

# DUNKMANIA

## **OPERATION MANUAL**

### **⚠** CAUTION

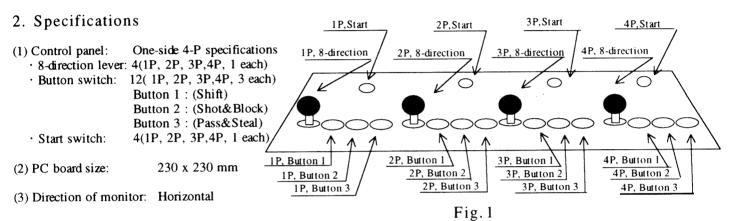
In or der to safely use this machine, be sure to car efully read this operation manual and the manual of the cabinet in which this machine to be installed before installation and operation.

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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.



#### 3. Connection

(1) Connection of control panel

See above to connect JAMMA harness and extended harness(accessory) to control panel through the cabinet (see P3 : 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

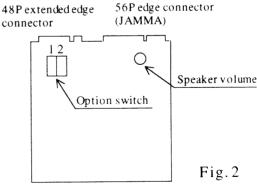
To decrease the sound volume of the speaker, turn the speaker volume counter-clockwise.

#### 5. Test Mode

(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 P3: PC Board Connector Table) on the cabinet or the option switch on the PC Board (see P1: 4.(1) Option switches)

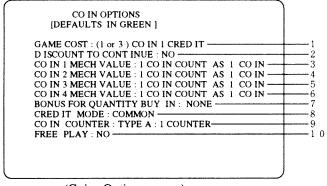
When an item is selected by operating the 1P control lever up and down and the 1P button1 switch is pushed, the selected test screen is displayed.

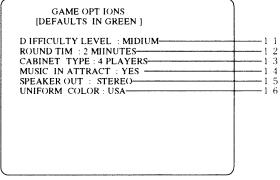
(2) Game fees can be changed on the coin option screen, and the game difficulty can be changed on the game option screen. Select an item by operating the 1P control lever up and down, and change its contents using the 1P button1 switch (see the option setting table). After that, push the 1P button2 switch to return to the test menu screen.



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SWITCH TEST -
                                     (a) Switch test screen
SOUND TEST
                                     (b) Sound test screen
COIN OPTIONS
                                     (c) Coin option screen (Setting of game fees)
GAME OPTIONS
                                     (d) Game option screen (Setting of game difficulty)
UARTS TEST
                                    (e) Not used
POLYGON TEST
                                     (f) Polygon test screen
A.D.S.
                                     (g)Not used
                                     (h) Color test screen (for monitor adjustment)
COLOR TEST-
CONVERGENCE TSTE
                                    (i) Cross hatch pattern (for monitor adjustment)
RS-232C TEST
                                     (j) Not used
```

#### (Test menu screen)





(Coin Option screen)

(Game Option Screen)

#### (Option setting table)

Item	Contents			
1. Game fees	one count required for one game (one credit)	(1 or 3) < [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. COIN 3 MECH VALUE	Count per coin	1 < [1 - 9]		
6. COIN 4 MECH VALUE	Count per coin 1 < [1 - 9]			
7. BONUS COIN	One additional coin per the specified number of coins	NONE < 2 Coins Give 1 Coin~ 9 Coins Give 3 Coins		
8. CREDIT MODE	COMMON (Credit is common to 1P, 2P,3P and 4P) <, EACH ONE (Credit is set for 1P, 2P,3P and 4P each) EACH TWO (Credit is set for 1P and 2P,3P and 4P each)			
9. COIN COUNTER	TYPE A : 1 COUNTER < TYPE B : 2 COUNTERS			
10. FREE PLAY	NO< YES			
11. DIFFICULTY LEVEL	MEDIUM < [ EASY . MEDIUM . HARD ]			
12. ROUND TIME	2MINUTES < [1, 2, 3, 4, 5]			
13.CABINET TYPE	4 PLAYERS < 2PLAYERS			
14.MUSIC IN ATTRACT	YES < NO			
15.SPEAKER OUT	STEREO < MONO			
16.UNIFORM COLOR	USA< JAPAN			

	Game	fees	, 854		, in		Credit	(Note)
Example	1 game	Continue	(1)	(2)	3)4	7)	display	Set 3, 4 corresponded to Coin Mech 1&2 in use.
Lxample	100 yen	100 yen	1 COIN 1 CREDIT	NO	1 COUNT 1 COIN	NONE	CREDIT 0	
	100 yen	50 yen	2 COINS 1 CREDIT	YES	1 COUNT 2 COINS	NONE	CREDIT 0/2	

#### 6. PC Board Connector Table

JAMMA edge connector (56P 3.96 mm pitch)

JAMINIA edge connector (30F 3.90 mm pitch)						
Solder side	Termir	al 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 preventing	Н	7	Insertion error preventing			
			-			
Coin counter 2	J	8	Coin counter 1			
	K	9	Coin lockout 1			
Speaker (-)	L	10	Speaker (+)			
Audio (GND)	М	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	Т	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	1P lever DOWN			
2P lever LEFT	X	20	1 P lever LEFT			
2P lever RIGHT	Y	21	1 P lever RIGHT			
2P button1	Z	22	1P button1			
2P button2	a	23	1P button2			
2P button3	b	24	1P button3			
	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.

$$COM$$
  $N.C.$ 

• 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	Termir	ıal No.	Parts side
Speaker R (-) [YEL]	A1	Bl	Speaker R (+) [ORG ]
	A2	B2	
4P start switch	A3	В3	
	A4	B4	
Insertion error preventing key	A5	B5	Insertion error preventing key
4P lever RIGHT	<b>A</b> 6	B6	4P lever LEFT
4P lever DOWN	A7	В7	4P lever UP
4P button1	A8	B8	4P button2
	A9	B9	GND
	A10	B10	GND
	A11	B11	
	A12	B12	
	A13	B13	4P button3
	A14	B14	
Coin switch 4	A15	B15	Coin switch 3
	A16	B16	
	A17	B17	GND
	A18	B18	GND
3P button3	A19	B19	3P button2
3P button1	A20	B20	3P lever RIGHT
3P lever LEFT	A21	B21	3P lever DOWN
3P lever UP	A22	B22	3P start switch
······································	A23	B23	
	A24	B24	

- · Do not connect anything to the blank connectors.
- The colors indicated in [] in the extended edge connector table show these of color cords on the extended edge connector harness in the accessories.

[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.