

SAMMY GAME CARTRIDGE SYSTEM



OPERATION MANUAL

**25" VIDEO GAME
DEDICATED CABINET**



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1. SPECIFICATIONS OF CABINET

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

**SIZE: W = 30" (762 mm)
D = 37" (940 mm)
H = 77" (1956 mm)**

WEIGHT: 385 lbs (175 kg)



1. SPECIFICATIONS OF CABINET

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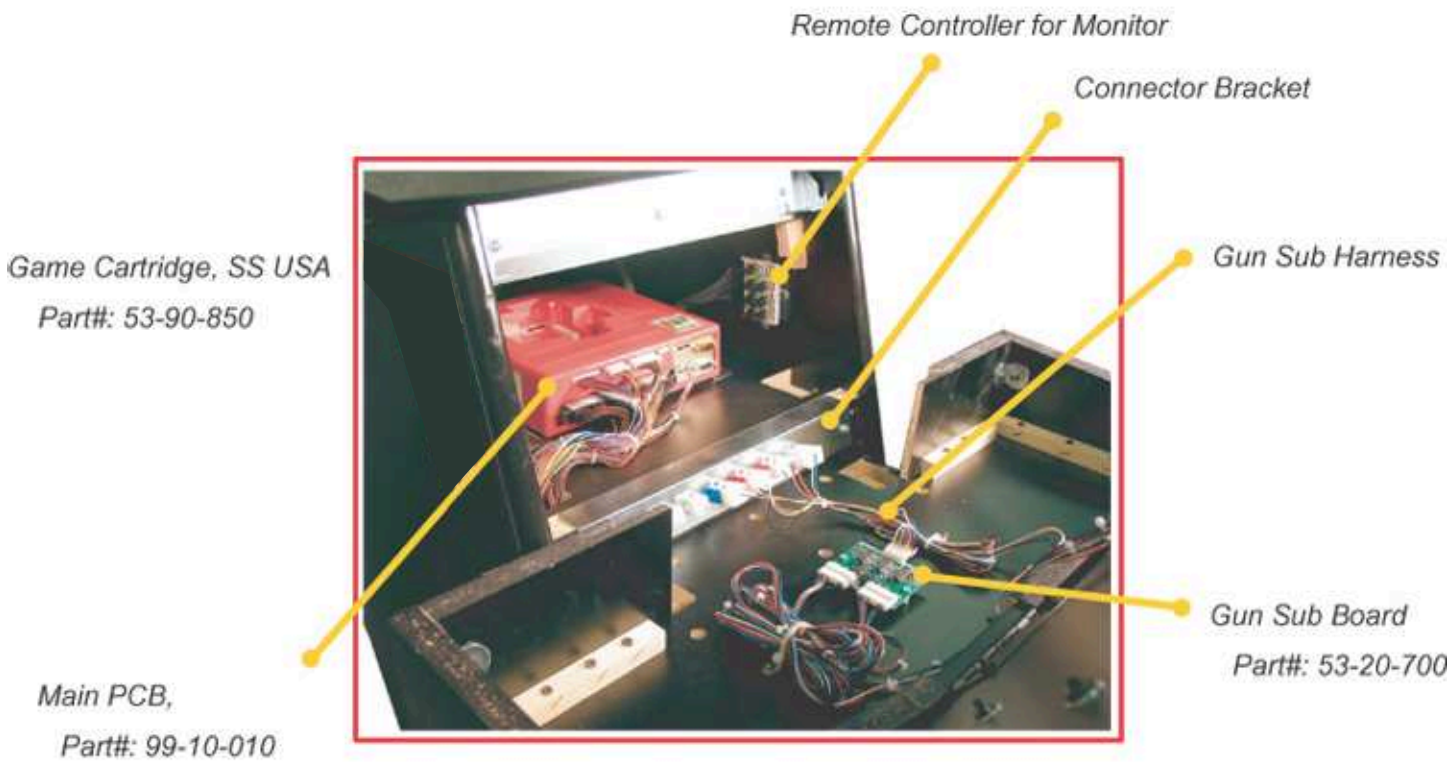
D = 37" (940 mm)

H = 77" (1956 mm)

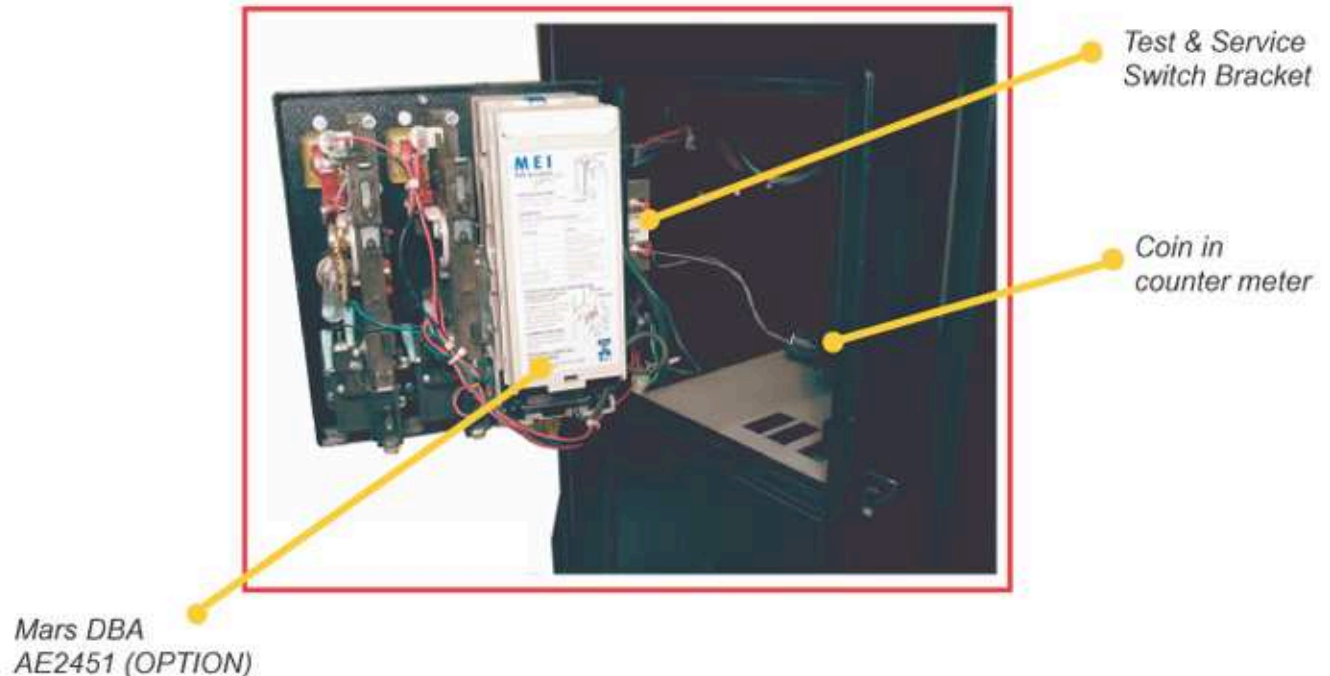
WEIGHT: 385 lbs (175 kg)



INSIDE VIEW OF CONTROL PANEL & INSTRUCTION PANEL



INSIDE VIEW OF COIN DOOR



2. GAME PLAY

Insert coin(s).

Shoot using gun scope to select Category from SPEED, PRECISION, MARKSMAN, and TRAINING.

SPEED: Mainly Steel targets

PRECISION: Mainly Human shaped targets

MARKSMAN: Mainly Bullseye type targets

TRAINING: Mix of above targets. (Easy)



Shoot using gun scope to choose DIVISION from 4 kinds.

(OPEN, STANDARD, MODIFIED and REVOLVER. Each division uses a different GUN.)

SPEED & PRECISION

(Competitor, Trojan, Edge and Revolver w/compensator)



MARKSMAN

(Grandmaster, Xcaliber, Executive and Revolver w/scope)



Each DIVISION has 8 stages. Shoot and hit each target to get points.

Register your initials when you rank in top 20.



HIT EACH TARGET!



**DON'T SHOOT
BLACK AREA!**



**DON'T SHOOT
RED-X TARGET!**

3. GAME SETTING

Sports Shooting USA has dedicated GAME SETTINGS. Press TEST switch to display "SYSTEM MENU" screen. Go to "CONFIGURATION" and Select "GAME SETTING." You can adjust following game settings:

■ LIFE

2 kinds. (2 or 3) Lose one LIFE when player does not qualify in each stage.

■ DIFFICULT(QUALIFY POINT)

3 kinds. (EASY, NORMAL and HARD) Default is NORMAL.

■ MERCURY (ball) SWITCH CHECK

2 kinds. (ENABLE or DISABLE) Default is DISABLE. When ENABLE, player must drop Scope Gun down before starting each stage.

■ AUTO RELOAD

2 kinds. (ENABLE or DISABLE) Default is ENABLE. When DISABLE, player must shoot out of screen to re-load bullets of gun.



COIN SETTING: FACTORY DEFAULTS for Sports Shooting USA:
(NORTH AMERICAN VERSION)

GAME MODE: NORMAL

COIN CHUTE TYPE: COMMON

PLAYER MODE: 2 PLAYERS

COIN CHUTE #A: 2 COINS 1 CREDIT, 2 COINS CONTINUE

COIN CHUTE #B: 2 COINS 1 CREDIT, 2 COINS CONTINUE

PRESET SITUATION: NORMAL

4. CALIBRATION OF GUN SCOPE

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

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.

After pulling trigger, screen goes to calibration mode. Screen shows a "White square" in the top left corner of screen. (Fig.2) Shoot center of this box using 1 player scope gun.

Then the White Square will move to the right bottom of the screen. (Fig.3) Shoot center of this box using 1 player scope gun.

The White square will move to center of the screen. (Fig.4)

Shoot center of this white square using 1 player scope gun to complete 1 player's gun calibration.

Then the screen will go to 2 player gun calibration automatically.

This is the same movements as above 1 player gun adjustment. Shoot each of the 3 positions of White square using 2 player scope gun.

After finished with above, pull trigger 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)

Fig.1



Fig.2

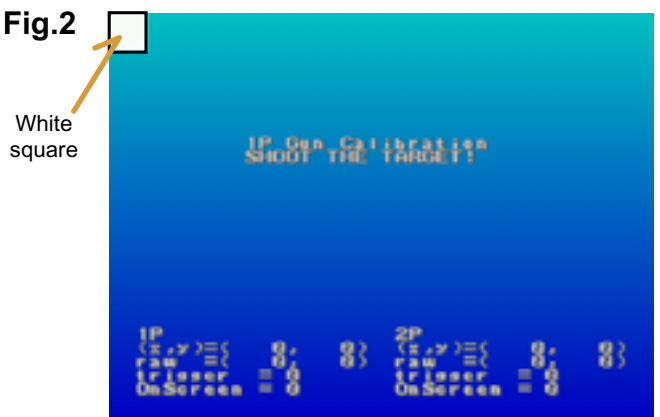


Fig.3

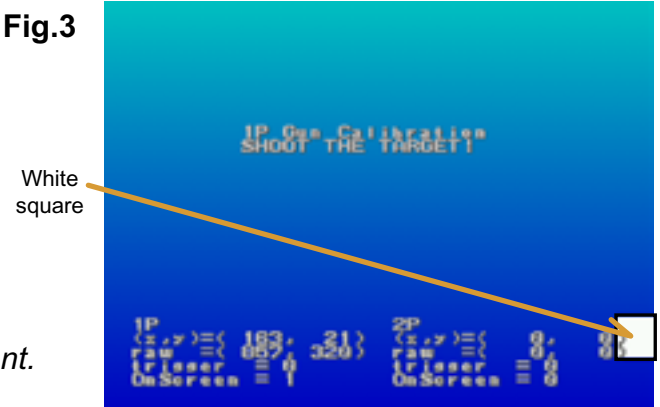
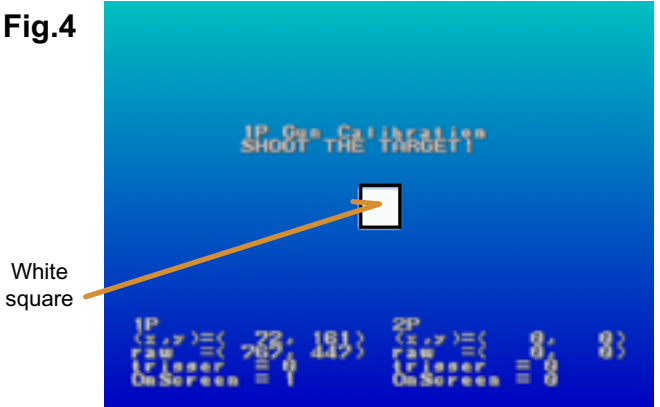


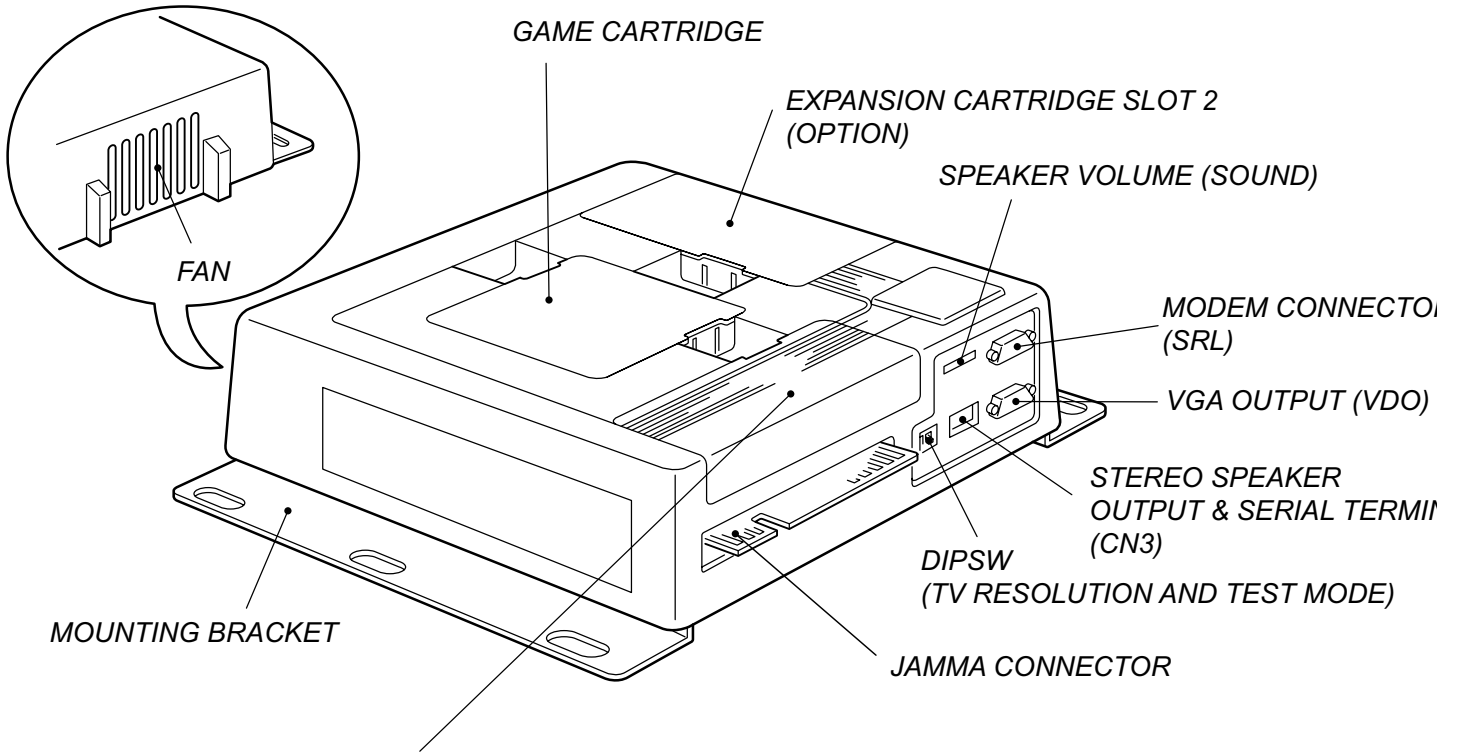
Fig.4



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.

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

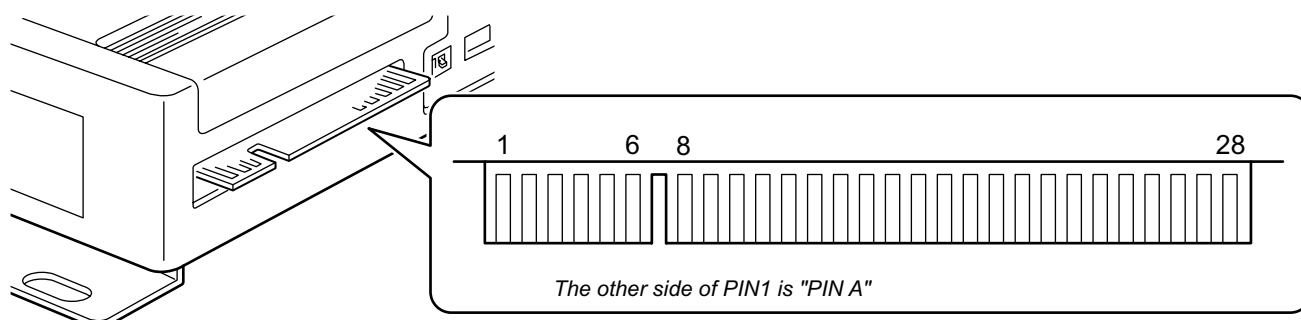
CN304: 12 PIN CONNECTOR

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

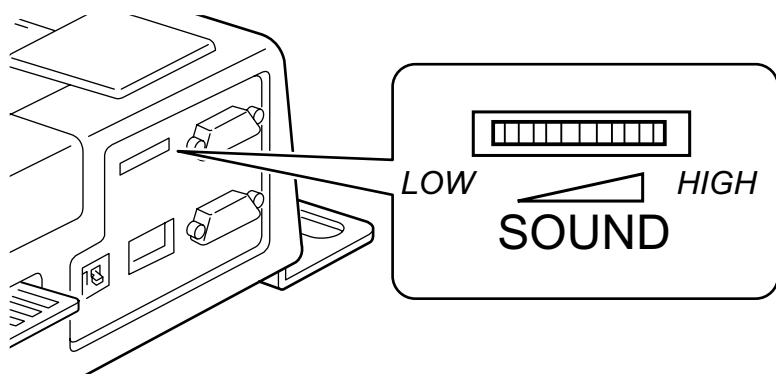
■ JAMMA CONNECTOR TABLE



JAMMA EDGE CONNECTOR (56 PINS)

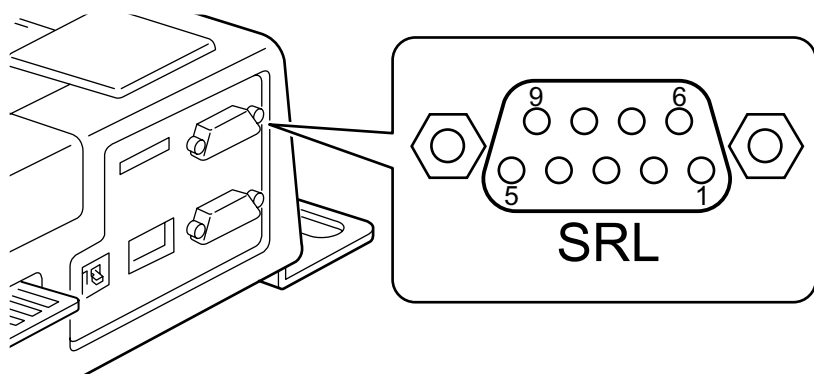
No.	FUNCTION	I/O	No.	FUNCTION	I/O
1	GND	-	A	GND	-
2	GND	-	B	GND	-
3	+5V	IN	C	+5V	IN
4	+5V	IN	D	+5V	IN
5	N.C.	-	E	N.C.	-
6	+12V	IN	F	+12V	IN
7	N.C.	-	H	N.C.	-
8	1P COIN COUNTER	OUT	J	2P COIN COUNTER	OUT
9	1P COIN LOCKOUT	OUT	K	2P COIN LOCKOUT	OUT
10	MONO SPEAKER (+)	OUT	L	MONO SPEAKER (-)	OUT
11	AUDIO OUT	OUT	M	AUDIO GND	-
12	VIDEO RED	OUT	N	VIDEO GREEN	OUT
13	VIDEO BLUE	OUT	P	VIDEO SYNC	OUT
14	VIDEO GND	-	R	SERVICE SW	IN
15	TEST SW	IN	S	TILT SW	IN
16	1P COIN	IN	T	2P COIN	IN
17	1P START	IN	U	2P START	IN
18	1P UP	IN	V	2P UP	IN
19	1P DOWN	IN	W	2P DOWN	IN
20	1P LEFT	IN	X	2P LEFT	IN
21	1P RIGHT	IN	Y	2P RIGHT	IN
22	1P PUSH1	IN	Z	2P PUSH1	IN
23	1P PUSH2	IN	a	2P PUSH2	IN
24	1P PUSH3	IN	b	2P PUSH3	IN
25	1P PUSH4	IN	c	2P PUSH4	IN
26	1P PUSH5	IN	d	2P PUSH5	IN
27	GND	-	e	GND	-
28	GND	-	f	GND	-

■ **SPEAKER VOLUME (SOUND)**



Use for adjusting game sound

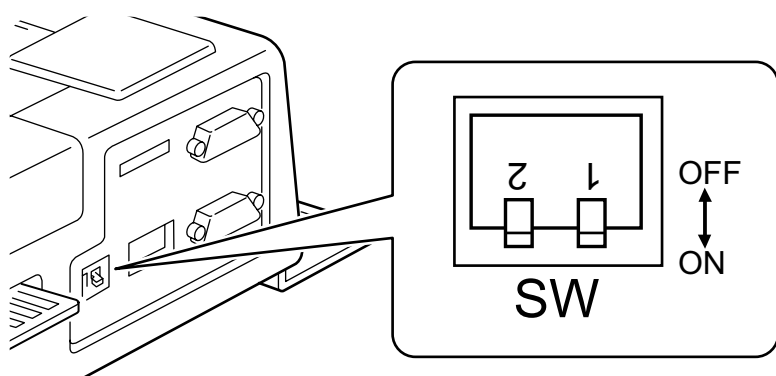
■ **MODEM CONNECTOR (SRL) >>> OPTION**



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)**

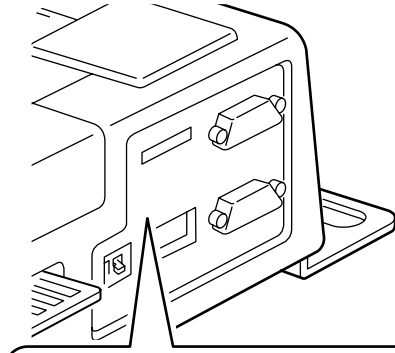


SW-1: Change Frequency of TV signal.
Default is OFF = 15KHz*
*For Standard = Low resolution monitor

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

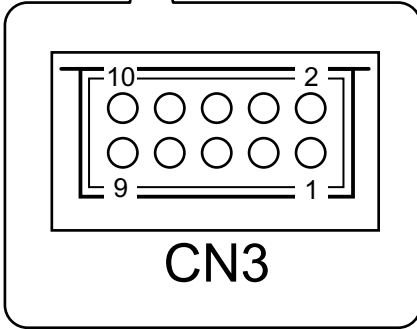
	ON	OFF
SW-1	31KHZ	15KHZ
SW-2	SYSTEM MENU MODE	GAME MODE

■ STEREO SPEAKER OUTPUT CONNECTOR (OPTION)



NOTE:

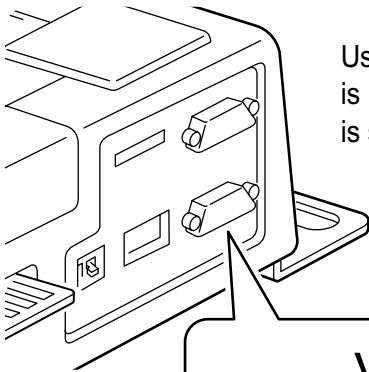
Can not use JAMMA speaker output & STEREO speaker output at same time.



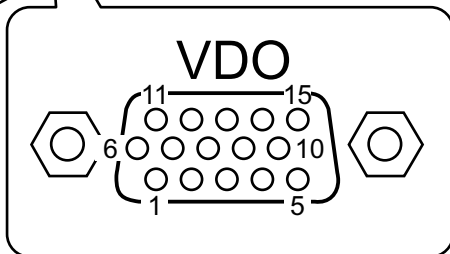
STEREO SPEAKER OUTPUT & EXTENSION SERIAL CONNECTOR, PIN LAYOUT
(JST, 10 PIN PHD CONNECTOR)

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



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



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

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.	-

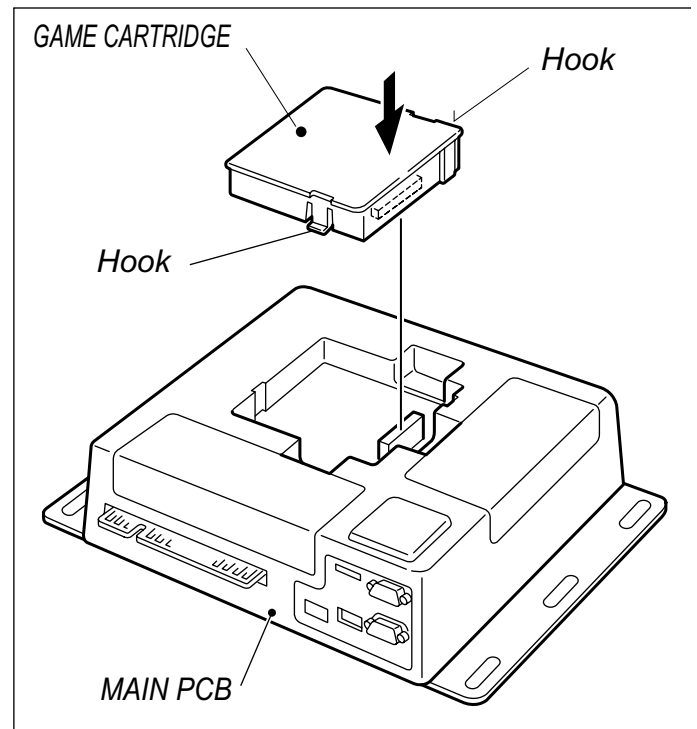
■ GAME CARTRIDGE

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.

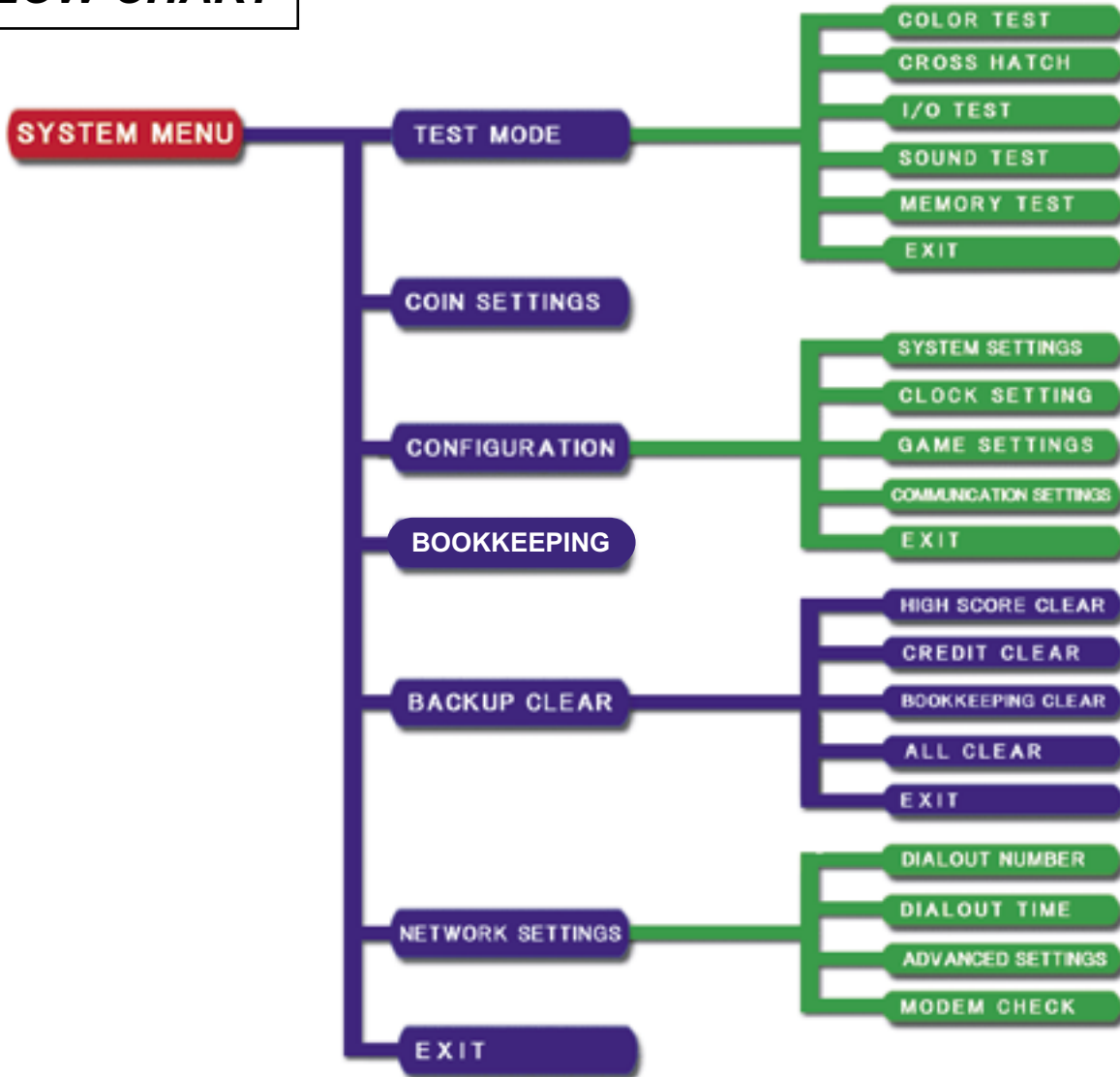


6. SYSTEM MENU

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.

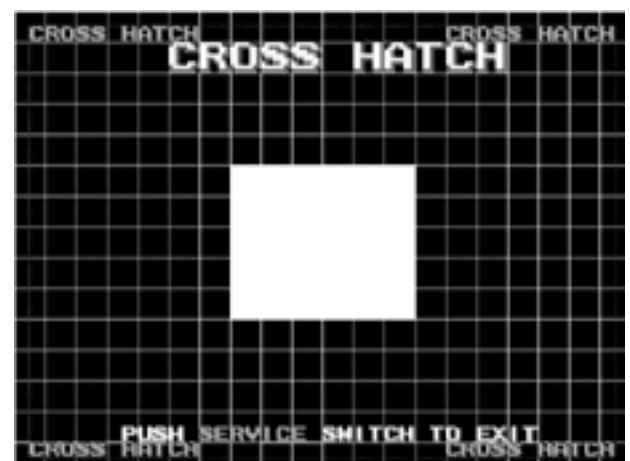
Press SERVICE switch to go back to TEST MODE screen



CROSS HATCH

Use for Size adjustment of monitor.

Press SERVICE switch to go back to TEST MODE screen



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*



COIN SETTING

WARNING: ALL CREDIT DATA WILL BE LOST WHEN MAKING THE FOLLOWING CHANGES!

GAME MODE

Select *FREE PLAY* or *NORMAL*. Move cursor to *GAME MODE* then press *SERVICE* switch to select "*NORMAL (COIN OPERATION)*" or "*FREE PLAY.*"
(Refer Fig.B and C)

COIN CHUTE TYPE

Select *COMMON* or *INDIVIDUAL*. Move cursor to *COIN CHUTE TYPE* then press *SERVICE* switch to select "*COMMON*" or "*INDIVIDUAL*" mode.
(Refer Fig.A and B)



Fig. A



Fig. B

WHEN COIN CHUTE TYPE IS "COMMON"

Credit(s) will display all in one place on screen. Move cursor to coin chute A or B then press SERVICE switch to change setting number. Able to set up coin chute A and B separately. Select SAVE & EXIT to go back to SYSTEM MENU.

WHEN COIN CHUTE TYPE IS "INDIVIDUAL"

Credit(s) will display on screen by players. Move cursor to coin chute A or B then press SERVICE switch to change setting number. Unable to set up coin chute A and B separately. Coin chute A & B will be same setting. Select SAVE & EXIT to go back to SYSTEM MENU.



Fig. C

PRESET SITUATION

There is 53 kinds of coin settings.
 When PRESET SITUATION is NORMAL,
 you can select from 14 kinds. (#00 to #09 and
 #45 to #48.) This is basic coin settings line-up.
 When PRESET SITUATION is ADVANCE,
 you can choose from all 53 kinds as shown
 below.

NO	COIN SETTING
#00	1 COIN 1 CREDIT / 1 COIN CONTINUE
#01	2 COINS 1 CREDIT / 1 COIN CONTINUE
#02	2 COINS 1 CREDIT / 2 COINS CONTINUE
#03	3 COINS 1 CREDIT / 1 COIN CONTINUE
#04	3 COINS 1 CREDIT / 2 COINS CONTINUE
#05	3 COINS 1 CREDIT / 3 COINS CONTINUE
#06	4 COINS 1 CREDIT / 1 COIN CONTINUE
#07	4 COINS 1 CREDIT / 2 COINS CONTINUE
#08	4 COINS 1 CREDIT / 3 COINS CONTINUE
#09	4 COINS 1 CREDIT / 4 COINS CONTINUE
#10	5 COINS 1 CREDIT / 1 COIN CONTINUE
#11	5 COINS 1 CREDIT / 2 COINS CONTINUE
#12	5 COINS 1 CREDIT / 3 COINS CONTINUE
#13	5 COINS 1 CREDIT / 4 COINS CONTINUE
#14	5 COINS 1 CREDIT / 5 COINS CONTINUE
#15	6 COINS 1 CREDIT / 1 COIN CONTINUE
#16	6 COINS 1 CREDIT / 2 COINS CONTINUE
#17	6 COINS 1 CREDIT / 3 COINS CONTINUE
#18	6 COINS 1 CREDIT / 4 COINS CONTINUE
#19	6 COINS 1 CREDIT / 5 COINS CONTINUE
#20	6 COINS 1 CREDIT / 6 COINS CONTINUE
#21	7 COINS 1 CREDIT / 1 COIN CONTINUE
#22	7 COINS 1 CREDIT / 2 COINS CONTINUE
#23	7 COINS 1 CREDIT / 3 COINS CONTINUE
#24	7 COINS 1 CREDIT / 4 COINS CONTINUE
#25	7 COINS 1 CREDIT / 5 COINS CONTINUE
#26	7 COINS 1 CREDIT / 6 COINS CONTINUE
#27	7 COINS 1 CREDIT / 7 COINS CONTINUE



NO	COIN SETTING
#28	8 COINS 1 CREDIT / 1 COIN CONTINUE
#29	8 COINS 1 CREDIT / 2 COINS CONTINUE
#30	8 COINS 1 CREDIT / 3 COINS CONTINUE
#31	8 COINS 1 CREDIT / 4 COINS CONTINUE
#32	8 COINS 1 CREDIT / 5 COINS CONTINUE
#33	8 COINS 1 CREDIT / 6 COINS CONTINUE
#34	8 COINS 1 CREDIT / 7 COINS CONTINUE
#35	8 COINS 1 CREDIT / 8 COINS CONTINUE
#36	9 COINS 1 CREDIT / 1 COIN CONTINUE
#37	9 COINS 1 CREDIT / 2 COINS CONTINUE
#38	9 COINS 1 CREDIT / 3 COINS CONTINUE
#39	9 COINS 1 CREDIT / 4 COINS CONTINUE
#40	9 COINS 1 CREDIT / 5 COINS CONTINUE
#41	9 COINS 1 CREDIT / 6 COINS CONTINUE
#42	9 COINS 1 CREDIT / 7 COINS CONTINUE
#43	9 COINS 1 CREDIT / 8 COINS CONTINUE
#44	9 COINS 1 CREDIT / 9 COINS CONTINUE
#45	1 COIN 2 CREDITS
#46	1 COIN 3 CREDITS
#47	1 COIN 4 CREDITS
#48	1 COIN 5 CREDITS
#49	1 COIN 6 CREDITS
#50	1 COIN 7 CREDITS
#51	1 COIN 8 CREDITS
#52	1 COIN 9 CREDITS

PLAYER MODE

Choose from 2 PLAYERS or 4 PLAYERS. When 2 PLAYERS, COIN CHUTE A (Left) is for
 1 Player, COIN CHUTE B (Right) is for 2 player.
 When 4 PLAYERS, COIN CHUTE A (Left) for 1 & 2 players, COIN CHUTE B (Right) for
 3 & 4 players.

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: Select from following:
(English or Japanese)

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

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.

TOTAL COIN: Total coins of COIN #A + COIN #B.

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: Number of NETWORK plays.



BACKUP CLEAR

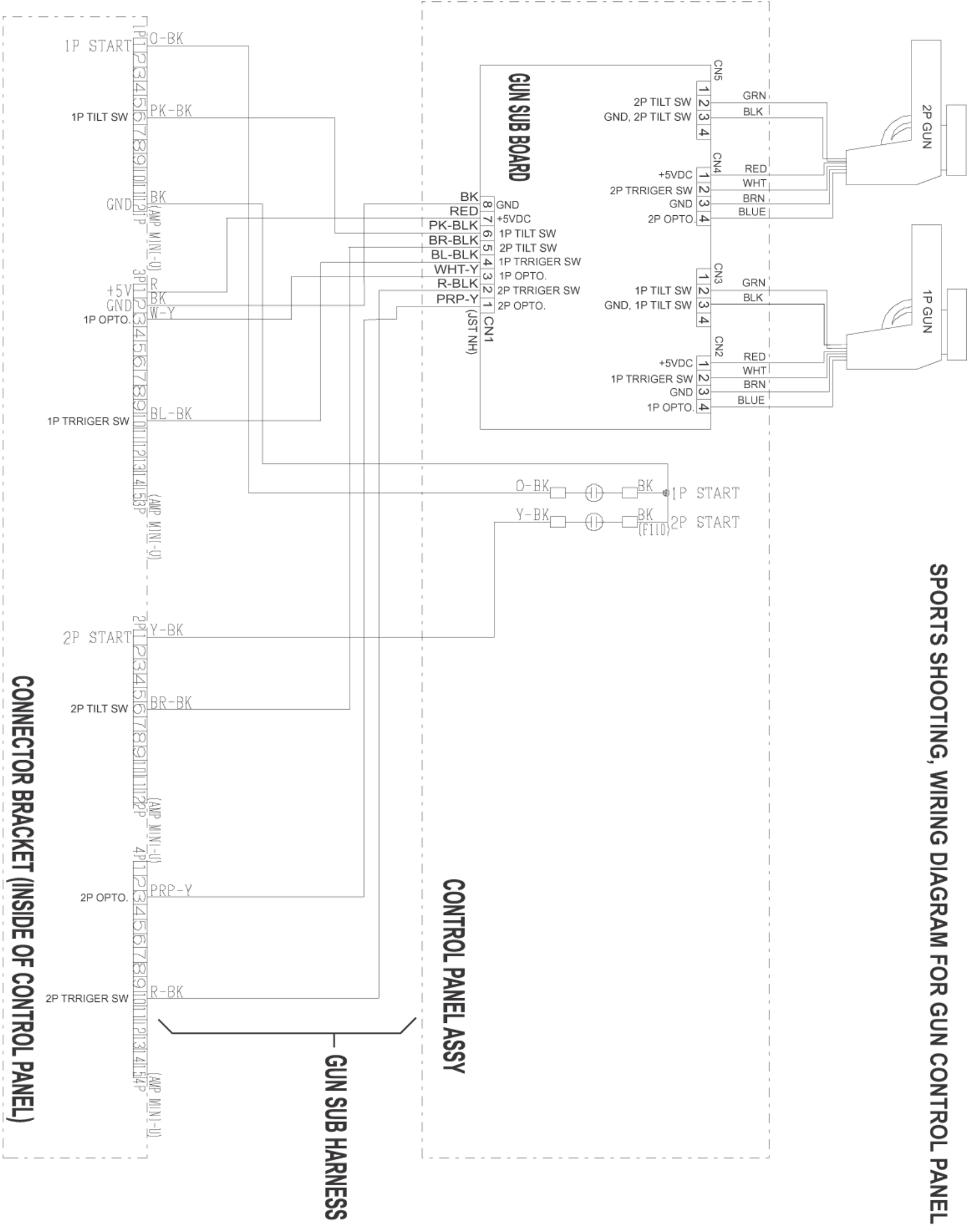
Clear following data in MAIN PCB.
(HIGH SCORE, CREDIT CLEAR,
BOOKKEEPING CLEAR and ALL CLEAR)

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.



SPORTS SHOOTING, WIRING DIAGRAM FOR GUN CONTROL PANEL





SPORTS SHOOTING USA 25" DEDICATED CABINET

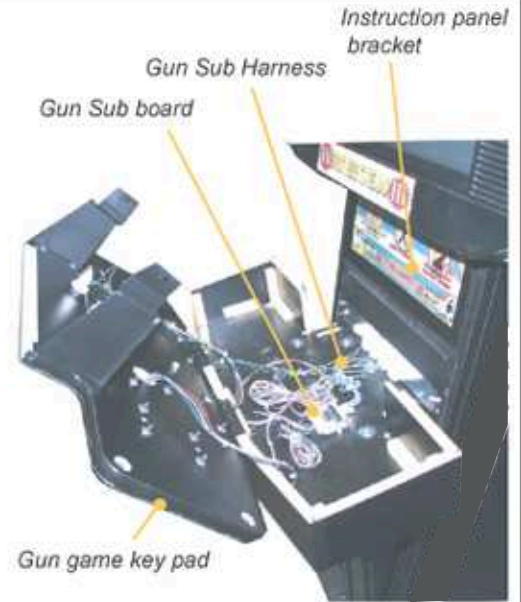
CONVERION INSTRUCTION FROM GUN GAME TO JOYSTICK GAME

KEY PAD, GAME CARTRIDGE AND INSTRUCTION SHEET EXCHANGE

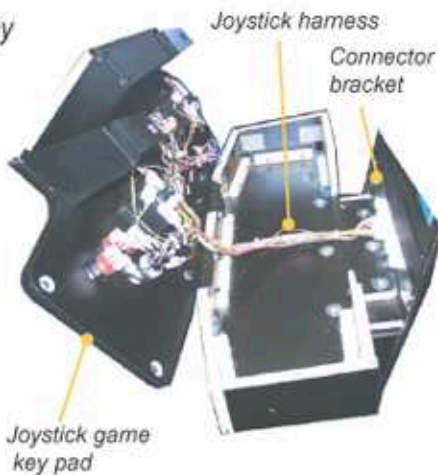


1) Open Coin door and latches off to open control panel key pad.

2) Screws off Gun Sub board, harnesses from control panel base. Take off 4 sets of screws & nuts from hinges to remove Gun game key pad and all harnesses.



3) Re-mount Joystick key pad to hinges. Connect Joystick harness to connector bracket.

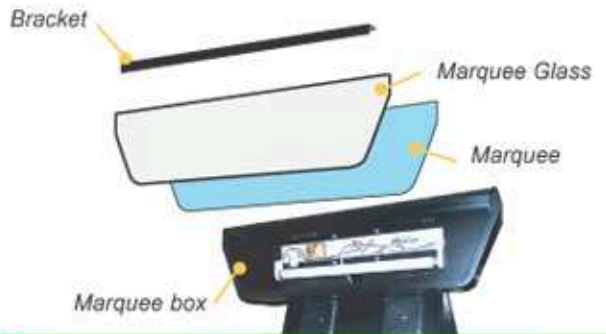


4) Remove 2 screws to open Instruction panel bracket. (Slide out to exchange instruction sheet.)



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

MARQUEE EXCHANGE



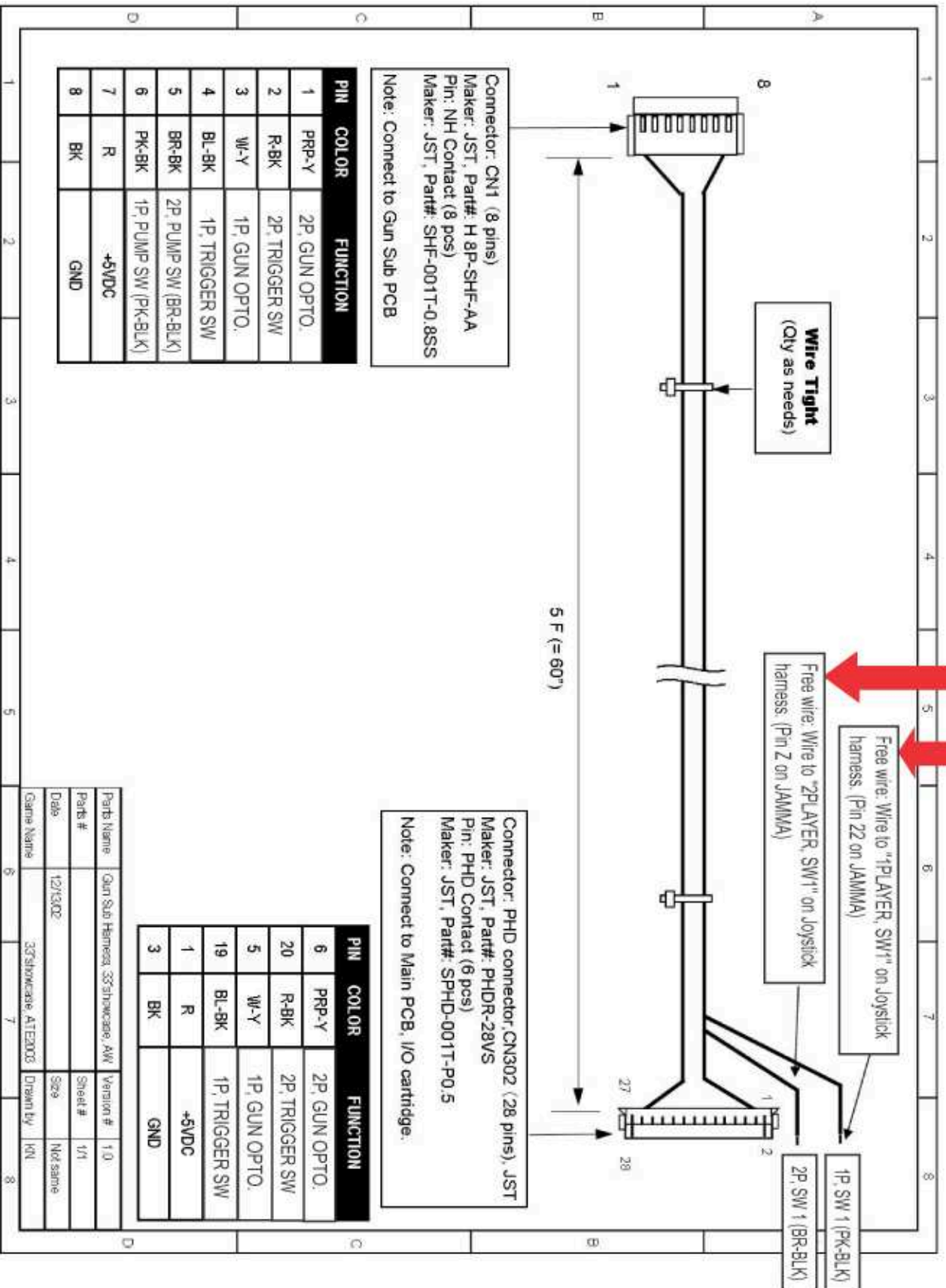
6) Remove 3 of tamper screws & bracket off from top of marquee box to exchange marquee.

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



Gun Sub Harness (For KIT), AW

NOTE: Please wire these 2 wires to your JAMMA connector when you use SAMMY 27" PUMP SHOT GUN.



Connector: CN1 (8 pins)
 Maker: JST, Part#: H 8P-SHF-AA
 Pin: NH Contact (8 pos)
 Maker: JST, Part#: SHF-001T-0.8SS
 Note: Connect to Gun Sub PCB

PIN	COLOR	FUNCTION
1	PRP-Y	2P, GUN OPTO.
2	R-BK	2P, TRIGGER SW
3	W-Y	1P, GUN OPTO.
4	BL-BK	1P, TRIGGER SW
5	BR-BK	2P, PUMP SW (BR-BLK)
6	PK-BK	1P, PUMP SW (PK-BLK)
7	R	+5VDC
8	BK	GND

Connector: PHD connector, CN302 (28 pins), JST
 Maker: JST, Part#: PHDR-28VS
 Pin: PHD Contact (6 pcs)
 Maker: JST, Part#: SPHD-001T-P0.5
 Note: Connect to Main PCB, I/O cartridge.

PIN	COLOR	FUNCTION
6	PRP-Y	2P, GUN OPTO.
20	R-BK	2P, TRIGGER SW
5	W-Y	1P, GUN OPTO.
19	BL-BK	1P, TRIGGER SW
1	R	+5VDC
3	BK	GND

Parts Name	Gun Sub Harness, 335Shwacare, AW	Version #	1.0
Parts #		Sheet #	1/1
Date	12/13/02	Size	Not same
Game Name	335Shwacare, ATE2003	Drawn by	KN