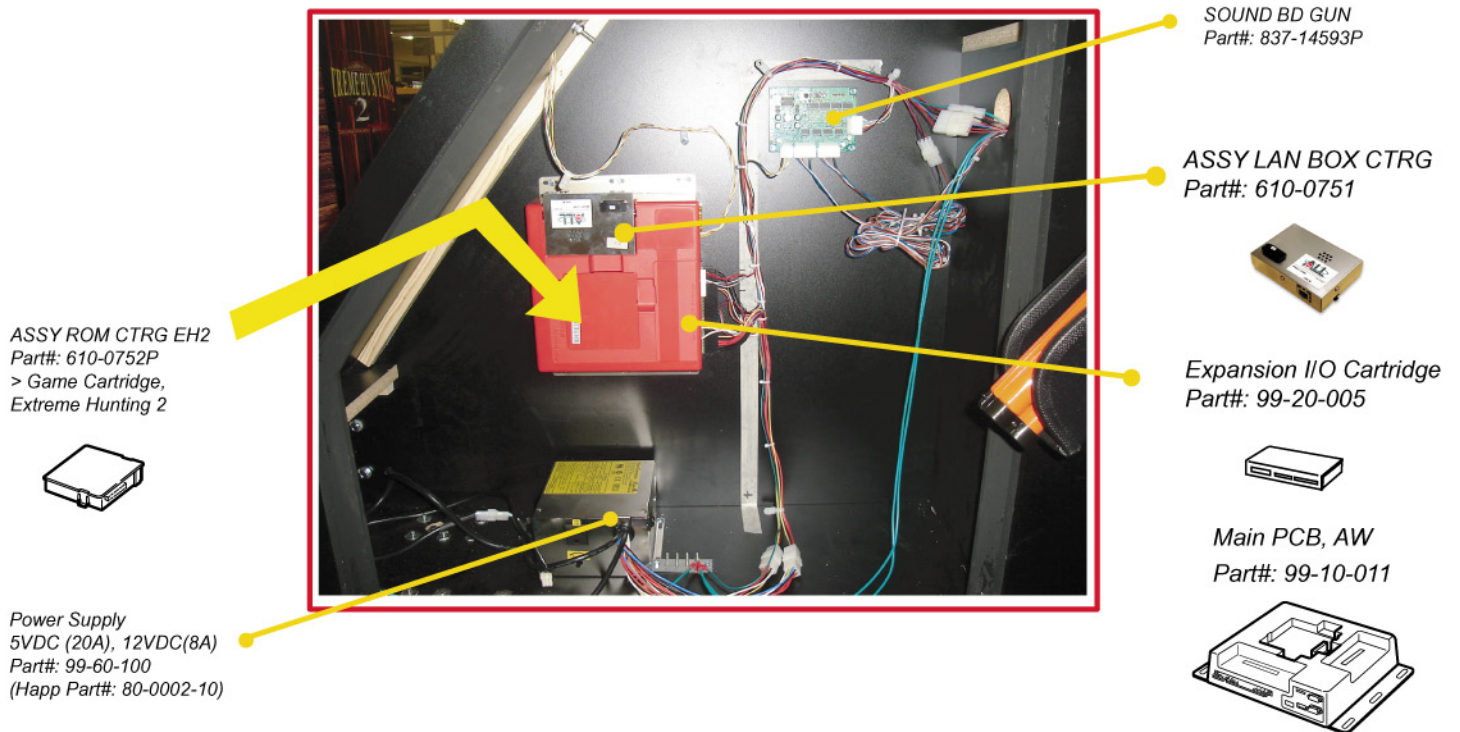
Mars DBA  
AE2451 (OPTION)



# INSIDE VIEW OF CONTROL PANEL & INSTRUCTION PANEL, 29"UR



# INSIDE VIEW OF SIDE DOOR, 50"DX



## 2. GAME PLAY

Embark on a hunting trip of a lifetime with *Extreme Hunting 2 Tournament Edition*, the second, and better than ever, installment of the *Extreme Hunting Franchise*.

### SELECT PLAY MODE



#### SINGLE or HEAD TO HEAD

*Play within the comfort of your own tree stand or side-by-side with your competition. Single Play is individual play where a hunter shoots for practice or for rank. In Head to Head mode, two players aim to beat one another by shooting simultaneously during each scene.*



#### ALTERNATE PLAY

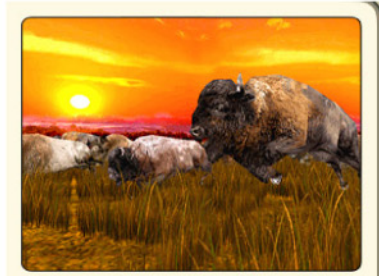
*In *Extreme Hunting 2 Tournament Edition*, up to 4 players can compete in Alternate Play. Whether it is a two-player, three-player, or four-player game, hunters take their turn with each scene. What better a social activity than hunting indoors, with your buddies, and practicing a little healthy competition?*





## ANIMAL SELECT

Your hunting experience is virtually limitless in *Extreme Hunting 2 Tournament Edition*. You have a choice of six wild game including Whitetail Deer, Black Bear, Elk, Wolf, Moose, the new Bison hunt and more to come. Each play sends you a Bonus Hunt of Goose, Bat, Prairie Dog, Squirrel, Bass, or Target Shooting. Additionally, each player has the chance at a Special Hunt you have to play to uncover. The life-like animations, variety of stages, regions, imagery and weather conditions all serve to enhance your world of indoor hunting.



**BISON**  
 Season: Year Round  
 Weight: 700 - 2,200 lbs  
 Size: 7' to 12'  
 Penalty Animal: Calf



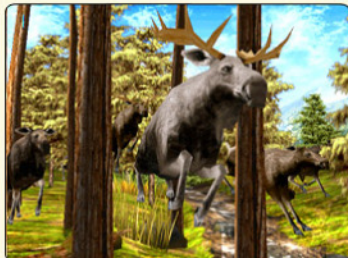
**WOLF**  
 Season: Year Round  
 Weight: 55 to 115 pounds  
 Size: 26 to 32 inches  
 Penalty Animal: Pups



**WHITETAIL DEER**  
 Season: Mid Fall  
 Weight: 80 - 380 lbs  
 Size: 8' to 10'  
 Penalty Animal: Doe



**ELK**  
 Season: Early Winter  
 Weight: 240 - 860 lbs  
 Size: 12' to 18'  
 Penalty Animal: Cow



**MOOSE**  
 Season: Early Fall  
 Weight: 320 - 1000 lbs  
 Size: 15' to 22'  
 Penalty Animal: Cow



**BLACK BEAR**  
 Season: Early Fall  
 Weight: 160 - 600 lbs  
 Size: 6' to 9'  
 Penalty Animal: Cub



## WEAPON SELECT

Playing *Extreme Hunting 2 Tournament Edition*, hunters have access to 6 forceful weapons. To start off, players have a choice of a Shotgun, Rifle, or Bow and Arrow. If you are a registered player, your mileage levels will earn you special hidden weapons. Each weapon has a different power level and ammo count. Develop a strategy by picking the appropriate weapon for each animal. You'll also hear and feel each shot through the game's model gun as if it were real.



**SHOTGUN**  
 Number of ammo: 6  
 Power: Medium  
 Useability level: Normal




**RIFLE**  
 Number of ammo: 4  
 Power: High  
 Useability level: Hard



**BOW**  
 Number of ammo: 8  
 Power: Low  
 Useability level: Easy




## BONUS HUNT




Shoot all 20 to earn bonus points!

**TARGET**




Shoot all 20 to earn bonus points!

**BAT**



Shoot all 20 to earn bonus points!

**SQUIRREL**




Shoot all 20 to earn bonus points!

**BASS**



Shoot all 20 to earn bonus points!

**PRAIRIEDOG**



Shoot all 20 to earn bonus points!

**GEESE**

# 3. GAME SETTING

Extreme Hunting 2 has dedicated GAME SETTINGS. Press TEST switch to display "SYSTEM MENU" screen. Go to "CONFIGURATION" and select "GAME SETTINGS." You can adjust the following game settings.

## ■ STAGE TYPE

Select HALF TRIP or FULL TRIP. DEFAULT SETTING IS HALF TRIP.

HALF TRIP: This allows the player to play until the bonus stage and it will ask for the player to continue the second game.

FULL TRIP: This allows the player to play from start to end of each animal include Bonus and Special Spot. After they finished that animal, they can continue to the next animal by add more money.

■ **DIFFICULTY** (Animal vital point will change according to the level of difficulty.) 4 different levels can be set (Easy, Normal, Hard & Expert) DEFAULT SETTING IS **NORMAL**.

## ■ GUN FEEDBACK

ON or OFF. DEFAULT IS ON.

## ■ RELOAD TYPE

SHOTGUN or HAND GUN. DEFAULT IS **SHOTGUN**.

SHOTGUN = Reload when Pump.

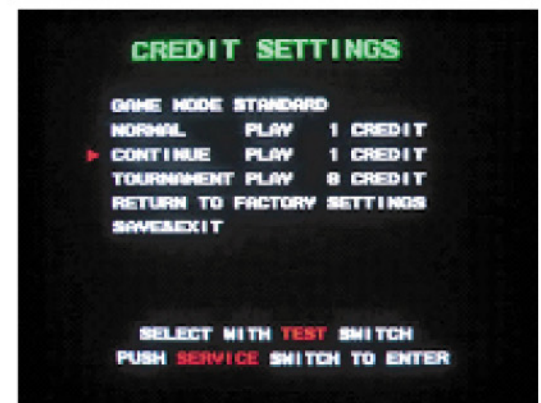
HAND GUN = Reload when shoot out of screen.

## ■ AUTO RELOAD

4 kinds. OFF, 0, 0.25 and 0.5. DEault IS **OFF**.

## ■ CREDIT SETTING

You able to set up 3 kinds of credit settings as **NORMAL PLAY**, **CONTINUE PLAY** and **TOURNAMENT PLAY**. (1 to 20)



### DEFAULT SETTING (OUR RECOMMENDATION for EXTREME HUNTING 2 (NORTH AMERICAN VERSION))

STAGE TYPE: **FULL TRIP**

DIFFICULTY: **NORMAL**

CREDIT SETTING:

NORMAL PLAY : **4 CREDIT(S)**

CONTINUE PLAY: **4 CREDIT(S)**

TOURNAMENT PLAY: **8 CREDIT(S) >>> OPTION**

## 4. CALIBRATION OF GUN ASSY

For gun calibration, go to "TEST MENU" and select "I/O TEST." Screen shows calibration screen. (Fig.1)

Bottom of screen shows "SHOOT CENTER MARK ONLY ADJUST." ( Fig.1)

Shoot center of X mark by using 1 player and 2 player guns.

Then Press SERVICE switch to go to GUN TEST screen. (Fig.2)

Pull the trigger to test both guns at this mode. Screen shows X marks when pull the trigger. Shoot anywhere to test gun calibration at this screen.

Before Pulling trigger at this screen, please test all of switches, if necessary. Screen shows ON or OFF letters for each switch when they are activated.

**NOTE:**

Test Sound speaker of Gun Assy at GUN TEST screen. Pull trigger then Speaker of Gun Assy will output sound.

After finished with above, press SERVICE switch to exit I/O test.

Please double check gun calibration using normal game mode. Move gun forward and backward then shoot screen. Make sure each gun's hit mark does not move or jump.

If hit mark moves or jumps, you need monitor adjustment. Lower brightness or contrast of monitor.

**NOTE:** Once you are in this mode, you can not skip calibration of both guns. If you re-power game during calibration, all settings will revert to previous data.

Fig.1



Fig.2



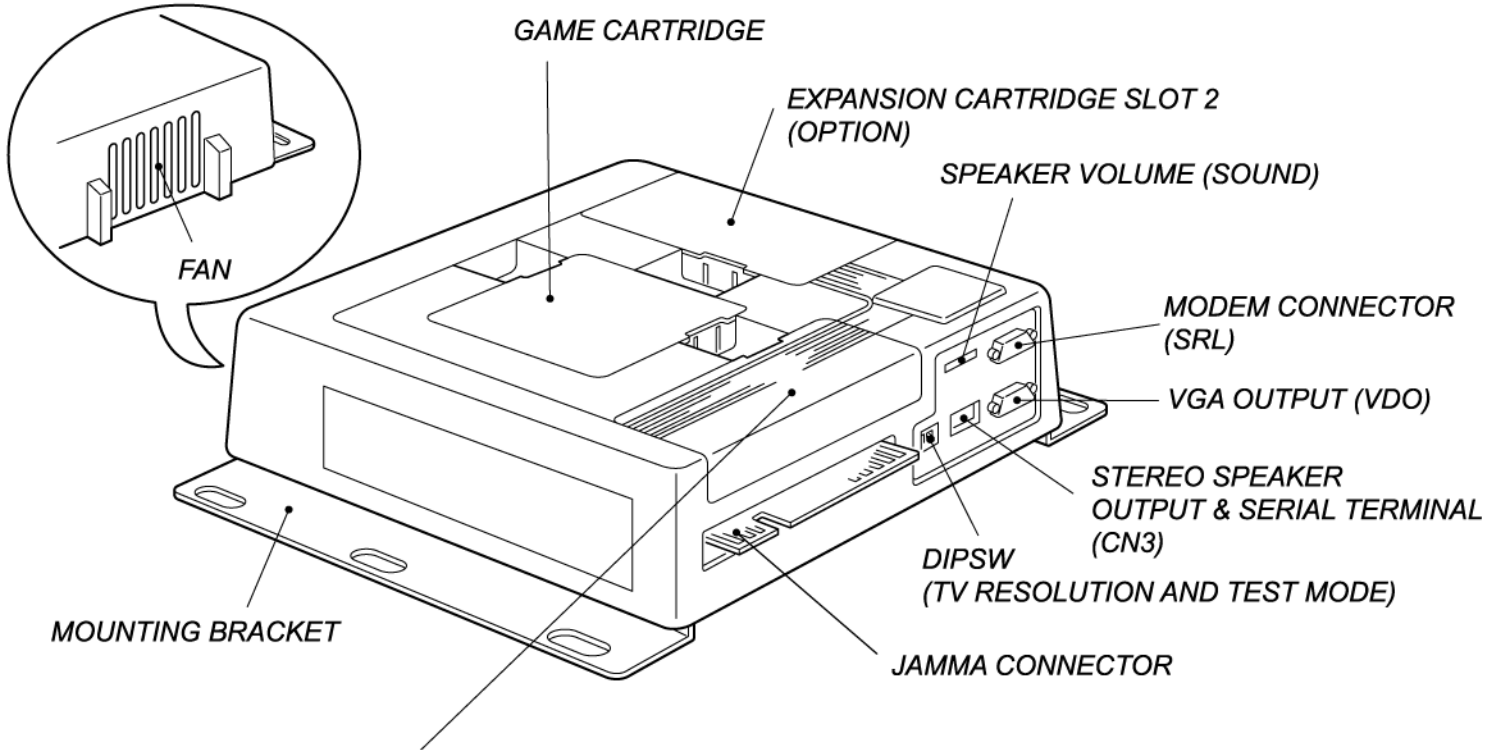
**NOTE:**

You must Calibrate both 1P and 2P Guns when completing gun adjustments. Calibration of only one gun will lead to inaccurate shooting.



# 5. SYSTEM BOARD

**DIMENSIONS:** 10.67" W x 9.04" D x 2.52" H  
**WEIGHT:** 3 lbs



## ■ EXPANSION CARTRIDGE SLOT 1 (EX. I/O BOARD) CONNECTOR TABLE

CN303: 8 PIN CONNECTOR

| PIN# | FUNCTION |
|------|----------|
| 1    | +5VDC    |
| 2    | +5VDC    |
| 3    | GND      |
| 4    | GND      |
| 5    | ANALOG 0 |
| 6    | ANALOG 1 |
| 7    | ANALOG 2 |
| 8    | ANALOG 3 |

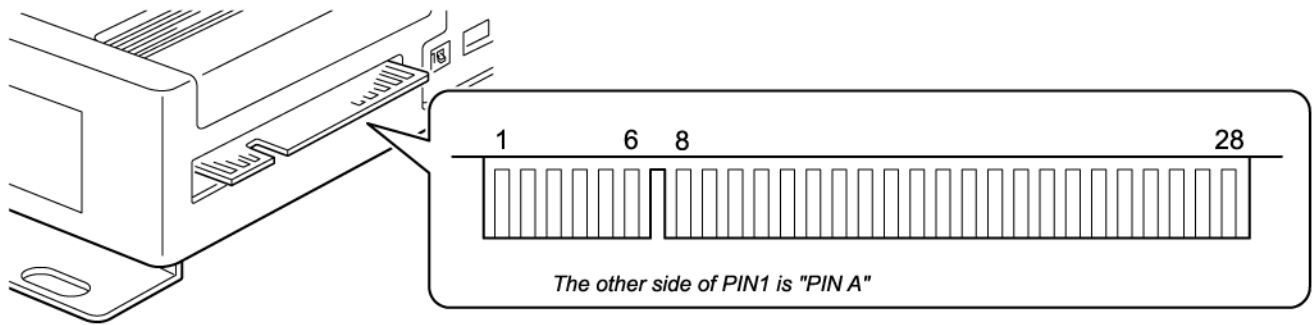
CN304: 12 PIN CONNECTOR

| PIN# | FUNCTION |
|------|----------|
| 1    | +5VDC    |
| 2    | +5VDC    |
| 3    | GND      |
| 4    | GND      |
| 5    | POUT 0   |
| 6    | POUT 1   |
| 7    | POUT 2   |
| 8    | POUT 3   |
| 9    | POUT 4   |
| 10   | POUT 5   |
| 11   | POUT 6   |
| 12   | POUT 7   |

CN302: 28 PIN CONNECTOR

| PIN# | FUNCTION   | PIN# | FUNCTION   |
|------|------------|------|------------|
| 1    | +5VDC      | 2    | +5VDC      |
| 3    | GND        | 4    | GND        |
| 5    | 3P GUN     | 6    | 4P GUN     |
| 7    | 3PUP/PULX1 | 8    | 4PUP/PULX1 |
| 9    | 3PDO/PULX2 | 10   | 4PDO/PULX2 |
| 11   | 3PLE/PULY1 | 12   | 4PLE/PULY1 |
| 13   | 3PRI/PULY2 | 14   | 4PRI/PULY2 |
| 15   | 3P COIN    | 16   | 4P COIN    |
| 17   | 3P START   | 18   | 4P START   |
| 19   | 3PPU1/TRIG | 20   | 4PPU1/TRIG |
| 21   | 3P PUSH2   | 22   | 4P PUSH2   |
| 23   | 3P PUSH3   | 24   | 4P PUSH3   |
| 25   | 3P PUSH4   | 26   | 4P PUSH4   |
| 27   | 3P PUSH5   | 28   | 4P PUSH5   |

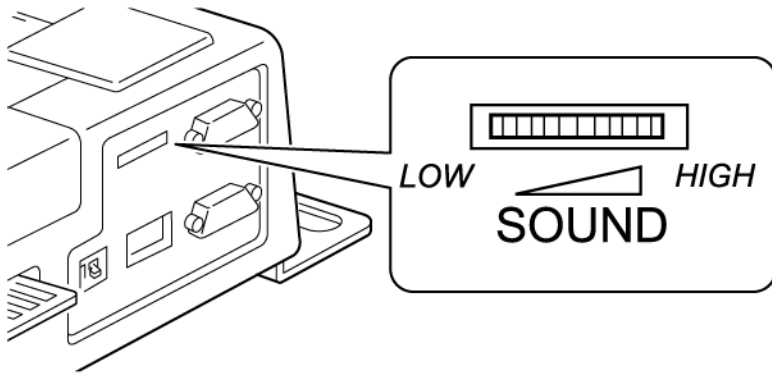
## ■ JAMMA CONNECTOR TABLE



### JAMMA EDGE CONNECTOR (56 PINS)

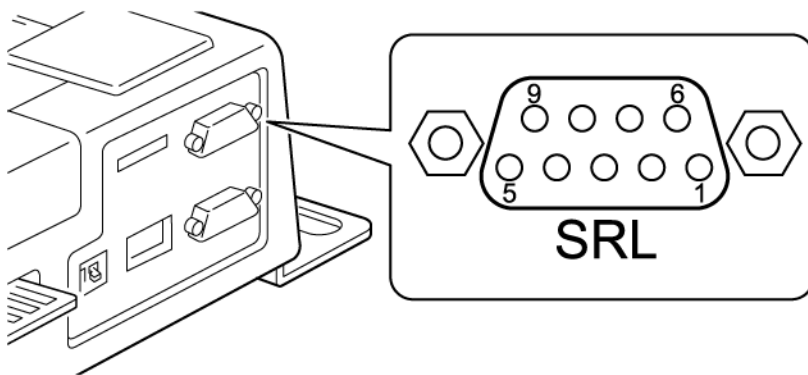
| No. | FUNCTION                | I/O        | No. | FUNCTION                | I/O        |
|-----|-------------------------|------------|-----|-------------------------|------------|
| 1   | <b>GND</b>              | -          | A   | <b>GND</b>              | -          |
| 2   | <b>GND</b>              | -          | B   | <b>GND</b>              | -          |
| 3   | <b>+5V</b>              | <b>IN</b>  | C   | <b>+5V</b>              | <b>IN</b>  |
| 4   | <b>+5V</b>              | <b>IN</b>  | D   | <b>+5V</b>              | <b>IN</b>  |
| 5   | <b>N.C.</b>             | -          | E   | <b>N.C.</b>             | -          |
| 6   | <b>+12V</b>             | <b>IN</b>  | F   | <b>+12V</b>             | <b>IN</b>  |
| 7   | <b>N.C.</b>             | -          | H   | <b>N.C.</b>             | -          |
| 8   | <b>1P COIN COUNTER</b>  | <b>OUT</b> | J   | <b>2P COIN COUNTER</b>  | <b>OUT</b> |
| 9   | <b>1P COIN LOCKOUT</b>  | <b>OUT</b> | K   | <b>2P COIN LOCKOUT</b>  | <b>OUT</b> |
| 10  | <b>MONO SPEAKER (+)</b> | <b>OUT</b> | L   | <b>MONO SPEAKER (-)</b> | <b>OUT</b> |
| 11  | <b>AUDIO OUT</b>        | <b>OUT</b> | M   | <b>AUDIO GND</b>        | -          |
| 12  | <b>VIDEO RED</b>        | <b>OUT</b> | N   | <b>VIDEO GREEN</b>      | <b>OUT</b> |
| 13  | <b>VIDEO BLUE</b>       | <b>OUT</b> | P   | <b>VIDEO SYNC</b>       | <b>OUT</b> |
| 14  | <b>VIDEO GND</b>        | -          | R   | <b>SERVICE SW</b>       | <b>IN</b>  |
| 15  | <b>TEST SW</b>          | <b>IN</b>  | S   | <b>TILT SW</b>          | <b>IN</b>  |
| 16  | <b>1P COIN</b>          | <b>IN</b>  | T   | <b>2P COIN</b>          | <b>IN</b>  |
| 17  | <b>1P START</b>         | <b>IN</b>  | U   | <b>2P START</b>         | <b>IN</b>  |
| 18  | <b>NOT USED</b>         | <b>IN</b>  | V   | <b>NOT USED</b>         | <b>IN</b>  |
| 19  | <b>NOT USED</b>         | <b>IN</b>  | W   | <b>NOT USED</b>         | <b>IN</b>  |
| 20  | <b>NOT USED</b>         | <b>IN</b>  | X   | <b>NOT USED</b>         | <b>IN</b>  |
| 21  | <b>NOT USED</b>         | <b>IN</b>  | Y   | <b>NOT USED</b>         | <b>IN</b>  |
| 22  | <b>1P PUMP</b>          | <b>IN</b>  | Z   | <b>2P PUMP</b>          | <b>IN</b>  |
| 23  | <b>NOT USED</b>         | <b>IN</b>  | a   | <b>NOT USED</b>         | <b>IN</b>  |
| 24  | <b>NOT USED</b>         | <b>IN</b>  | b   | <b>NOT USED</b>         | <b>IN</b>  |
| 25  | <b>NOT USED</b>         | <b>IN</b>  | c   | <b>NOT USED</b>         | <b>IN</b>  |
| 26  | <b>NOT USED</b>         | <b>IN</b>  | d   | <b>NOT USED</b>         | <b>IN</b>  |
| 27  | <b>GND</b>              | -          | e   | <b>GND</b>              | -          |
| 28  | <b>GND</b>              | -          | f   | <b>GND</b>              | -          |

■ **SPEAKER VOLUME (SOUND)**



Use for adjusting game sound

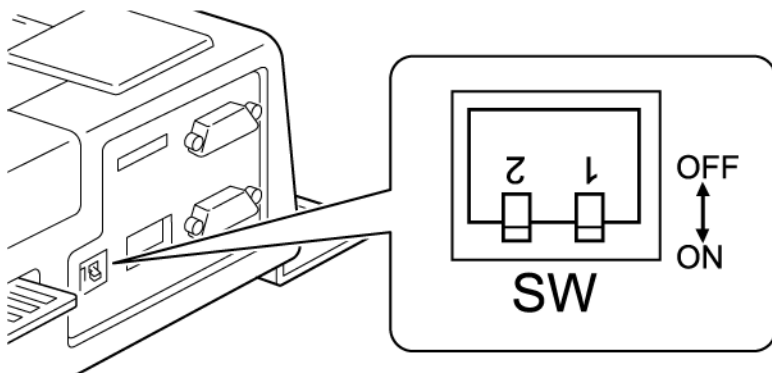
■ **MODEM CONNECTOR (SRL) >>> OPTION**



JST 9PIN SUB, CONNECTOR (MALE)

| No. | FUNCTION | I/O |
|-----|----------|-----|
| 1   | (N.C.)   | -   |
| 2   | RXD2     | IN  |
| 3   | TXD2     | OUT |
| 4   | DTR      | OUT |
| 5   | GND      | -   |
| 6   | (N.C.)   | -   |
| 7   | RTS      | OUT |
| 8   | CTS      | IN  |
| 9   | (N.C.)   | -   |

■ **DIP SWITCH (2 POSITIONS)**



SW-1: Change Frequency of TV signal. Default is OFF = 15KHz\*

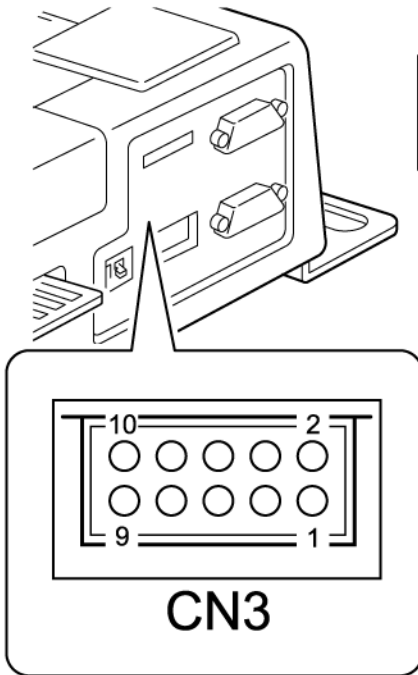
\*For Standard = Low resolution monitor

SW-2: Change ON position to go to SYSTEM MENU.

|      | ON                  | OFF          |
|------|---------------------|--------------|
| SW-1 | 31KHZ               | 15KHZ        |
| SW-2 | SYSTEM MENU<br>MODE | GAME<br>MODE |



## ■ STEREO SPEAKER OUTPUT CONNECTOR (OPTION)



### NOTE:

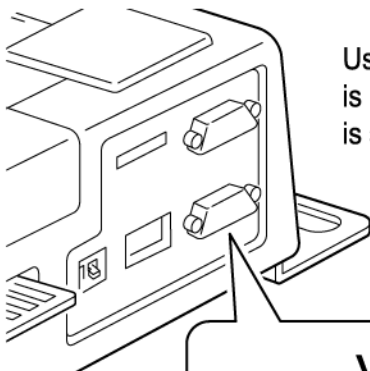
Can not use JAMMA speaker output & STEREO speaker output at same time.

STEREO SPEAKER OUTPUT & EXTENSION SERIAL CONNECTOR, PIN LAYOUT  
(JST, 10 PIN PHD CONNECTOR)

| No. | FUNCTION             | I/O | No. | FUNCTION | I/O |
|-----|----------------------|-----|-----|----------|-----|
| 1   | STEREO SPEAKER L (+) | OUT | 2   | TXD      | OUT |
| 3   | STEREO SPEAKER L (-) | OUT | 4   | RXD      | IN  |
| 5   | STEREO SPEAKER R (+) | OUT | 6   | GND      | -   |
| 7   | STEREO SPEAKER R (-) | OUT | 8   | +5V      | OUT |
| 9   | N.C.                 | -   | 10  | N.C.     | -   |

## ■ VGA (31KHz) TV SIGNAL OUTPUT CONNECTOR (VDO) >>>OPTION

VGA OUTPUT CONNECTOR, PIN LAYOUT  
(JST, 15 PIN D-SUB CONNECTOR, 3 SEQUENCE, FEMALE)



Use this connector when TV Monitor is High Resolution. Make sure DIPSW #1 is set to ON position.

| No. | FUNCTION  | I/O |
|-----|-----------|-----|
| 1   | R         | OUT |
| 2   | G         | OUT |
| 3   | B         | OUT |
| 4   | N.C.      | -   |
| 5   | GND       | -   |
| 6   | R-GND     | -   |
| 7   | G-GND     | -   |
| 8   | B-GND     | -   |
| 9   | +5V       | OUT |
| 10  | GND       | -   |
| 11  | N.C.      | -   |
| 12  | N.C.      | -   |
| 13  | COMP SYNC | OUT |
| 14  | N.C.      | -   |
| 15  | N.C.      | -   |

## ■ GAME CARTRIDGE

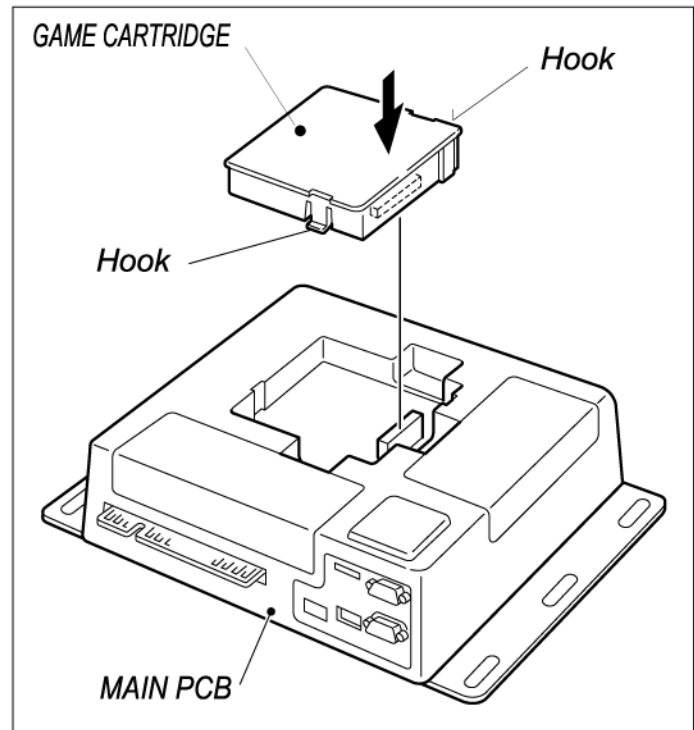
### HOW TO MOUNT GAME CARTRIDGE

Check position of connector for both game cartridge and slot in MAIN PCB.  
Then insert Game Cartridge.  
Make sure that Game Cartridge is locked by hooks.

### HOW TO REMOVE GAME CARTRIDGE

Pinch both Hooks on game cartridge,  
then pull game cartridge out.

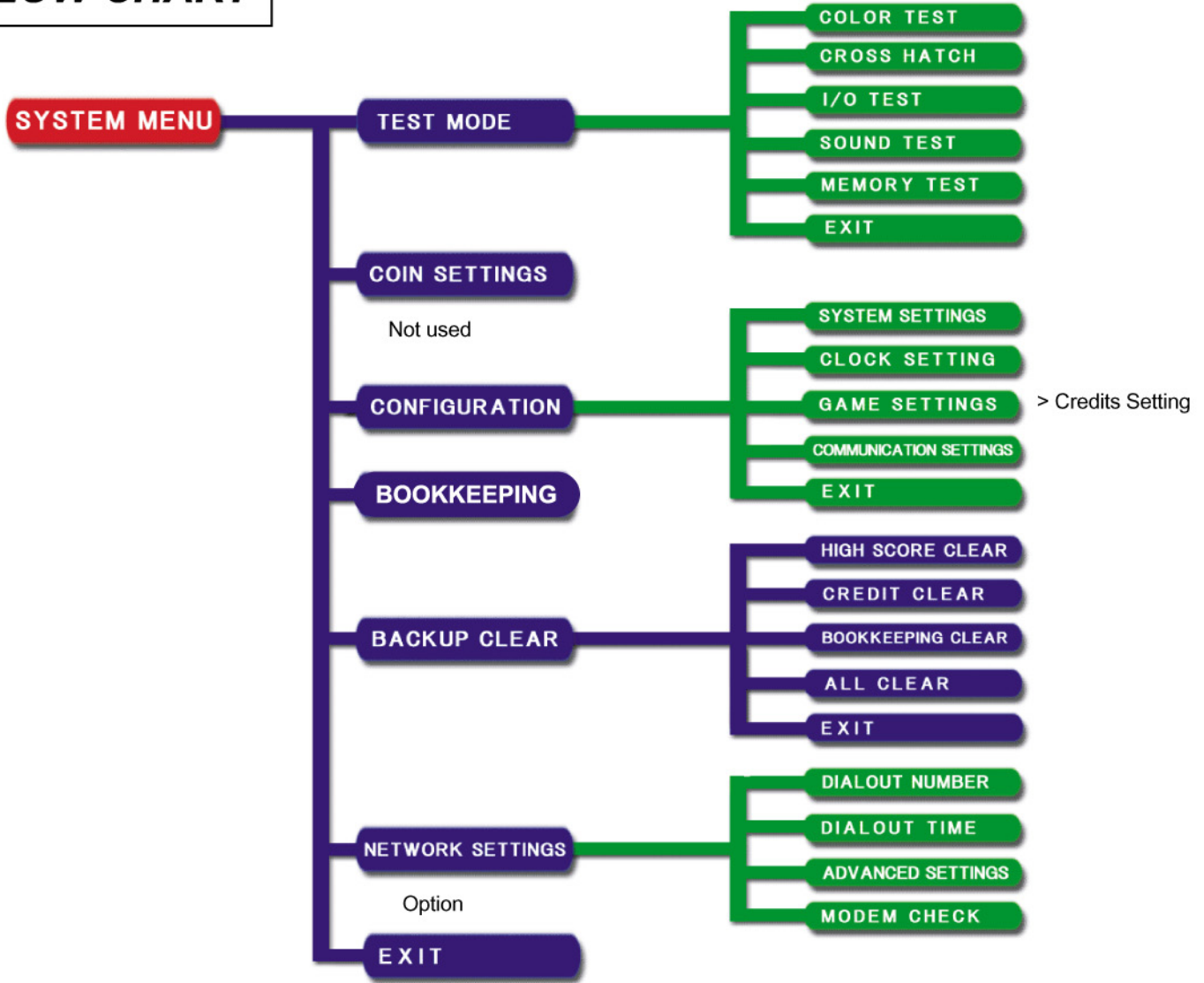
When you exchange Game Cartridge to  
another Game Cartridge, all backup data  
(bookkeeping data) will be cleared. Then  
all settings will go back to default settings.



# 6. SYSTEM MENU

Press TEST switch to enter SYSTEM MENU.  
 (TEST switch can be activated any time. Game play will cancel when you press a test switch during game play. Credit(s) will be lost.)

## FLOW CHART



## HOW TO CONTROL

Press TEST switch to move cursor. Press SERVICE switch to select.

(If there is no TEST switch in your cabinet, change DIPSW #2 ON, re-power on to go to SYSTEM MENU. Press 1P START switch quickly to move cursor. Press & hold 1P START button to select it.)

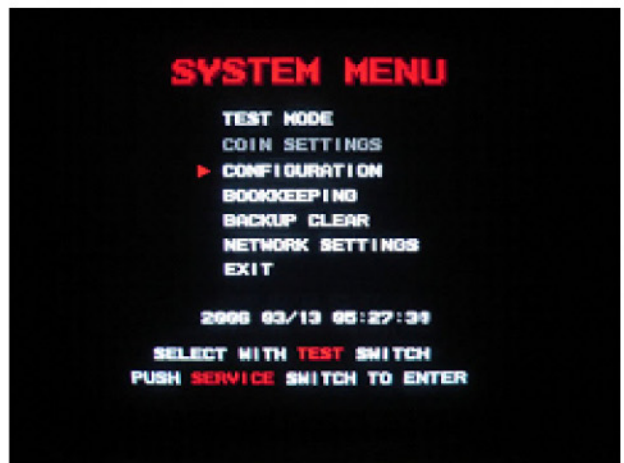


## TOP PAGE OF SYSTEM MENU

*This is first screen of SYSTEM MENU.*

*Move cursor to contents then select to go to next menu*

*Move cursor to "EXIT" and select to go back to normal game mode.  
Credit(s) are memorized.*



## TEST MODE

*Use for function test of game.*

*Select "EXIT" to go back to top page screen of SYSTEM MENU.*



## COLOR TEST

*Use for Color adjustment and checking of monitor.*

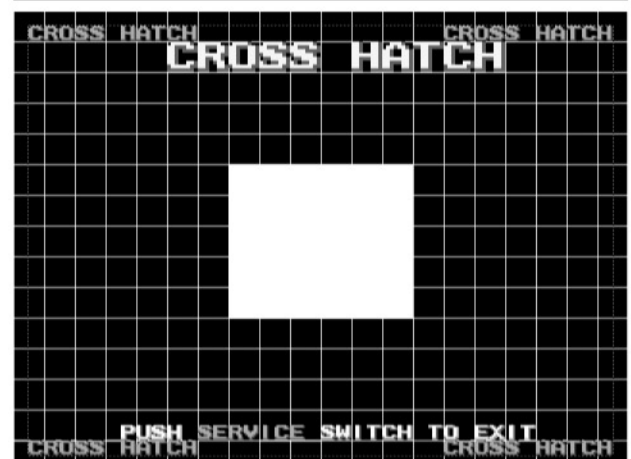
*Press SERVICE switch to go back to TEST MODE screen*



## CROSS HATCH

*Use for Size adjustment of monitor.*

*Press SERVICE switch to go back to TEST MODE screen*

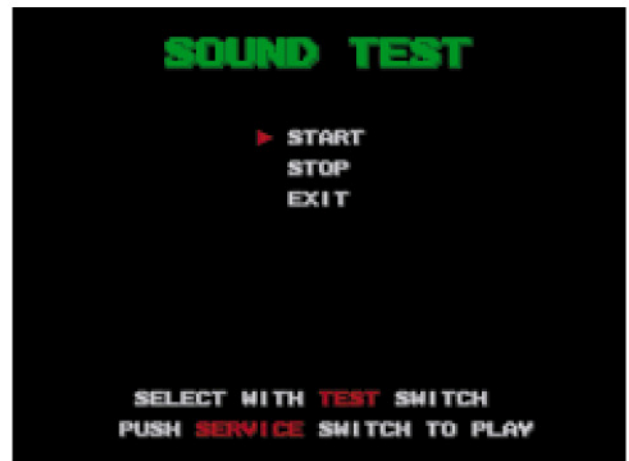


## I/O TEST

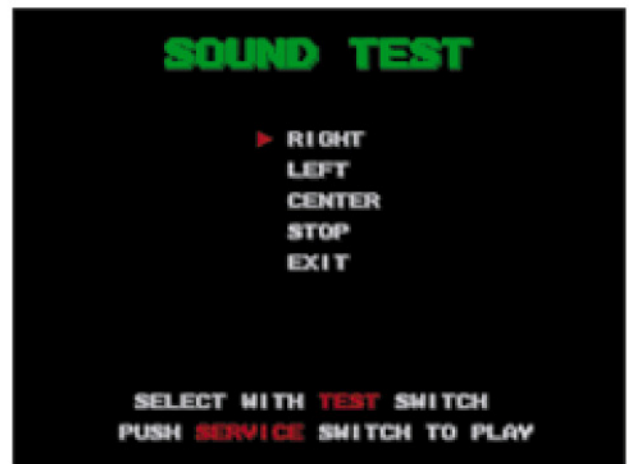
*Use for Gun Calibration. Refer page 6 of "GUN CALIBRATION OF GUN ASSY"*

## SOUND TEST

Use for checking Speaker output.  
When NOT STEREO SPEAKER Setting,  
select START to output sound.  
Select STOP to stop sound.  
Select "EXIT" to go back to  
TEST MODE screen



When STEREO SPEAKER Setting (OPTION),  
select RIGHT to output sound from right  
speaker.  
Select LEFT to output sound from left speaker.  
Select CENTER to output sound from both left  
& right speakers.  
Select STOP to stop sound.  
Select "EXIT" to go back to  
TEST MODE screen



## MEMORY TEST

Use for testing RAM of MAIN PCB.  
Press TEST switch to start read  
& writing RAM test. Can not cancel  
this test till MEMORY test is complete.  
Press SERVICE switch after  
test complete to go back to  
TEST MODE screen



## I/O TEST

Use for functions of input devices.  
I/O TEST contents will be deferent game  
by game. (Picture shows basic I/O screen)  
Activate each input device manually.  
If it's functioned, letter on screen "OFF"  
change to "ON."  
Press SERVICE switch to go back to  
TEST MODE screen



# CONFIGURATION

4 kinds of contents.

Contents of "COMMUNICATION" is unavailable when game has no COMMUNICATION feature.

## SYSTEM SETTINGS

**AREA:** Select country of operation.  
(JAPAN, NORTH AMERICA, EUROPE or OTHER)  
This setting effects factory defaults.

**LANGUAGE:** English

**ADVERTISE SOUND:**  
Select to output sound in attract mode.

**AUDIO MODE:**  
Select sound STEREO (OPTION) or NORMAL

**SOUND VOLUME:**  
Volume level of sound. Default is "15"

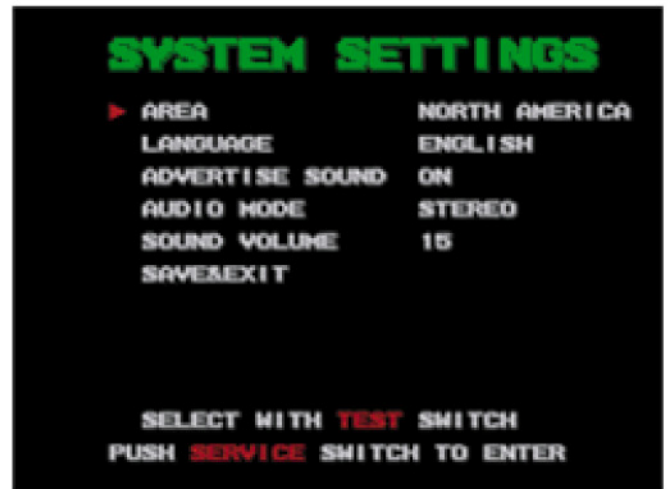
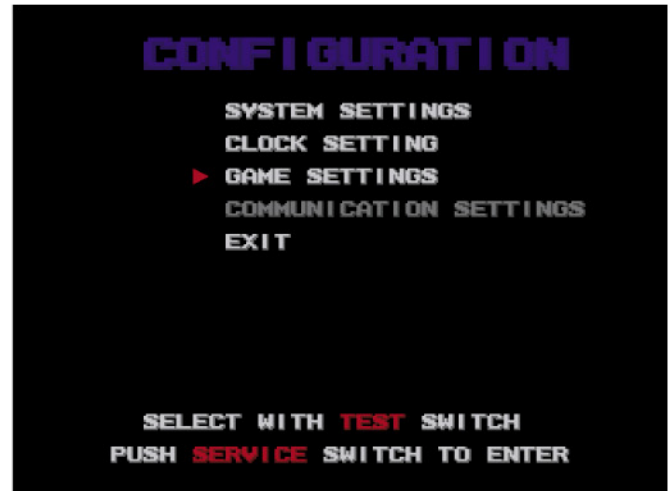
## CLOCK SETTING

Adjust clock system on Main PCB.  
Move cursor then press SERVICE switch to advance each digit. Press & hold SERVICE switch more than 1 sec. to speed it up.

Move cursor to "SAVE & EXIT" then press SERVICE switch to go back to SYSTEM MENU screen.

## GAME SETTING

Adjust game setting at this mode.  
Move cursor to "SAVE & EXIT" then press SERVICE switch to go back to CONFIGURATION.  
Select "RETURN TO FACTORY SETTINGS" to change all settings to Factory default settings.





# BOOKKEEPING

5 kinds. Refer below.

## SUMMARY

SRAM on Main PCB records & saves following data.

**TOTAL TIME:** This is time when game is powered on.

**TOTAL PLAY TIME:** Play time.

**COIN #A:** Total coins of COIN CHUTE 1.

**COIN #B:** Total coins of COIN CHUTE 2.

**COIN #C:** Total coins of COIN CHUTE 3.

**COIN #D:** Total coins of COIN CHUTE 4.

**TOTAL COIN:** Total coins of COIN #A, B, C and D.

**COIN CREDIT:** Number of credits by coins in.

**SERVICE CREDIT:** Number of SERVICE credits.

**TOTAL CREDIT:** Total of COINS + SERVICE CREDITS.

**NORMAL START:** Number of games started from beginning.

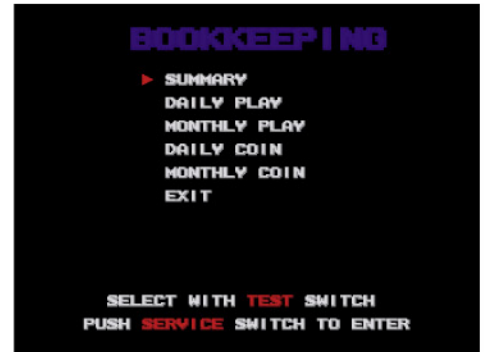
**CONTINUE START:** Number of Continue plays.

**NETWORK START 1:** Number of NETWORK plays by Cabinet 1.

**NETWORK START 2:** Number of NETWORK plays by Cabinet 2.

**NETWORK START 3:** Number of NETWORK plays by Cabinet 3.

**NETWORK START 4:** Number of NETWORK plays by Cabinet 4.



## DAILY PLAY DATA1

Display Average of play time for each play by Daily.

| DAILY PLAY DATA1 |      |      |               |          |
|------------------|------|------|---------------|----------|
| DATE             | PLAY | CONT | AVE PLAY TIME |          |
| 25/10/03         | FRI  | 0    | 0             | 0h 0m 0s |
|                  |      |      |               |          |
|                  |      |      |               |          |
|                  |      |      |               |          |
|                  |      |      |               |          |
|                  |      |      |               |          |
|                  |      |      |               |          |
|                  |      |      |               |          |

PUSH SERVICE SWITCH TO EXIT

## MONTHLY PLAY DATA1

Display Average of play time for each play by Monthly.

| MONTHLY PLAY DATA1 |      |      |               |  |
|--------------------|------|------|---------------|--|
| DATE               | PLAY | CONT | AVE PLAY TIME |  |
| Oct .03            | 0    | 0    | 0h 0m 0s      |  |
|                    |      |      |               |  |
|                    |      |      |               |  |
|                    |      |      |               |  |
|                    |      |      |               |  |
|                    |      |      |               |  |
| TOTAL              | 0    | 0    | 0h 0m 0s      |  |

PUSH SERVICE SWITCH TO EXIT

## DAILY COIN DATA1

Display number of coin in for each play by Daily.

| DAILY COIN DATA1 |       |       |       |       |     |   |
|------------------|-------|-------|-------|-------|-----|---|
| DATE             | Co #A | Co #B | Co #C | Co #D | SRV |   |
| 25/10/03         | FRI   | 0     | 0     | 0     | 0   | 0 |
|                  |       |       |       |       |     |   |
|                  |       |       |       |       |     |   |
|                  |       |       |       |       |     |   |
|                  |       |       |       |       |     |   |
|                  |       |       |       |       |     |   |
|                  |       |       |       |       |     |   |
|                  |       |       |       |       |     |   |

PUSH SERVICE SWITCH TO EXIT

## MONTHLY COIN DATA1

Display number of coin in for each play by Monthly.

| MONTHLY COIN DATA1 |       |       |       |       |     |   |
|--------------------|-------|-------|-------|-------|-----|---|
| MONTH              | Co #A | Co #B | Co #C | Co #D | SRV |   |
| Oct .03            | 0     | 0     | 0     | 0     | 0   | 0 |
|                    |       |       |       |       |     |   |
|                    |       |       |       |       |     |   |
|                    |       |       |       |       |     |   |
|                    |       |       |       |       |     |   |
|                    |       |       |       |       |     |   |
| TOTAL              | 0     | 0     | 0     | 0     | 0   | 0 |

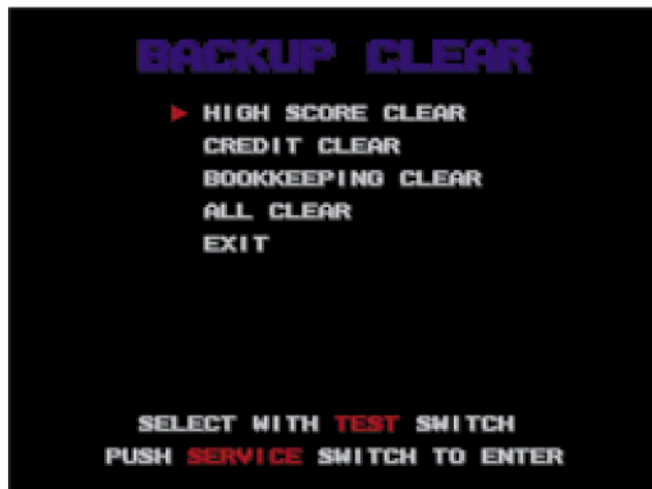
PUSH SERVICE SWITCH TO EXIT

## **BACKUP CLEAR**

*Clear following data in MAIN PCB.  
(HIGH SCORE, CREDIT CLEAR,  
BOOKKEEPING CLEAR and ALL CLEAR)*

*Press SERVICE to select each contents then  
go to each data clear screen.*

*In each data clear screen, Press TEST switch  
to move cursor to "YES" then press  
SERVICE switch. After finishing data clear,  
screen will go back to BACKUP CLEAR screen.*





# WARRANTY

## *Limited warranty, Repair and Return Policy*

*SEGA Amusements U.S.A., Inc. warrants all products to be free from defective materials and workmanship for a period of thirty (30) days from SEGA Amusements U.S.A., Inc. invoice date unless otherwise specified in writing by SEGA Amusements U.S.A., Inc. The extent of this warranty applies to all electronic assemblies only, and does not include lamps and fuses.*

*This limited warranty is invalid for any product that upon examination, is deemed to have been subject to misuse, improper repair or installation, neglect or violation of specification or other instructions published by SEGA Amusements U.S.A., Inc.*

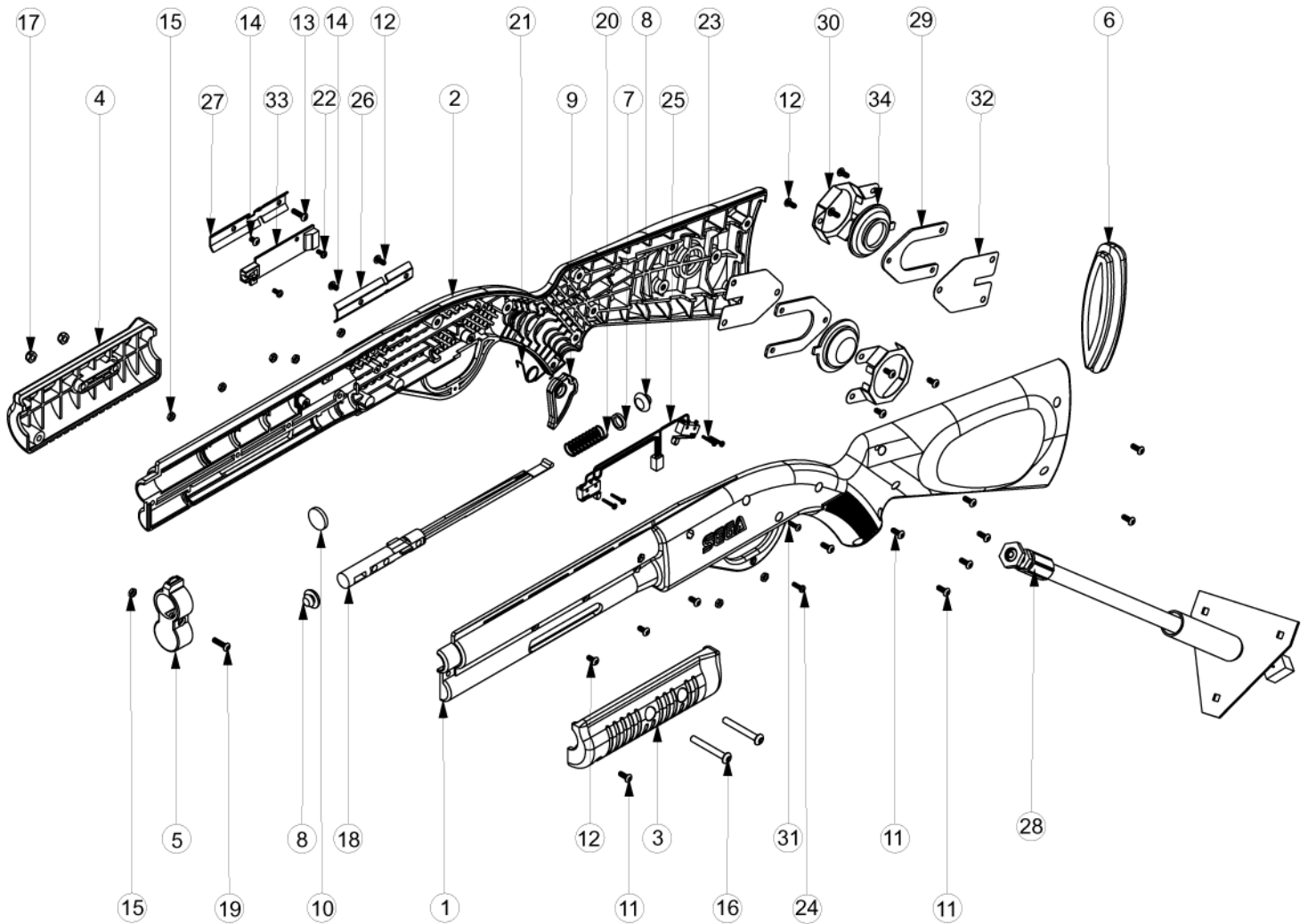
*There are no additional warranties described above.*

*The limited warranties described above shall be in lieu of any other warranty, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose.*

## *Return Merchandise Authorization*

- 1. Contact your authorized SEGA Amusements U.S.A., Inc. distributor to receive a Return Merchandise Authorization for return.*
- 2. You must obtain RMA numbers from SEGA Amusements U.S.A., Inc. through an authorized SEGA Amusements U.S.A., Inc. distributor. Please have your serial number available when calling for RMA number.*
- 3. All items must have an RMA number marked clearly on the outside of the package.*
- 4. Products must be shipped prepaid. Products returned without an RMA number will not be accepted.*
- 5. Credits to accounts are subject to inspection of products for damage and suitability for resale.*

# ASSEMBLE VIEW, 28"SHOTGUN WITH SPEAKER ASSY



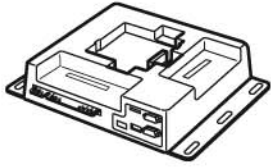
| No. | Part number | Part name                        | QTY | No. | Part number | Part name                          | QTY |
|-----|-------------|----------------------------------|-----|-----|-------------|------------------------------------|-----|
| 1   | 99-50-328   | Housing L Half Shotgun w/Speaker | 1   | 18  | 99-50-325   | Activation Bar Shotgun             | 1   |
| 2   | 99-50-329   | Housing R Half Shotgun w/Speaker | 1   | 19  | 99-50-317   | Screw 6-32 x 9/16 BH Torx          | 1   |
| 3   | 99-50-330   | Pump L Half Shotgun w/Speaker    | 1   | 20  | 99-50-317   | Spring Pump Carnevil Shotgun       | 1   |
| 4   | 99-50-331   | Pump R Half Shotgun w/Speaker    | 1   | 21  | 99-50-322   | Torsion Spring Trigger Shotgun     | 1   |
| 5   | 99-50-332   | Front Cap Shotgun w/Speaker      | 1   | 22  | 99-50-322   | Screw, 4-40-x .25 PH.PN.HD         | 2   |
| 6   | 99-50-321   | Rear Cap (Butt) 27"Shotgun       | 1   | 23  | 99-50-322   | Screw, #2 x 1/2 Type B.PPH         | 4   |
| 7   | 99-50-327   | Washer Plastic F/Pump Shotgun    | 1   | 24  | 99-50-322   | Screw, #4 PH PN HD TP B .38 L.     | 1   |
| 8   | 99-50-326   | Rubber Bumper Lavelle 16-86PB    | 2   | 25  | 99-50-323   | Trigger & Pump Switch and Harness  | 1   |
| 9   | 99-50-318   | Trigger for Shotgun/Rifle        | 1   | 26  | 99-50-333   | Shield Plate L.H. Shotgun w/SPKR   | 1   |
| 10  | 99-50-314   | Lens Glass for Shotgun           | 1   | 27  | 99-50-334   | Shield Plate R.H. Shotgun w/SPKR   | 1   |
| 11  | 99-50-314   | Lens Glass for Shotgun           | 1   | 28  | 99-50-339   | Hose & Harness Shotgun w/SPKR      | 1   |
| 12  | 99-50-318   | Trigger for Shotgun/Rifle        | 1   | 29  | 99-50-337   | SP Holder BKT Shotgun w/SPKR       | 2   |
| 13  | 99-50-318   | Trigger for Shotgun/Rifle        | 1   | 30  | 99-50-336   | SP Cover BKT Shotgun w/SPKR        | 2   |
| 14  | 99-50-318   | Trigger for Shotgun/Rifle        | 1   | 31  | 99-50-336   | Screw 4-40 x 3/8 BHMS T-10 Torx    | 1   |
| 15  | 99-50-314   | Lens Glass for Shotgun           | 1   | 32  | 99-50-338   | SP Base BKT Shotgun w/SPKR         | 2   |
| 16  | 99-50-314   | Lens Glass for Shotgun           | 1   | 33  | 837-14592   | Sensor Board, 28"shotgun w/speaker | 1   |
| 17  | 99-50-314   | Lens Glass for Shotgun           | 1   | 34  | 130-5262P   | Speaker, 28"shotgun                | 2   |

# EXTREME HUNTING 2, KIT#1 (FULL KIT)

KIT Part#: 523-00-003

6/29/06

Main PCB, AW  
Part#: 99-10-011



EX I/O Cartridge  
Part#: 99-20-005



ASSY ROM CTRG EHT  
Part#: 610-0752P



ASSY LANBOX AW  
Part#: 610-0751



28" Shotgun w/Speaker Assy (2 pcs)  
Part#: 99-50-324



Marquee AW25UR & KIT EH2  
Part#: 523-30-100



SOUND BD GUN  
Part#: 837-14593P



Epilepsy Caution Sticker  
Part#: 99-30-014



Instructions AW25UR EH2  
Part#: 523-30-210



Gun Holster, Hook (4 pcs)  
(w/4 Screws, Nuts & Washers)  
Part#: 43-50-303



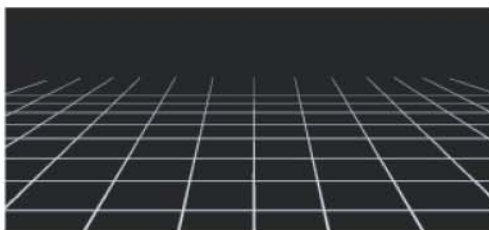
New Gun Sub Harness (KIT)  
Part#: 99-60-685



START Button 2" Yellow Round (2)  
Part#: 99-50-006



Overlay, AW KIT  
Part#: 99-30-151



Manual, Extreme Hunting 2  
Part#: 523-30-300



# EXTREME HUNTING 2, KIT#3 (UPDATE KIT w/New guns)

KIT Part#: 523-00-068

6/29/06

ASSY ROM CTRG EHT  
Part#: 610-0752P



ASSY LANBOX AW  
Part#: 610-0751



START Button 2" Yellow Round (2)  
Part#: 99-50-006



Epilepsy Caution Sticker  
Part#: 99-30-014



Marquee AW25UR & KIT EH2  
Part#: 523-30-100



Instructions AW25UR EH2  
Part#: 523-30-210



SOUND BD GUN  
Part#: 837-14593P



Gun Holster, Hook (2 pcs)  
(w/4 Screws, Nuts & Washers)  
Part#: 43-50-303



Gun Holster (2 pcs)  
(w/8 Nuts&Washers)  
Part#: 53-50-304



New Gun Sub Harness (KIT)  
Part#: 99-60-685



28" Shotgun w/Speaker Assy (2 pcs)  
Part#: 99-50-324



Manual, Extreme Hunting 2  
Part#: 523-30-300



New Gun Sub Harness (Dedicated)  
Part#: 99-60-683



Overlay, AW KIT  
Part#: 99-30-151



Harness Dual Power EX Hunt 2  
Part#: 99-60-686



# EXTREME HUNTING 2, KIT#4 (UPDATE KIT w/o guns)

KIT Part#: 523-00-067

6/01/06

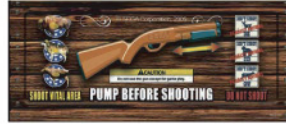
ASSY ROM CTRG EHT  
Part#: 610-0752P



ASSY LANBOX AW  
Part#: 610-0751



Instructions AW25UR EH2  
Part#: 523-30-210



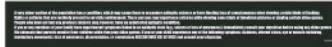
Manual, Extreme Hunting 2  
Part#: 523-30-300



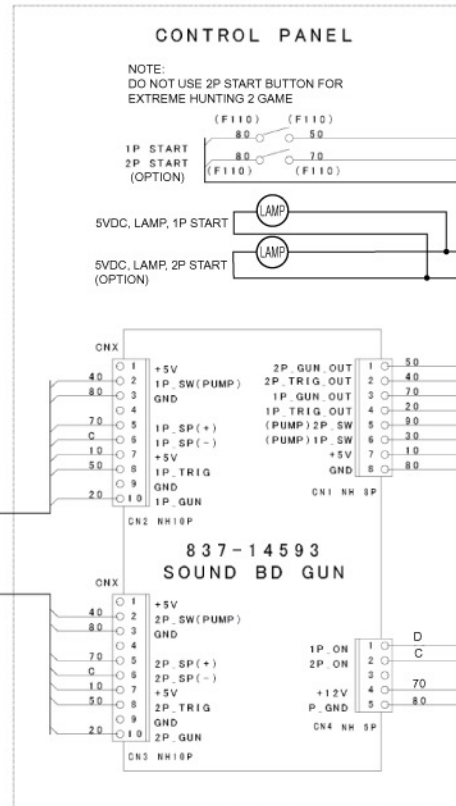
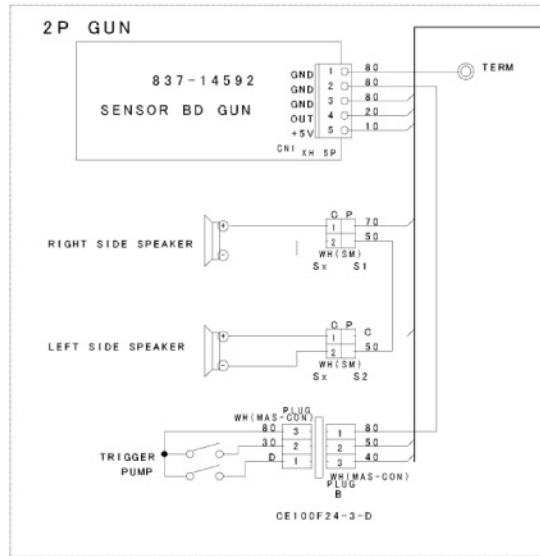
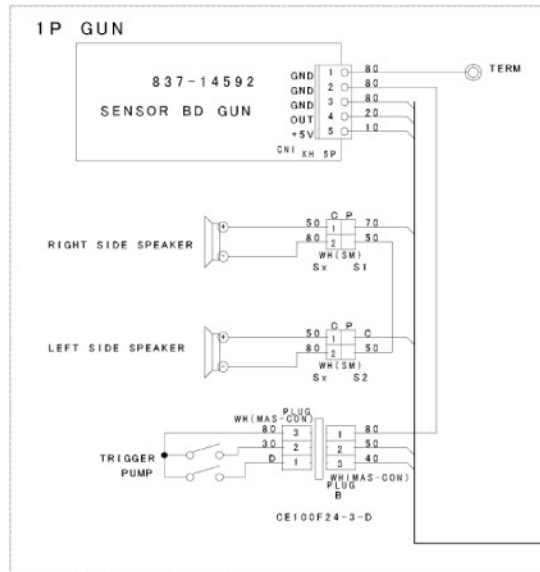
Marquee AW25UR & KIT EH2  
Part#: 523-30-100



Epilepsy Caution Sticker  
Part#: 99-30-014



NEW GUN SUB HARNESS (DED)  
Part#: 99-60-683

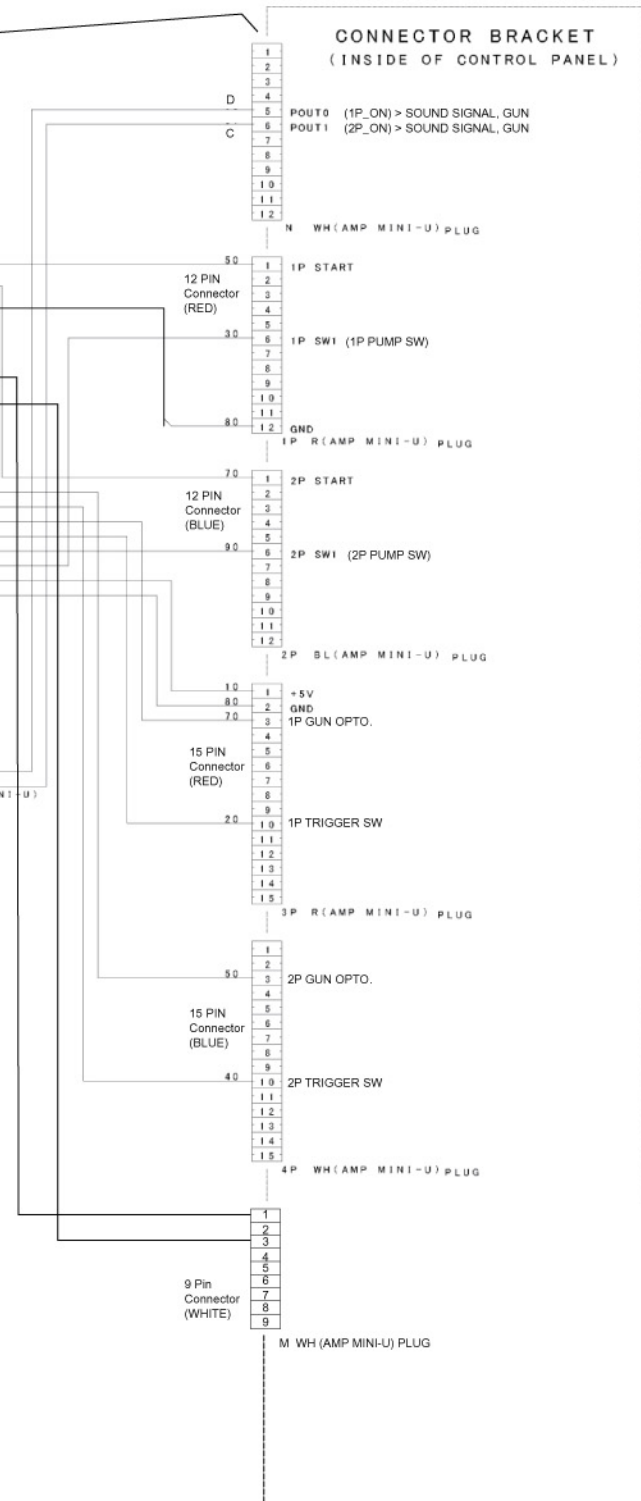


GND TO POWER SUPPLY UNIT

+12V TO POWER SUPPLY UNIT

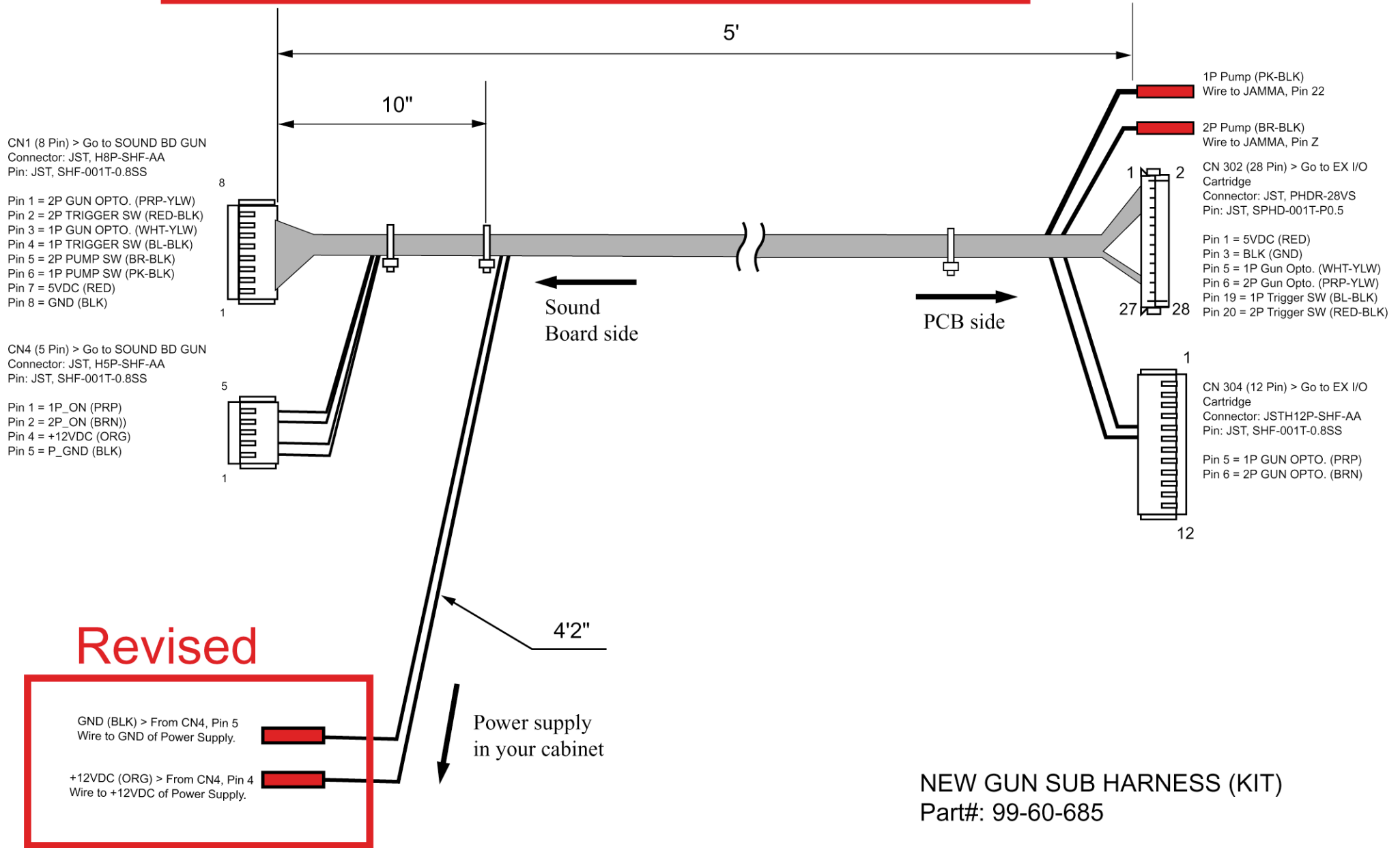
WIRE COLOR TABLE

|   |        |   |             |
|---|--------|---|-------------|
| 8 | BLACK  | E | LIGHT GREEN |
| 7 | ORANGE | D | PURPLE      |
| 5 | WHITE  | O | BROWN       |
| 4 | GREEN  | B | SKY BLUE    |
| 3 | YELLOW | A | PINK        |
| 2 | BLUE   | 9 | GRAY        |
| 1 | RED    |   |             |





**NOTE: Please exchange this page in original manual.  
We change pin layout note as below RED box.**



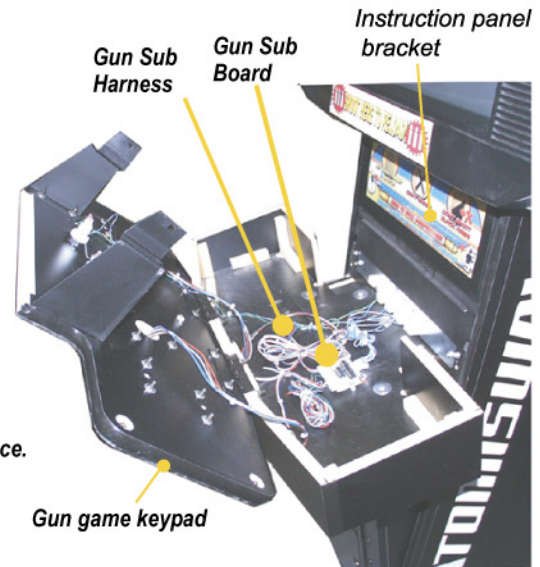
**CONVERSION INSTRUCTION FROM SPORTS SHOOTING USA, AW25"UR**

**KEY PAD, GAME CARTRIDGE AND  
INSTRUCTION SHEET EXCHANGE**



1) Open Coin Door and unlatch control panel Keypad.

2) Remove Scope Gun Assy (2) & Gun Sub BD from inside of Keypad then mount 28"SEGA Shotgun Assy w/ Speaker (2) & Sound BD in its place.

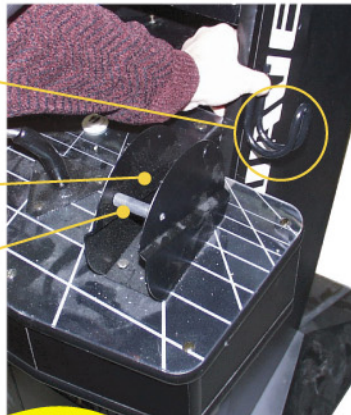


3) Use carriage bolts to mount Holster Hook to each side of cabinet. Do not remove original Scope gun holster. Remove the inner Rubber spacer from both of Scope gun holster

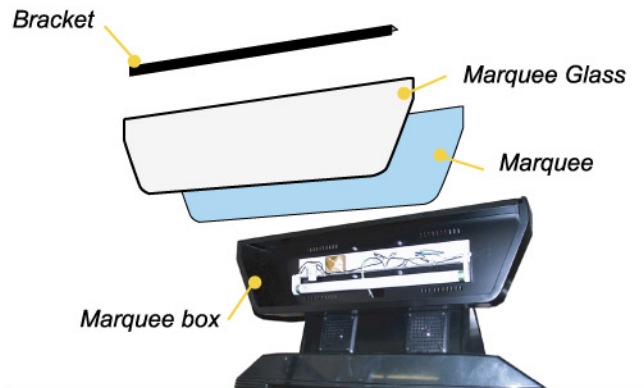
Hook Holster

Scope Gun Holster

**Do not remove this Rubber Spacer. Remove the other one.**

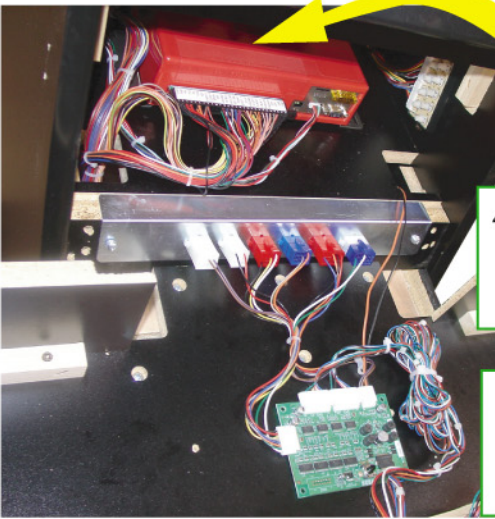


**MARQUEE EXCHANGE**



6) Change the Marquee lexan.

7) Close key pad down, Latches on, close coin door . END



Extreme Hunting 2 Game cartridge

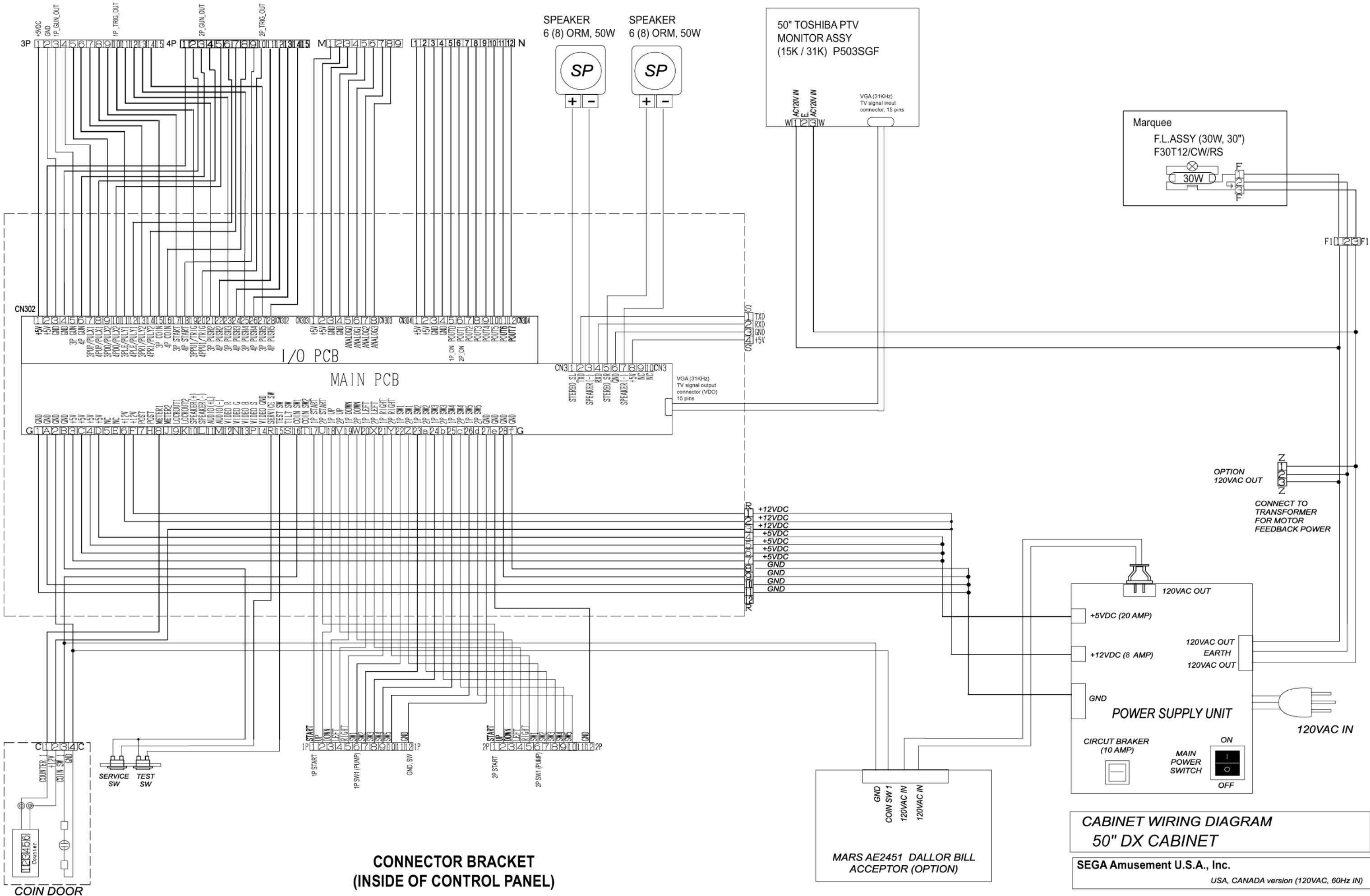


4) Remove 2 screws to open Instruction panel bracket. (Slide out to exchange instruction sheet)

5) Exchange game cartridge. (Just snap in to mount it.) Then close instruction panel bracket.

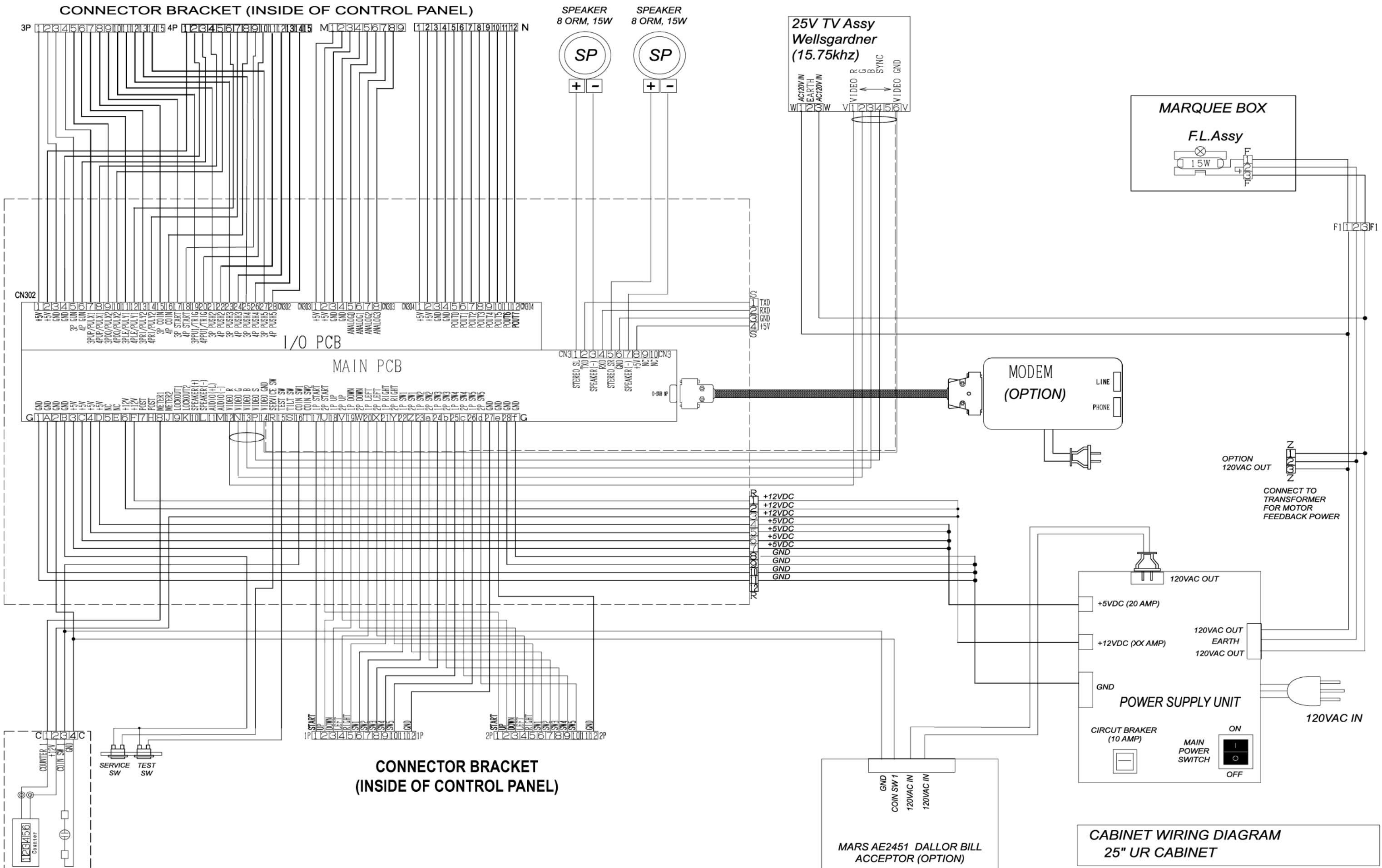


**CONNECTOR BRACKET (INSIDE OF CONTROL PANEL)**



**CONNECTOR BRACKET (INSIDE OF CONTROL PANEL)**

**CABINET WIRING DIAGRAM**  
**50" DX CABINET**  
 SEGA Amusement U.S.A., Inc.  
 USA, CANADA version (120VAC, 60Hz IN)

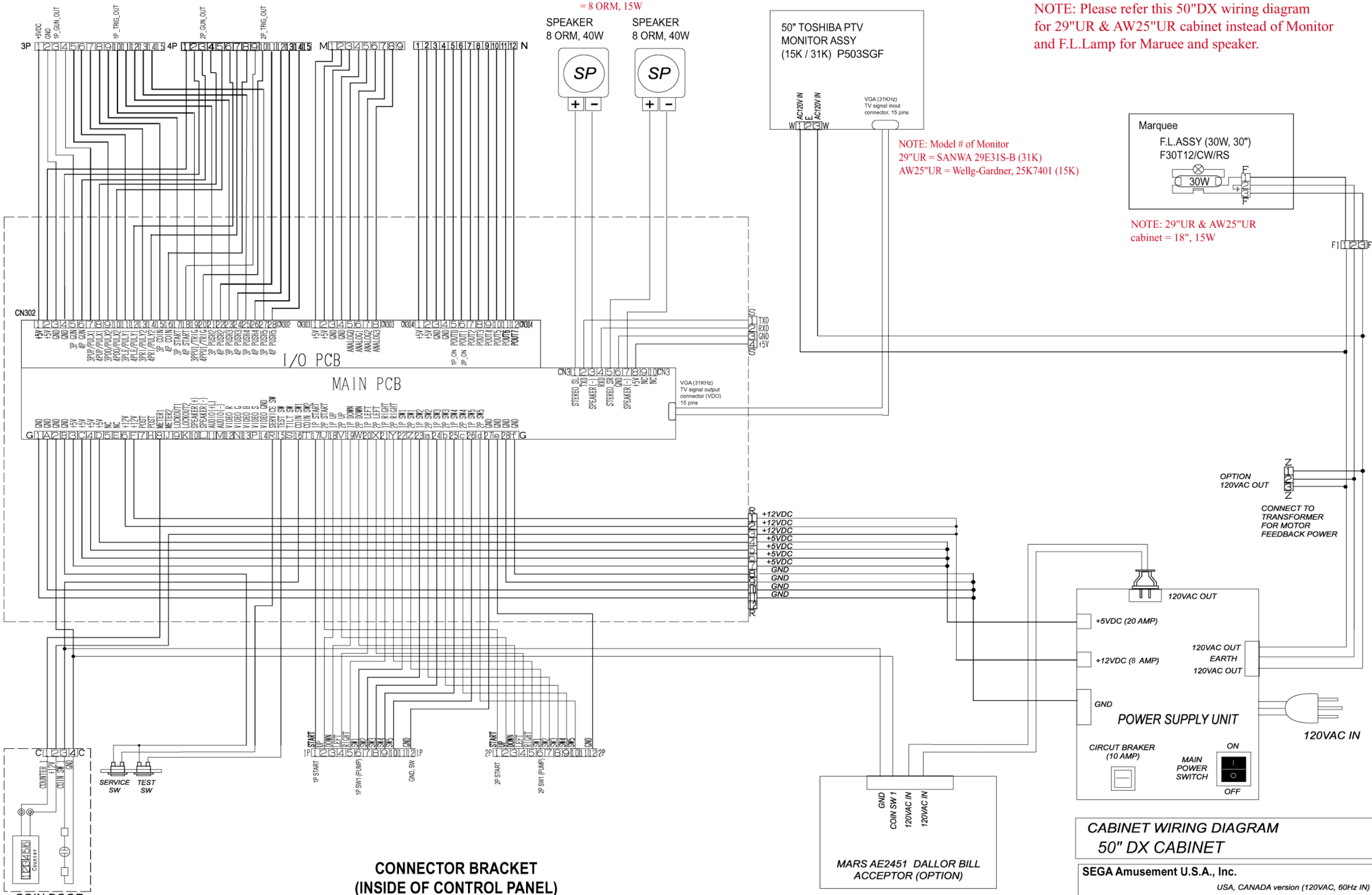




**CONNECTOR BRACKET (INSIDE OF CONTROL PANEL)**

NOTE: 29"UR & AW25"UR  
= 8 ORM, 15W

NOTE: Please refer this 50"DX wiring diagram  
for 29"UR & AW25"UR cabinet instead of Monitor  
and F.L.Lamp for Marquee and speaker.



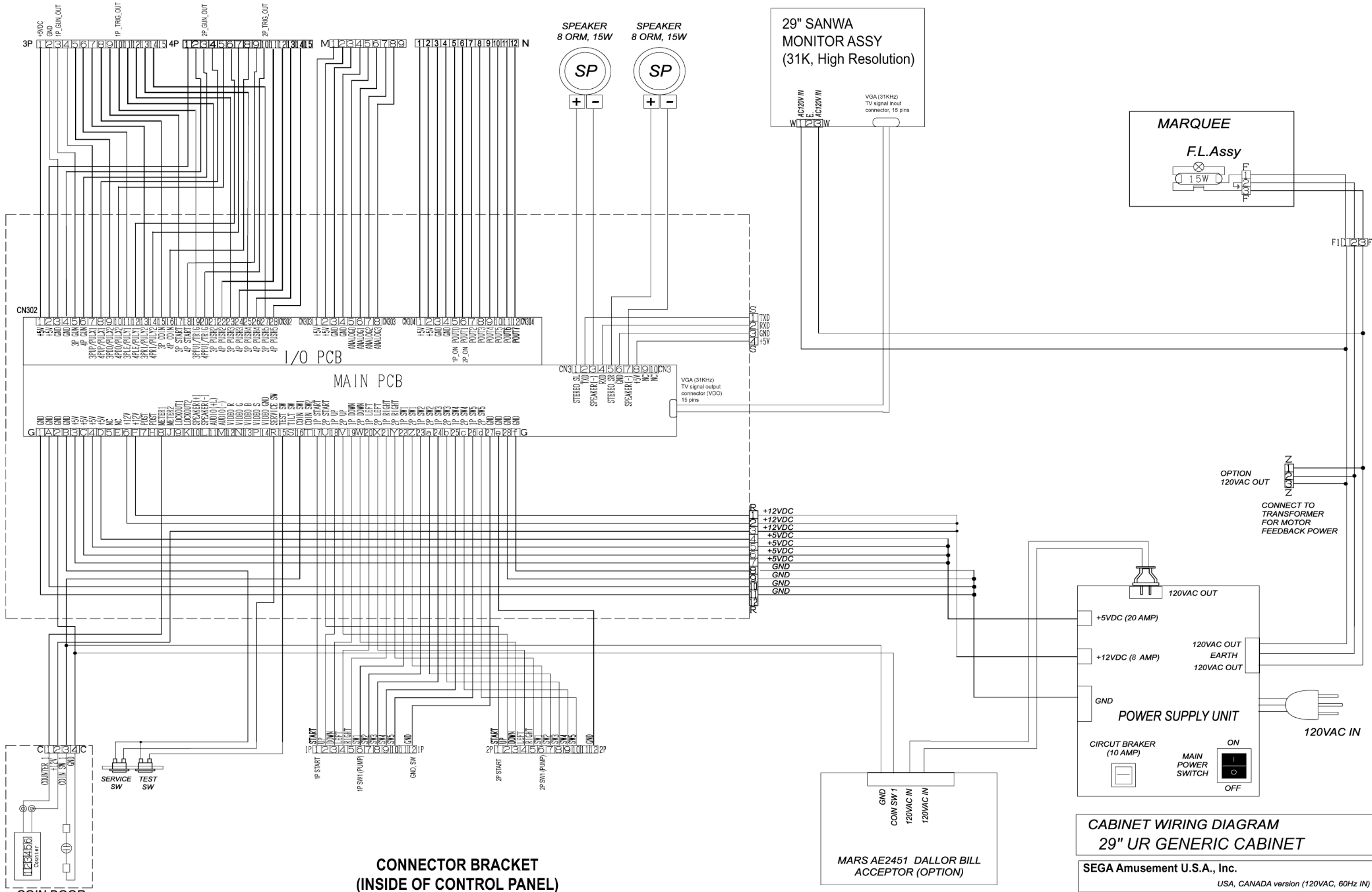
NOTE: Model # of Monitor  
29"UR = SANWA 29E31S-B (31K)  
AW25"UR = Wellg-Gardner, 25K7401 (15K)

NOTE: 29"UR & AW25"UR  
cabinet = 18", 15W

**CABINET WIRING DIAGRAM**  
**50" DX CABINET**  
SEGA Amusement U.S.A., Inc.  
USA, CANADA version (120VAC, 60Hz IN)



CONNECTOR BRACKET (INSIDE OF CONTROL PANEL)



CONNECTOR BRACKET (INSIDE OF CONTROL PANEL)

**CABINET WIRING DIAGRAM**  
**29" UR GENERIC CABINET**  
 SEGA Amusement U.S.A., Inc.  
 USA, CANADA version (120VAC, 60Hz IN)

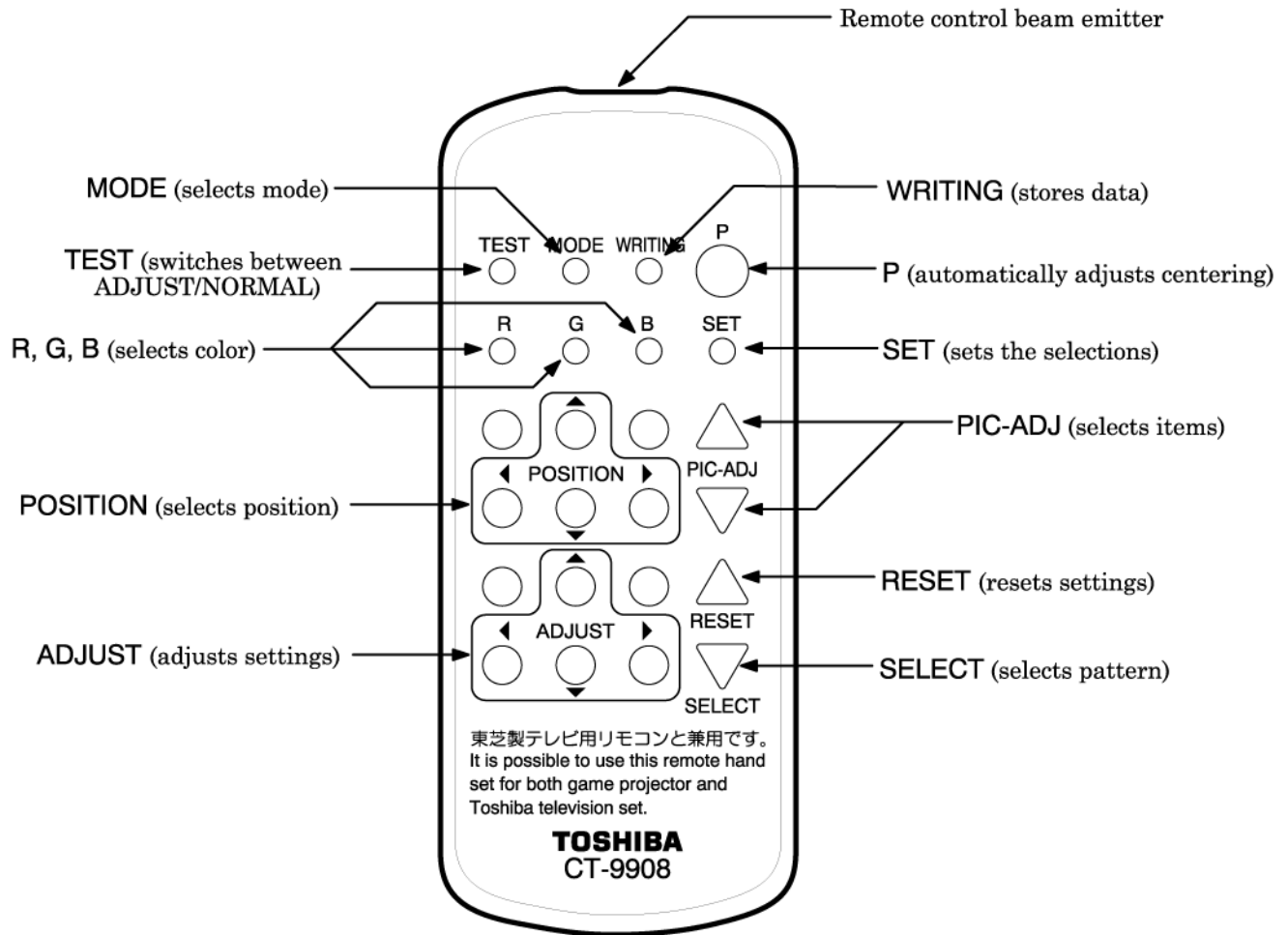
# TOSHIBA 50 PTV (P503SGF) Monitor adjustment Manual

## Remote Controller

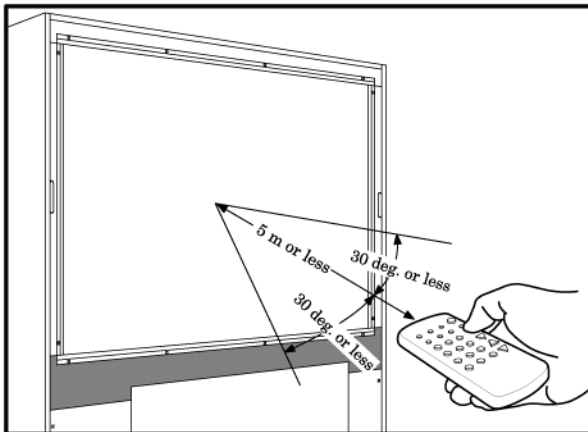
\* **This remote controller is used to make adjustments to the projector.**

You cannot use this remote controller to turn the entire projector and game system on or off.

For detailed operating procedures, refer to the pages with the specific adjustment procedures.



\* **The remote controller should be used when facing the projector screen.**



Notes on the remote controller:

- \* Do not drop, shake, or subject the remote controller to shocks.
- \* Do not expose the remote controller to water or place it on top of wet objects.
- \* Do not take the remote controller apart.
- \* Do not place the remote controller in places where the temperature becomes high or high-humidity places.

# Remote Controller Functions

---

## TEST Button

---

When in the normal image receiving mode, holding down the TEST button for three seconds will display "--- ADJUST MODE ---" to indicate that the projector is in adjustment mode. A green cross pattern appears on the screen. To return to image receiving mode, hold down the TEST button for three seconds again.

Note 1: Do not switch the input signals while the projector is in adjustment mode.

Note 2: If the adjustment status is disrupted by a spark from the CRT while the projector is in adjustment mode, turn off the power without saving the data or performing other operations.

## MODE Button

---

- Repeatedly pressing the MODE button will cycle through these modes: (1) Static Convergence Adjustment Mode → (2) Line (Row) Adjustment Mode → (3) Point Adjustment Mode
- Repeatedly pressing the CENTER MODE button will cycle through these modes: (1) Static Convergence Adjustment Mode → (2) Line (Row) Adjustment Mode → (3) Point Adjustment Mode → (4) Sensor Adjustment Mode.

## WRITING Button

---

Press this button to store the adjustment status (adjustment data). When this button is pressed, "WRITING" is displayed on the screen, and the projector automatically returns to image receiving mode after saving the data. If you return to image receiving mode before saving the data or the power is turned off, the projector will be in the status before adjustment or the status when the last button was pressed.

If you do not want to store the data, return to image receiving mode without pressing this button.

## G Button

---

This button is used for turning off and adjusting green.

Pressing this button when green is displayed will turn off green.

When green is off, pressing this button will display green, allowing you to adjust green with the Adjust button.

When the blank pattern appears in CENTER MODE, the projector is in Sensor Adjustment mode and only a green single-color display is shown.

## R Button

---

This button is used for turning off and adjusting red.

Pressing this button when red is displayed will turn off red.

When red is off, pressing this button will display red, allowing you to adjust red with the Adjust button.

When the blank pattern appears in CENTER MODE, the projector is in Sensor Adjustment mode and only a red single-color display is shown.

## B Button

---

This button is used for turning off and adjusting blue.

Pressing this button when blue is displayed will turn off blue.

When blue is off, pressing this button will display blue, allowing you to adjust blue with the Adjust button.

When the blank pattern appears in CENTER MODE, the projector is in Sensor Adjustment mode and only a blue single-color display is shown.

## POSITION Buttons ▲▼◀▶

---

These buttons are used when moving the adjustment position (point cursor or line cursor). The cursor moves in the direction of the arrow shown on the buttons.

## ADJUST Buttons ▲▼◀▶

---

These buttons are used to adjust the selected mode.

- In Convergence Adjustment mode, the four buttons ▲▼◀▶ can be used to move the cursor in the direction of the arrow shown.
- In other adjustment modes, the two buttons ◀▶ can be used. The ◀ button will reduce the data value, and the ▶ button will increase the data value.

## RESET Button

---

In ADJUST MODE, holding down this button for three seconds when in Static Convergence Adjustment mode will display "RESET" and return the Static Convergence Adjustment data to the default values.

In CENTER MODE, holding down this button for three seconds when in Static Convergence Adjustment mode will display "RESET" and return the Static Convergence and all the Auto-centering data (TILT, CENT) to the default values.

## SELECT Button

---

Press this button when you want to view the test pattern and input signal image while in ADJUST MODE. Repeatedly pressing this button will switch between (1) test pattern → (2) test pattern + input signal. Pressing this button allows adjustment while viewing the input signal image.

## PIC-ADJ Buttons

---

In normal mode, these buttons are used when selecting the user adjustment items.

Pressing these buttons display the menu items shown below. The selected adjustment item is highlighted in violet (other items are displayed in light blue). Press the buttons to highlight the desired item for selection.

|            |       |                                 |
|------------|-------|---------------------------------|
| CONTRAS    | ..... | Contrast adjustment             |
| BRIGHTNESS | ..... | Brightness adjustment           |
| H. POSI    | ..... | Horizontal phase adjustment     |
| V. POSI    | ..... | Vertical phase adjustment       |
| H. SIZE    | ..... | Horizontal amplitude adjustment |
| V. SIZE    | ..... | Vertical amplitude adjustment   |
| EXIT       | ..... | Cancels mode                    |

In ADJUST MODE, these buttons are used when selecting the secondary adjustment items.

Pressing these buttons displays the menu items shown below. The selected adjustment item is highlighted in violet (other items are displayed in light blue). Press the buttons to highlight the desired item for selection.

|             |       |   |
|-------------|-------|---|
| SUB H. SIZE | ..... | Secondary horizontal amplitude adjustment |
| SUB V. SIZE | ..... | Secondary vertical amplitude adjustment   |
| SUB BRIGHT  | ..... | Secondary brightness adjustment           |
| EXIT        | ..... | Cancels mode                              |

## SET Button

---

This button is used when entering the user adjustment mode and secondary adjustment mode.

After the item is selected with the PIC-ADJ buttons, pressing the SET button will show the scale bar display and send you to the mode for adjusting the item. However, if this button is pressed in EXIT mode, the screen display will be closed and the mode will be canceled.

## P Button

---

Holding down this button for three seconds in the normal image receiving mode will send you to the auto-centering mode. In this mode, the screen will automatically change to the green, red, and blue cross patterns, in that order. When the operation is completed, the projector will return to image receiving mode.

If operations cannot be properly performed when returning to image receiving mode, the error messages shown below will appear.

\* When an error occurs for the first time:

The message "TRY AGAIN" is shown in red indicating that the geomagnetism adjustment should be performed again.

\* When an error occurs two or more times:

The message "PLEASE ADJ" is shown in red indicating that the sensor sensitivity and centering adjustment should be performed again.

- When in the ADJUST MODE, holding down the P button for three seconds will display "--- CENTER MODE ---" to indicate that the projector is in the mode for adjusting the sensor sensitivity and centering. A green cross pattern appears on the screen.

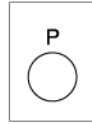


# OPERATION AND ADJUSTMENT PROCEDURES

## Automatic Centering Adjustment

Raster misalignment may occur in the projector due to the influence of ground magnetism.

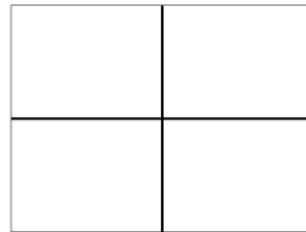
To prevent this, perform automatic centering adjustment when first installing the projector or after changing the installation location or direction.



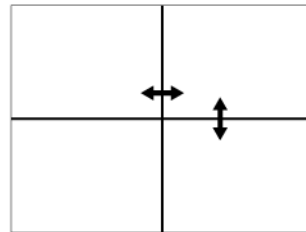
**1** Hold down the P button for about three seconds.

The following operations are then performed automatically.

The projector enters correction mode for raster misalignment, and a green cross-pattern appears on the screen.

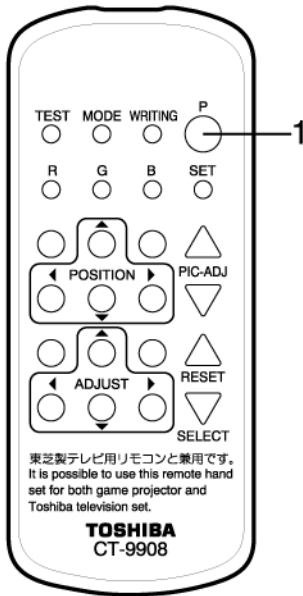


The cross-pattern moves vertically and horizontally to detect the correct screen position and inclination.



After the operation, the green cross-pattern changes to red, and then changes to blue. The projector performs the same detection operation for each color.

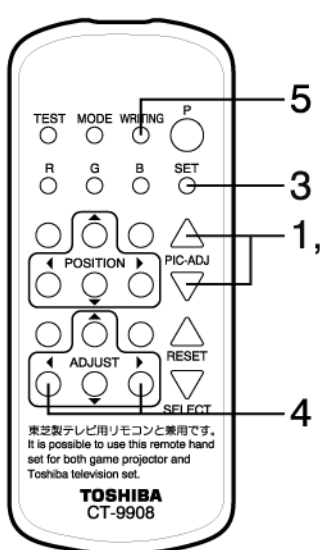
When the green, red, and blue detection operations are completed, the projector returns to the game screen. Any color misalignment has been corrected.



- Operation and Adjustment Procedures Sunlight from the outside, strong lighting, or other sources of light hitting the projector screen can prevent the projector from operating properly. If this happens, the error message "TRY AGAIN" is shown in red on the projector screen. When this message is shown, hold down the P button again for about three seconds. If the error message continues to occur after repeating this procedure, the projector screen changes to the "PLEASE ADJ" message. When this message is shown, adjust the screen so that light does not directly hit it, and then hold down the P button for about three seconds.
- If an error occurs in the automatic centering, the color alignment can be performed manually. For more information on manual color alignment, see the convergence adjustment procedure starting on page 16.

# Adjusting the Contrast

The images contrast has been adjusted to standard settings at the factory. However, you can also adjust to your own settings.



**1** Press either the PIC-ADJ ▲ or ▼ button.

In this screen, the highlighted menu item is displayed in violet, while the other six menu items are displayed in light blue.

```

CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SIZE
EXIT
    
```

**2** Use the PIC-ADJ ▲ or ▼ buttons to select CONTRAST.

Move the cursor so that CONTRAST is highlighted in violet. However, since the default setting is already at CONTRAST, this operation is unnecessary in this case.

```

CONTRAST
BRIGHTNESS
H.POSI
V.POSI
H.SIZE
V.SIZE
EXIT
    
```

**3** Press the SET button. (This sets the selection.)

This sends you to the CONTRAST adjustment mode. The CONTRAST adjustment scale bar appears on the screen.

```

CONTRAST    230
●.....●.....●
    
```

**4** Use the ADJUST ◀ and ▶ buttons to adjust the setting.

The adjustment data values change as the cursor moves. Adjust the screen contrast to the desired setting.

```

CONTRAST    156
●.....●.....●
    
```

**5** Press the WRITING button. (This stores the data and completes the adjustment operation.)

The message "WRITING" appears, and the adjustment data is stored.

```

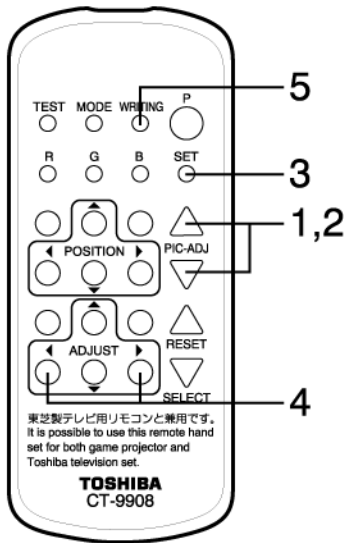
WRITING
    
```

Skip to Step 3

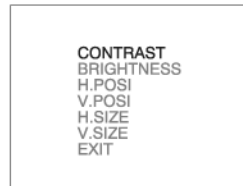
- \*1. To exit the adjustment procedure, select EXIT in Step 2, and then press the SET button.
- \*2. To make the settings for other items in the menu, repeat Steps 2 to 4.
- \*3. If you do not store the new adjustment data, it will be erased when the projector is turned off. Then, when you turn on the projector the next time, the projector will have the previous settings.

# Adjusting the Brightness

The image brightness has been adjusted to standard settings at the factory. However, you can also adjust to your own settings.



**1** Press either the PIC-ADJ ▲ or ▼ button.



In this screen, the highlighted menu item is displayed in violet, while the other six menu items are displayed in light blue.



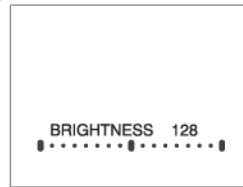
**2** Use the PIC-ADJ ▲ or ▼ buttons to select BRIGHTNESS.



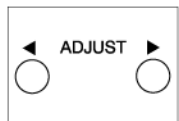
Move the cursor that BRIGHTNESS is highlighted in violet.



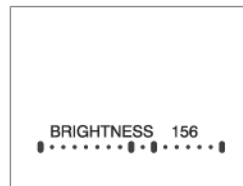
**3** Press the SET button. (This sets the selection.)



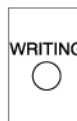
This sends you to the BRIGHTNESS adjustment mode. The BRIGHTNESS adjustment scale bar appears on the screen.



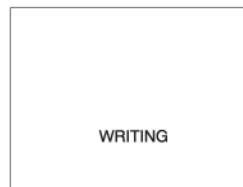
**4** Use the ADJUST ◀ and ▶ buttons to adjust the setting.



The adjustment data values change as the cursor moves. Adjust the screen brightness to the desired setting.



**5** Press the WRITING button. (This stores the data and completes the adjustment operation.)

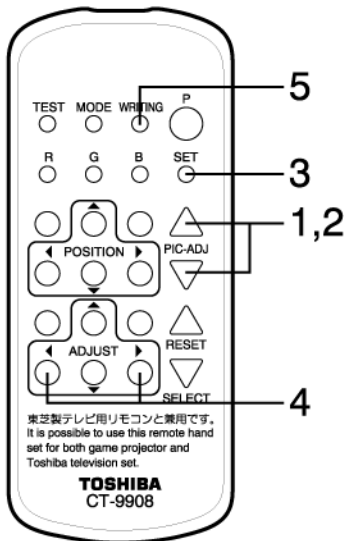


The message "WRITING" appears, and the adjustment data is stored.

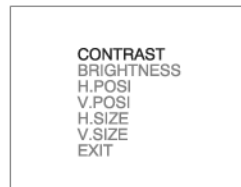
- \*1. To exit the adjustment procedure, select EXIT in Step 2, and then press the SET button.
- \*2. To make the settings for other items in the menu, repeat Steps 2 to 4.
- \*3. If you do not store the new adjustment data, it will be erased when the projector is turned off. Then, when you turn on the projector the next time, the projector will have the previous settings.

# Adjusting the image display Position

The image display position (H.POSI, V.POSI) on the screen has been adjusted to standard settings at the factory. However, you can also adjust to your own settings. You may have to adjust the screen position when changing game software.



**1** Press either the PIC-ADJ ▲ or ▼ button.



In this screen, the highlighted menu item is displayed in violet, while the other six menu items are displayed in light blue.



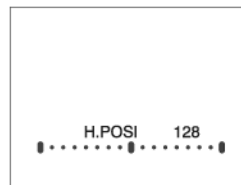
**2** Use the PIC-ADJ ▲ or ▼ buttons to select H.POSI (horizontal position) or V.POSI (vertical position).



Move the cursor so that H.POSI or V.POSI is highlighted in violet. The figure shows the case when H.POSI is selected.

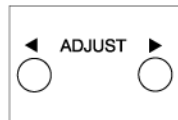


**3** Press the SET button. (This sets the selection.)

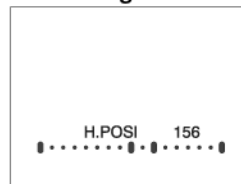


This sends you to the H.POSI or V.POSI adjustment mode. The H.POSI or V.POSI adjustment scale bar appears on the screen.

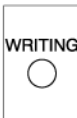
The ◀ and ▶ buttons are also used when adjusting the vertical direction.



**4** Use the ADJUST ◀ and ▶ buttons to adjust the setting.



The adjustment data values change as the cursor moves. Adjust the screen display position to the desired setting.



**5** Press the WRITING button. (This stores the data and completes the adjustment operation.)



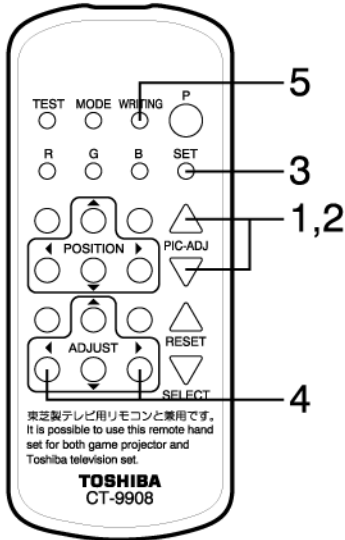
The message "WRITING" appears, and the adjustment data is stored.

- \*1. To exit the adjustment procedure, select EXIT in Step 2, and then press the SET button.
- \*2. To make the settings for other items in the menu, repeat Steps 2 to 4.
- \*3. If you do not store the new adjustment data, it will be erased when the projector is turned off. Then, when you turn on the projector the next time, the projector will have the previous settings.



# Adjusting the Image Size

The image size (H.SIZE, V.SIZE) on the screen has been adjusted to standard settings at the factory. However, you can also adjust to your own settings. You may have to adjust the image size when changing game software.



**1** Press either the PIC-ADJ ▲ or ▼ button.



In this screen, the highlighted menu item is displayed in violet, while the other six menu items are displayed in light blue.



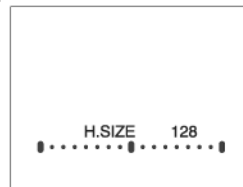
**2** Use the PIC-ADJ ▲ or ▼ buttons to select H.SIZE (horizontal size) or V.SIZE (vertical size).



Move the cursor so that H.SIZE or V.SIZE is highlighted in violet. The figure shows the case when H.SIZE is selected.

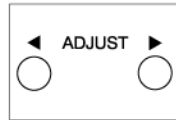


**3** Press the SET button. (This sets the selection.)

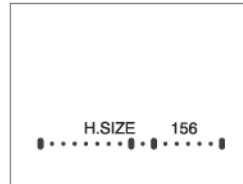


This sends you to the H.SIZE or V.SIZE adjustment mode. The H.SIZE or V.SIZE adjustment scale bar appears on the screen.

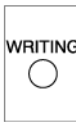
The ◀ and ▶ buttons are also used when adjusting the vertical direction.



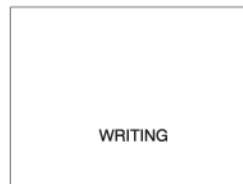
**4** Use the ADJUST ◀ and ▶ buttons to adjust the setting.



The adjustment data values change as the cursor moves. Adjust the screen size to the desired setting.



**5** Press the WRITING button. (This stores the data and completes the adjustment operation.)

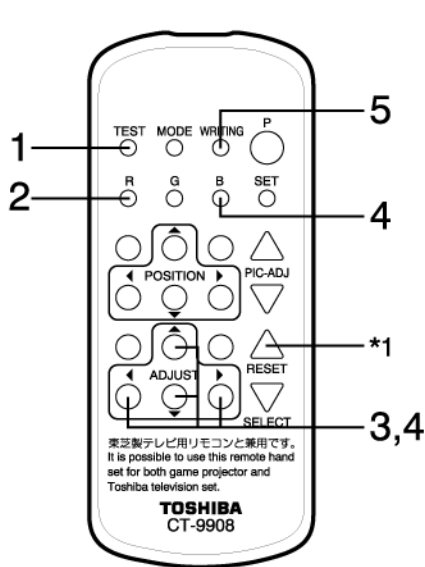


The message "WRITING" appears, and the adjustment data is stored.

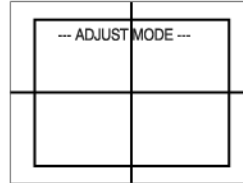
- \*1. To exit the adjustment procedure, select EXIT in Step 2, and then press the SET button.
- \*2. To make the settings for other items in the menu, repeat Steps 2 to 4.
- \*3. If you do not store the new adjustment data, it will be erased when the projector is turned off. Then, when you turn on the projector the next time, the projector will have the previous settings.

# Adjusting the Static Convergence

- \* Static convergence is an adjustment operation where a red and a blue image are each moved so that the entire color overlaps with a green image. Perform this adjustment procedure when the satisfactory color cannot be produced with the automatic color adjustment function.
- \* Before starting this adjustment procedure, perform the automatic centering adjustment operation once.



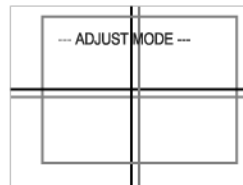
**1** Hold down the TEST button for approximately three seconds.



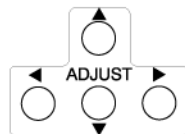
The projector enters ADJUST MODE. A green test pattern appears on the screen.



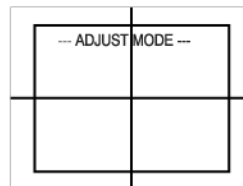
**2** Press the R button to enter red adjustment mode.



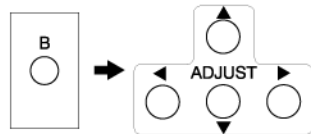
The red test pattern is added to the screen. The color of the frame changes to red to indicate that red can be adjusted.



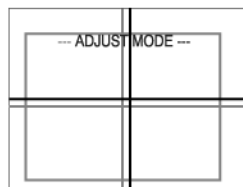
**3** Use the ADJUST ▲, ▼, ◀ and ▶ buttons to adjust.



Perform the adjustment by moving the red pattern so that it overlaps with the green pattern. When red overlaps with green, the pattern appears as yellow.

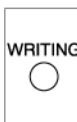


**4** Press the B button to select blue, and then adjust.

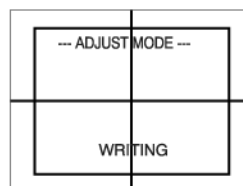


Perform the adjustment for the blue pattern in the same way as the red pattern. When red, green, and blue overlap, the pattern appears as white.

If the color to be adjusted disappears from the screen after pressing a color selection button (R, B), then press the button again to perform adjustment again. (For example, to perform adjustment for red again in Step 4, the R button must be pressed twice.)



**5** Press the WRITING button. (This stores the data and completes the adjustment operation.)

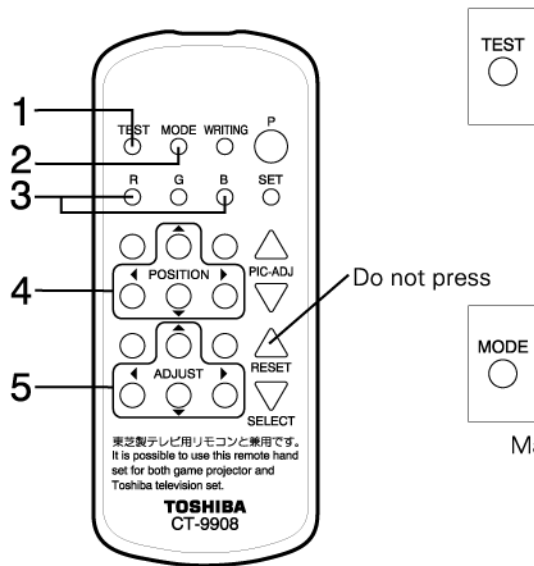


The message "WRITING" appears, and the adjustment data is stored.

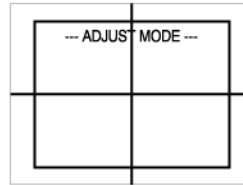
- \*1. Do not press the RESET button.
- \*2. To cancel the adjustments, hold down the TEST button for approximately three seconds before Step 5.
- \*3. If the screen malfunctions due to static electricity or other electrical noise, turn the power off without storing the adjustment data.

## Adjusting the Point Convergence

- \* Point convergence is an adjustment operation where red, green, and blue images are partially moved to align the colors. Adjustment may be necessary when changing game software or changing the screen size.
- \* Before starting this adjustment procedure, perform the automatic centering adjustment operation once.

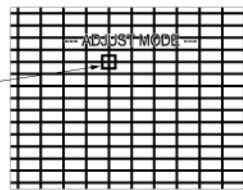


**1** Hold down the TEST button for approximately three seconds.



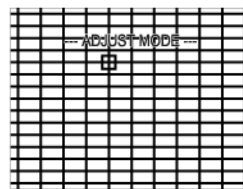
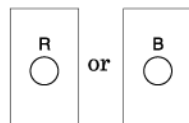
The projector enters ADJUST MODE. A green test pattern appears on the screen.

**2** Press the MODE button twice to enter point adjustment mode.\*



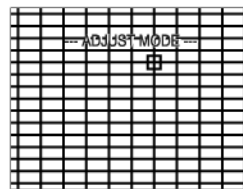
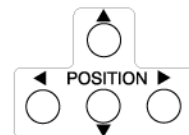
A grid test pattern appears, and a marker is displayed on the grid indicating the adjustment point.

**3** Use the R button or B button to select the color (red or blue) to be adjusted.\*\* (G is also possible.)



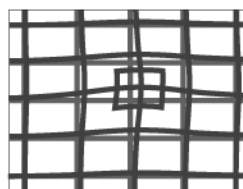
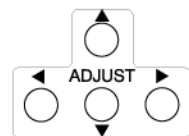
The selected color is displayed overlapped with green. The marker is shown in the selected color.

**4** Move the marker to the adjustment position using the POSITION ▲, ▼, ◀ and ▶ buttons.



The marker moves in the direction of the arrow button. However, the points where the marker can be moved are predetermined.

**5** Use the ADJUST ▲, ▼, ◀ and ▶ buttons to adjust.



Although the area near the marker center moves the most, perform adjustment while also paying attention to the surrounding area. The figure shows an enlarged view of the area near the marker.

\* Repeatedly pressing the MODE button will cycle through the adjustment modes as shown below.

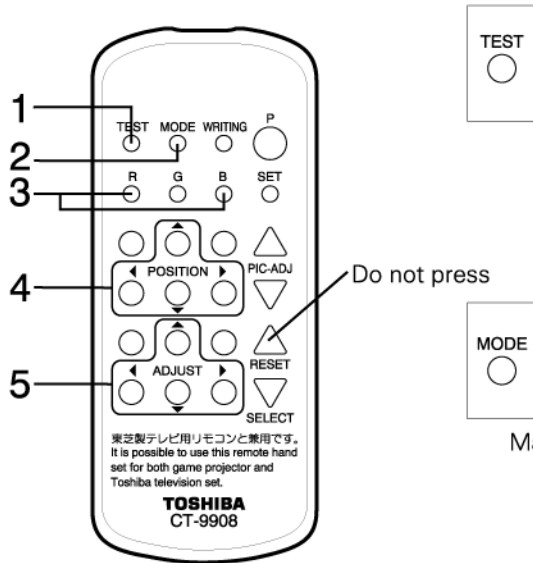
Static Adjustment Mode  
↓  
Line Adjustment Mode  
↓  
Point Adjustment Mode

\*\* If the color to be adjusted disappears from the screen after pressing a color selection button (R, G, B), then press the button again to perform adjustment again.

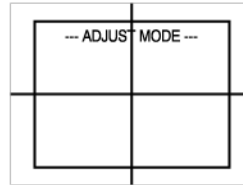
The procedure continues on the next page.

# Adjusting the Point Convergence

- \* Point convergence is an adjustment operation where red, green, and blue images are partially moved to align the colors. Adjustment may be necessary when changing game software or changing the screen size.
- \* Before starting this adjustment procedure, perform the automatic centering adjustment operation once.

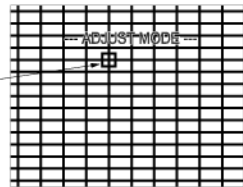


**1** Hold down the TEST button for approximately three seconds.



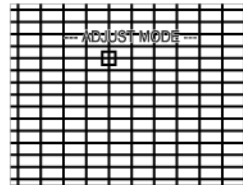
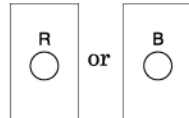
The projector enters ADJUST MODE. A green test pattern appears on the screen.

**2** Press the MODE button twice to enter point adjustment mode.\*



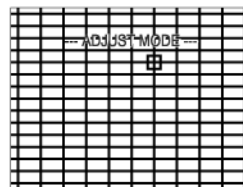
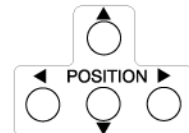
A grid test pattern appears, and a marker is displayed on the grid indicating the adjustment point.

**3** Use the R button or B button to select the color (red or blue) to be adjusted.\*\* (G is also possible.)



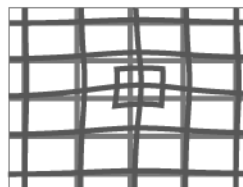
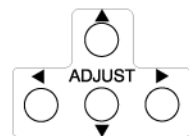
The selected color is displayed overlapped with green. The marker is shown in the selected color.

**4** Move the marker to the adjustment position using the POSITION ▲, ▼, ◀ and ▶ buttons.



The marker moves in the direction of the arrow button. However, the points where the marker can be moved are predetermined.

**5** Use the ADJUST ▲, ▼, ◀ and ▶ buttons to adjust.



Although the area near the marker center moves the most, perform adjustment while also paying attention to the surrounding area. The figure shows an enlarged view of the area near the marker.

\* Repeatedly pressing the MODE button will cycle through the adjustment modes as shown below.

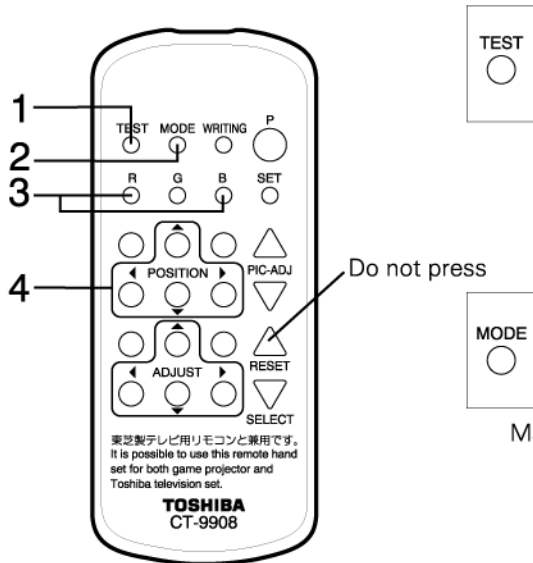
Static Adjustment Mode  
↓  
Line Adjustment Mode  
↓  
Point Adjustment Mode

\*\* If the color to be adjusted disappears from the screen after pressing a color selection button (R, G, B), then press the button again to perform adjustment again.

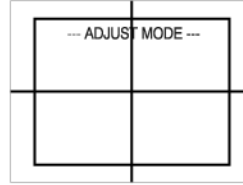
The procedure continues on the next page.

# Adjusting the Line Convergence

Line convergence is an adjustment operation which moves a vertical row or horizontal row of adjustment points in a single operation. This adjustment is useful when the rows show a uniform color misalignment.

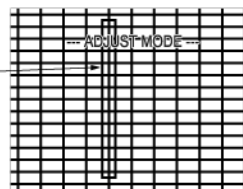


**1** Hold down the TEST button for approximately three seconds.



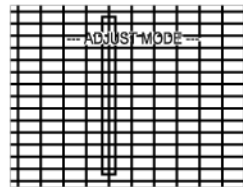
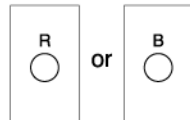
The projector enters ADJUST MODE. A green test pattern appears on the screen.

**2** Press the MODE button once to enter line adjustment mode.\*



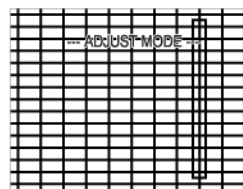
A grid test pattern appears, and a vertical line marker is displayed on the grid.

**3** Use the R button or B button to select the color (red or blue) to be adjusted.\*\* (Be careful not to press G.)

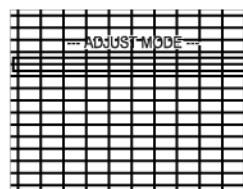


The selected color is displayed overlapped with green. The marker is shown in the selected color.

**4** Move the marker to the adjustment position using the POSITION ▲, ▼, ◀ and ▶ buttons.



Pressing the ◀ or ▶ button will select vertical row adjustment. The marker moves to the right or left according to the buttons. However, the points where the marker can be moved are predetermined.



Pressing the ▲ or ▼ button will select horizontal row adjustment. The marker moves up or down according to the buttons. However, the points where the marker can be moved are predetermined.

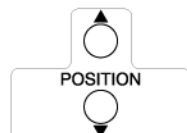
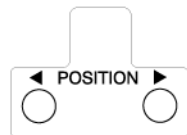
\*

Repeatedly pressing the MODE button will cycle through the adjustment modes as shown below.

Static Adjustment Mode  
↓  
Line Adjustment Mode  
↓  
Point Adjustment Mode

\*\*

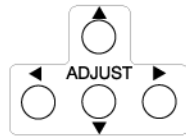
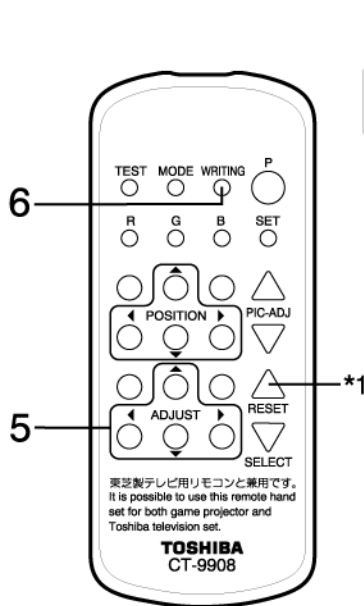
If the color to be adjusted disappears from the screen after pressing a color selection button (R, G, B), then press the button again to perform adjustment again.



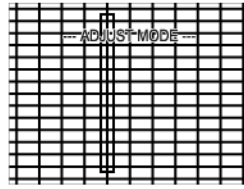
The procedure continues on the next page.



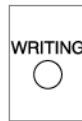
## Adjusting the Line Convergence -- Continued



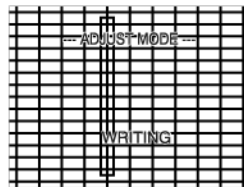
**5** Use the ADJUST ▲, ▼, ◀ and ▶ buttons to adjust.



You can use these buttons to move the selected vertical row or horizontal row (the example in the figure shows a vertical row) in the horizontal and vertical direction as required.



**6** Press the WRITING button when all the adjustments are completed. (This stores the data and completes the adjustment operation.)



The message "WRITING" appears, and the adjustment data is stored. After storing the data, the screen returns to the game screen.

\*1. Do not press the RESET button.

\*2. To cancel the adjustments, hold down the TEST button for approximately three seconds before Step 7.

\*3. If the screen malfunctions due to static electricity or other electrical noise, turn the power off without storing the adjustment data.



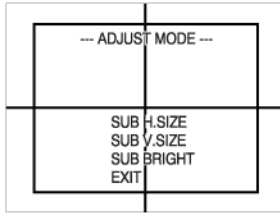
**CAUTION**

Do not under any circumstances use the convergence adjustment function (particularly line convergence adjustment) while changing the size of the screen.

The increase in power load may cause the circuits to break down.

Once the new convergence adjustment data is stored, there is no way to retrieve the original adjustment data. Also, do not perform line convergence adjustment for the green pattern, because this could gradually change the screen size over time as a result of convergence adjustment.

## Other Remote Control Adjustments



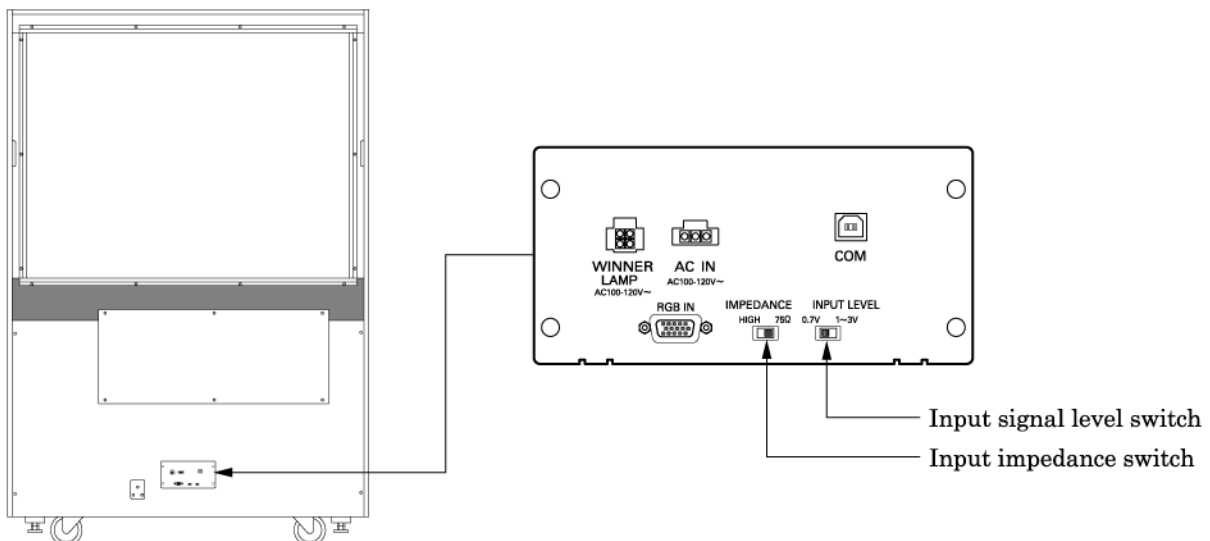
When the projector is in convergence adjust mode, pressing the PIC-ADJ ▲ or ▼ button will display the adjustment menu shown in the figure at left. When the specified game signal is being input, this adjustment menu is used for adjusting to the specified image size and darkness level when the user adjustment menu H.SIZE, V.SIZE, and BRIGHTNESS adjustment data has been set to 128. (The user does not adjust this menu.)

- If this adjustment menu appears unintentionally when operating the remote control, select EXIT with the PIC-ADJ ▲ or ▼ buttons, and then press the SET button to exit the menu.
- When the projector was repaired, the items in these menus need to be checked and adjusted (See page 35 and 37).

## Game System Interface Settings

The setting panel for the signal interface connecting the game system and projector is on the front of the projector. The settings for the input level and input impedance in the projector are made according to the output level and output impedance of the image signal from the game system. If the proper settings are not made, the image contrast will not be able to be adjusted properly, and the image quality will be reduced.

\* The synchronizing signal is compatible only with the negative polarity TTL level and cannot be changed.



The factory settings are INPUT LEVEL: 0.7V, IMPEDANCE: 75Ω. However, these settings can be changed if necessary such as when replacing the game system or game software.

After changing the settings, input a half-tone signal or other test pattern from the game system in order to re-adjust the contrast to the optimum state.

The figure above shows the projector before it is installed in the game system. If performing work on the projector when it is installed in the game system, remove the front cover according to the servicing documents issued by the game manufacturer.