

TM

OPERATION MANUAL

↑ CAUTION

In order to safely use this machine, be sure to carefully read this operation manual and the manual of the cabinet in which this machine to be installed before installation and operation.

This operation manual should be kept together with the machine.

DISTRIBUTED BY:

NAMCO LIMITED 2-8-5 TAMAGAWA, OHTA-KU, TOKYO, 146, JAPAN

1. Cautions

- (1) Be sure to turn off the cabinet whenever installing or removing the PC board. Otherwise you may be hurt by an electric shock.
- (2) Be sure to use an edge connector which is applied to the JAMMA standard. Any modifications such as cutting the edges of PC boards will cause a failure and also will be out of our guarantee for repair.
- (3) Never test the PC boards for conductivity with a multimeter or similar device. The PCB contains sensitive chips which could be destroyed even by the internal voltage of such a device.
- (4) Foreign matters or dust on the PC boards will cause a failure. Turn off the power and clean the PC boards with a brush or similar thing.
- (5) When transporting the PC boards, wrap them with sponges or air caps and pack them in a card board box so that they can avoid a direct impact from outside during shipment.
- (6) For maintenance, contact your distributor.

2. Specifications

(1) Control panel:

One-side 2-P specifications

· 8-direction lever:

2 (1P, 2P, 1 each) 4 (1P, 2P, 2 each)

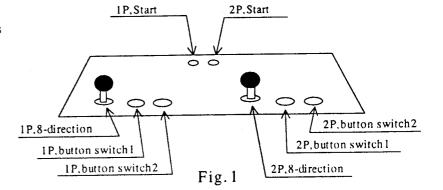
· Button switch: · Start switch:

2 (1P, 2P, 1 each)

(2) PC board size:

230 x 210 mm

(3) Direction of monitor: Vertical



3. Connection

(1) Connection of control panel

See above to connect JAMMA harness and extended harness (accessory) to control panel through the cabinet

(see P5: PC board connector table)

Connecting expanded harness to the right speaker allows you to enjoy a stereophonic effect.

(2) Connection of PC board

Set the PC board in the cabinet and connect JAMMA edge connector and 48P extended edge connector (DDK 225D-10024C2-2312) to the PC board

4. Explanation of PC Boards

(1) Option switches

No.1 to "ON" for Test Mode.

No.2 to "ON" for Screen Freeze.

Normally, all of the option switches are "OFF".

(2) Speaker volumes

To decrease the sound volume of the speaker, turn the

speaker volume counter-clockwise.

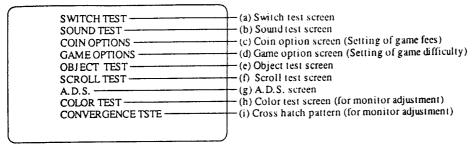
56P edge connector 48P extended edge (JAMMA) connector Speaker volume Option switch Brightness volume %Do not use brightness volume Fig. 2

5. Test Mode

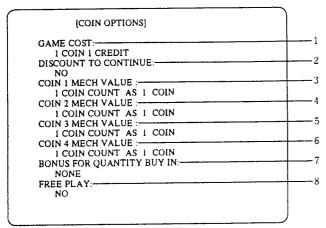
testscreen is displayed.

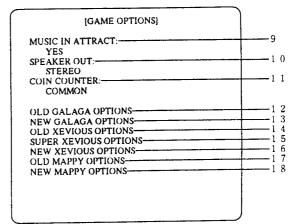
(1) The PC Board enters the test mode by setting the test switch on the PC Board to "ON" on the game screen. And the test menu screen is displayed on the monitor. Use the test switch (For connection, see P5: PC Board Connector Table) on the cabinet or the option switch on the PC Board (see P1: 4.(1) Option switches) When an item is selected by operating the 1P control lever up and down and the 1P button switch1 is pushed, the selected

(2) Game fees can be changed on the coin option screen, and the game difficulty can be changed on the game option screen. Select an item by operating the 1P control lever up and down, and change its contents using the 1P button switch1 (see the option setting table). After that, push the 1P button switch2 to return to the test menu screen.



(Test Menu Screen)





(Coin Option Screen)

(Game Option Screen)

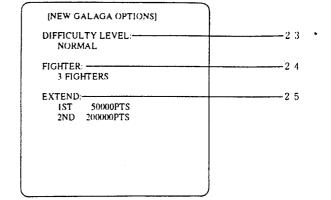
(Option Setting Table)

(< Standard Setting)

(Option Setting Table))			
Item	Contents			
1. Game fees	one count required for one game (one credit) 1 < [1 - 9]			
2. DISCOUNT	50% discount when continuing a play NO < YES			
3. COIN 1 MECH VALUE	Count per coin	1 < [1 - 9]		
4. COIN 2 MECH VALUE	Count per coin	1 < [1 - 9]		
5. 6.	Not used			
7. BONUS COIN	One additional coin per the specified number of Coins Sive 1 Coin > 9 Coins Give 3 Coins			
8. FREE PLAY	NO< YES			
9.MUSIC IN ATTRACT	YES < NO			
10.SPEAKER OUT	STEREO < MONO			
11. COIN COUNTER	COMMON (1Coin counter for 2slots) < EACH ONE (1Coin counter for each 1slot)			
12. OLD GALAGA OPTIONS	Push 1P button switch1 to enter OLD GALAGA OPTIONS screen——a			
13. NEW GALAGA OPTIONS	Push 1P button switch1 to enter NEW GALAGA OPTIONS screen—b			
14.OLD XEVIOUS OPTIONS	Push 1P button switch1 to enter OLD XEVIOUS OPTIONS screen———————————————————————————————————			
15.SUPER XEVIOUS OPTIONS	Push 1P button switch1 to enter SUPER XEVIOUS OPTIONS screen———————————————————————————————————			
16.NEW XEVIOUS OPTIONS	Push 1P button switch1 to enter NEW XEVIOUS OPTIONS screen—d			
17.OLD MAPPY OPTIONS	Push 1P button switch1 to enter OLD MAPPY OPTIONS screen———————————————————————————————————			
18.NEW MAPPY OPTIONS	Push 1P button switch1 to enter NEW MAPPY OF	PTIONS screen————f		

	Game f	ees	6	2	(3.74)	⟨₹⟩	Credit display	(Note) Set ③,4 corresponded
Example	I game	Continue	U,		` '	L		to Coin Mech 1&2 in
Example	100 yen	100 yen	1 COIN 1 CREDIT	NO	I COUNT I COIN	NONE	CREDIT 0	use.
	100 yen	50 yen	2 COINS I CREDIT	YES	1 COUNT 2 COINS	NONE	CREDIT 0/2	

•	Original Garaga Option Sciech	
	[OLD GALAGA OPTIONS])
	DIFFICULTY LEVEL: NORMAL	19
	RANK UP:	20
	FINAL STAGE: 31 STAGE	2 1
	FIGHTER & EXTEND:	2 2
	1ST 30000 PTS 2ND 120000 PTS EVERY 120000 PTS	

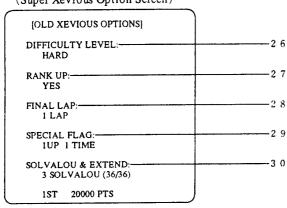


(Option Setting Table)

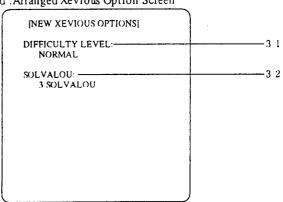
(< Standard Setting)

Item	Contents			
1 9. DIFFICULTY LEVEL	NORMAL < [NORMAL, EASY, HARD, VERY HARD, VER	ARDJ		
2 0 . RANK UP	Increase difficulty from 32nd stage	NO < YES		
2 1. FINAL STAGE	Set final stage to end a game compulsorily	31 < [31,63,95,ENDLESS]		
2 2. FIGHTER & EXTEND	3 FIGHTERS 1ST 30000PTS 2ND 120000PTS at 120000, hereafter 1 for every 120000 point [selectable from 32 patterns]	SEVERY 120000PTS < (initial 3,add 1 at 30000 points,another its)		
2 3. DIFFICULTY LEVEL	NORMAL < [EASY, NORMAL, HARD]			
2 4. FIGHTER	3 < [2,3,4,5]			
2 5. EXTEND	1ST 50000PTS 2ND 200000PTS < [NO BONUS, 1ST 50000PTS, 1ST 50000PTS 2ND 200000PTS]			

c .Original Xevious Option Screen (Super Xevious Option Screen)



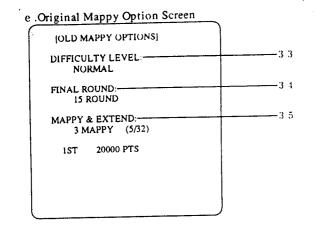
d .Arranged Xevious Option Screen



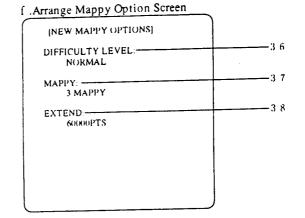
(Option Setting Table)

(< Standard Setting)

(Option Setting 13	1016)	(> Standard Setting)	
. Item	Contents		
2 6. DIFFICULTY LEVEL	HARD < [NORMAL, EASY, HARD, VERY	ARD] (*Default setting of Super Xevious is VERY HARD)	
2 7. RANK UP	Increase difficulty from 2nd lap	YES < NO	
2 8. FINAL LAP	Set final lap to end a game compulsorily	1LAP < [1LAP,2LAP,3LAP,4LAP,ENDLESS]	
2 9. SPECIAL FLAG	Set effect of Special Flag	1UP 1 TIME < (1UP,once at a place) 1UP (1UP) 10000PTS (add 10000points)	
3 0. SOLVALOU & EXTEND	3 SOLVALOU 1ST 20000PTS < (initial 3, [selectable from 36 patterns]	add 1 at 20000 points)	
3 1. DIFFICULTY LEVEL	NORMAL < [EASY, NORMAL, HARD]		
3 2. RANK UP	3 < [2,3,4,5]		



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(Ontion Setting Table)

(< Standard Setting)

(Option Setting Table)			
Item	Contents		
a a pieciolii TVI EVEL	NORMAL < [EASY, NORMAL, HARD, HARD+1,	,HARD+2,HARD+3,HARD+4,HARD+5]	
3 3. DIFFICULTY LEVEL			
3 4. FINAL ROUND	Set final round to end a game compulsorily	15 < [15,23,31,39,ENDLESS]	
3 5. MAPPY & EXTEND	3 MAPPY 1ST 20000PTS < (initial 3, add 1 at 20000 points) [selectable from 32 patterns]		
3 6. DIFFICULTY LEVEL	NORMAL < [EASY, NORMAL, HARD]		
3 7. MAPPY	3 < [2,3,4,5]		
3 8. EXTEND	60000PTS < [NO BONUS,60000PTS]		

o. I C Board Connector rubit

Solder side	Terminal No.		Parts side	
GND	A	1	GND	
GND	В	2	GND	
+5 V	С	3	+5 V	
+5 V	D	4	+5 V	
	Е	5		
+12V	F	6	+12V	
Insertion error	Н	7 .	Insertion error	
preventing			preventing	
Coin counter 2	J	8	Coin counter 1	
	K	9	Coin lockout 1	
Speaker (-)	L	10	Speaker (+)	
Audio (GND)	M	11	Audio (+)	
Video GREEN	N	12	Video RED	
Video SYNC	P	13	Video BLUE	
Service switch	R	14	Video GND	
	S	15	Test switch	
Coin switch 2	T	16	Coin switch 1	
2P start switch	U	17	1P start swich	
2P lever UP	V	18	1 P lever UP	
2P lever DOWN	w	19	I P lever DOWN	
2P lever LEFT	X	20	1 P lever LEFT	
2P lever RIGHT	Y	21	I P lever RIGHT	
2P button Switch l	Z	22	1P button Switch 1	
2P button Switch2	a	23	1P button Switch2	
	ь	24		
	С	25		
	d	26		
GND	е	27	GND	
GND	f	28	GND	

- · Do not connect anything to the blank connectors.
- · Both lockout solenoid and coin counter operate on +12V.
- · Connect the switches to N.O. terminals such as a microswitch, and the GND to the COM terminal.

• The supply voltage is available within $\pm 5\%$. For use in the best condition, get the supply voltage as close to the specified voltage as possible.

(Recommended power capacity)

+5V±5%	2.5A or more
+12V ±5%	2.0A or more

Extended edge connector (48P 2.54 mm pitch)

Solder side	Termi	nal No.	Parts side
Speaker R (-) [YEL]	Al	Bl	Speaker R (+) [ORG]
	A2	B2	
N. C.	A3	B3	
	A4	B4	
Insertion error preventing key	A5	B5	Insertion error preventing key
	A 6	B6	
	A7	B7	
	A8	В8	
	A9	B9	
	A10	B10	
	All	B11	
	A12	B12	
	A13	B13	
	A14	B14	
	A15	B15	
	A16	B16	
	A17	B17	
	A18	B18	
	A19	B19	
	A20	B20	
	A21	B21	
	A22	B22	
	A23	B23	
	A24	B24	

[Connection to stereo cabinet]

(1)STEREO / MONO setting

Select SPEAKER OUT in the game option screen at the test menu screen.

<Caution>Monophonic cabinets do output only the left-hand sound even if the stereophonic setting is selected.

(2) Connection to speakers

- · Connect the (L) speaker to the speaker output of 56P edge connector (JAMMA) on the PC board.
- · Connect the (R) speaker to Speaker R (+), (-) of 48P extended edge connector.
- * Use a DDK 225D-10024C2-2312 as a 48P extended edge connector.