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No 950357

## Technical Information

- (1) Required power capacity GND-Vcc 5V 4A or more GND-(+12V)
  - \* See the Wiring Diagram.
- (2) Output

R(red) analog, positive

G(green) analog, positive

B(blue) analog, positive

SYNC. H-V complexed, negative

- (3) The monitor should be horizontally installed.
- (4) Use the volume knob on the PCB to adjust sound level. Turn the knob clockwise for increased volume. In monaural output mode, use the left volume knob.
- (5) Handle with care.

# Play Instruction

- 1 or 2 Player Game.
- Second player can join at any time.
  - \* Shoot the enemy forces using SHOOT button. When enemy forces have been obliterated, power items appear.

Capture them for extra destructive power.

\*There are 10 power items;

Speed Up----Increase your speed up to 6 levels.

Normal Bomb ...... Increase your power of destruction to 3 levels.

Vulcan Bomb ..... Speed and number of bullets is increased.

Boomerang Laser ..... A straight laser which bounces off any surface.

Twin Laser ..... Fire both backwards and forwards with one shot.

Option ...... Maximum Options available for two players is four.

Options cannot be destroyed even when attacked.

Use OPTION ADJUST button to adjust distance.

Bonus Score .... Extra points will be awarded.

(special power up)

Fire bird Laser ...... Shoot out Fire Bird.

Macro Laser ..... Fire deadly electron beams.

Nuke Bomb ····· Big forward explosion.

These three special weapons cannot be used without an option and is limited. Fire with OPTION ADJUST button.

\*There are 7 stages in all. Continuation is available by inserting additional coins and pressing start button within the given time, but not in the final stage.

## Cabinet Information

Use a dual control upright cabinet with a start button, an 8-way joystick and two function buttons for each player.















8-WAY

SHOOT

OPTION ADJUST

8-WAY

SHOOT

OPTION ADJUST

## Self Test

Normal

: OK will be displayed. Then the game will start.

Abnormal: BAD will be displayed and self test will repeat itself. If '17F BAD' is displayed, switch off and switch on

again with TEST SWITCH (on the PCB) pressed.

## Manual Test

### (I) HOW TO START

After switching on the power, press the TEST SWITCH on the PCB or on the cabinet, and you will get the MENU SCREEN of the Manual Test.

<NOTE> Switching on with TEST SWITCH pressed causes the program in the EEPROM to be initialized to default.

(2) HOW TO RETURN TO THE GAME MODE

Select "EXIT" on the MENU SCREEN to return to the game mode.

(3) ITEMS AND HOW TO SELECT

Move arrow with 1P JOYSTICK to desired test and press 1P SHOOT button to begin. Select "EXIT" to return to the MENU SCREEN.

- 1. ROM CHECK
- 2. SCREEN CHECK
- 3. COLOR CHECK
- 4, I/O CHECK
- 5. MUSIC CHECK
- 6. SOUND CHECK
- 7, COIN, GAME OPTIONS
- 8. EXIT

#### (4) EXPLANATION OF THE ITEMS

## I. ROM CHECK

Roms will be checked one after another, and the message 'OK' or 'BAD' and check-sums will be displayed on the screen.

In this test only, you cannot return to the MENU SCREEN until the test is through.

#### 2. SCREEN CHECK

Adjust focus, alignment, size, etc. using the cross-hatch screen.

### 3. COLOR CHECK

Adjust color brightness.

#### 4. I/O CHECK

Check all the joysticks and buttons to see "I" when switched on.

### 5. MUSIC CHECK

Select "NEXT MUSIC" to change music.

## 6. SOUND CHECK

Next sound code is called automatically. Select "NEXT SOUND" to change it quicker.

### 7. COIN, GAME OPTIONS

Following screen will appear. Use JOYSTICK to select the option to modify and press SHOOT button. After modification is completed in the sub-screen, select EXIT to save and return to this screen.

## 7. COIN, GAME OPTIONS

7-1. COIN SETTING 1P 1 COIN 1 CREDIT 7-2. COIN SETTING

2P 1 COIN 1 CREDIT

7-3. NUMBER OF PLAYERS 3 PLAYERS

7-4. DIFFICULTY

7-5. SOUND IN ATTRACT MODE ON

7-6. VIDEO SCREEN FLIP NORMAL

7-7. SOUND OUTPUT

MONAURUL

7-8. FACTORY SETTING

7-9. EXIT

## 7-1, COIN SETTING 2

COINS CREDITS  O 1. 1 2 3. 1 3 4. 1 4 5. 1 5 6. 1 5 6. 1 7 8. 2 5 10. 2 5 11. 3 1 12. 3 2 13. 3 4 14. 4 1 15. 4 3 16. 4 3 17. FREE PLAY 18. EXIT	
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## 7.2. COIN SETTING 2

O 1. 2. 3. 4. 5. 6.	COINS 1 1 1 1 1	CREDITS 1 2 3 4 5 6
1.23.4.5.6.7.8.9.00.11.12.13.14.15.16.17.	1 1 1 1 1 1 1 1 1 1 2 2 2 3 3 3 4 4 4 EXIT	1 2 3 4 5 6 7 1 3 5 1 2 4 1 3 5

### 7-3. NUMBER OF PLAYERS

.1 PLAYER
.2 PLAYERS
O .3 PLAYERS
.4 PLAYERS
.5 PLAYERS
.6 PLAYERS
.7 PLAYERS
.EXIT

## 7-4. DIFFICULTY

.VERY EASY
.1
.2
0 .3
.4
.5
.VERY DIFFICULT
.EXIT

## 7-5, BONUS SETTING

FIRST 30,000
SECOND
200,000
SECOND
300,000
FIRST 30,000
ONLY
FIRST 50,000
ONLY
EXIT

## 7-6. SOUND IN ATTRACTIVE MODE

O .ON .OFF .EXIT

## 7-7. VIDEO SCREEN FLIP

O ,NORMAL .UPSIDE DOWN .EXIT

### 7-8, SOUND OUTPUT

O .MONAURAL .STEREO .EXIT

### 7.9. FACTORY SETTING

All the settings returns to default by selecting "FACTORY SETTING".

\* O shows recommended settings.

