



TEKKEN3 OPERATION MANUAL

Be sure to read this manual and the instruction manual for cabinet to be used before installing and operating this game machine to ensure the safety and to operate correctly.
 Keep this manual with care so as to read in case of need in daily operation.

Introduction

Thank you for purchasing our TEKKEN 3 (hereinafter mentioned as the game machine).

This manual shows you how to operate, install, transport, remove, maintain and discard this game machine in safety.

Be sure to read this manual and the instruction manual for cabinet to be used before installing and operating this game machine to ensure the safety and to operate correctly.

This manual applies to a staff of a game center. However, an article indicated as "It must be handled by an engineer." applies to engineers, so the operation must be done by engineers only. Never someone else besides the engineer should operate it.

Engineer means the following personnel:

Personnel who had taken credits of mechanical or electrical engineering in university, college or highschool, or who have knowledge as same as one who had taken the above credits and also who maintains, takes care and repairs amusement machines as a daily work.

When an owner of this game machine leaves operation, installation, transportation, removal, maintenance and discard to the other person, instruct him/her to read the articles in point and to follow the regulations.

Keep this manual with care so as to read in case of need in daily operation.

In case of resell of the game machine, be sure to attach this manual to the PC board.

For inquiries about the game machine and servicing:

As for inquiries about the game machine and servicing for the machine, contact your distributor.

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Do NOT remodel this game machine without our agreement; otherwise. an unexpected danger may happen.

[Note]

The contents on this operation manual are subject to change without notice for improvement.

1. Precautions on safety (for Safety Operation)

1-1 Explanation for a symbol A for calling attention:

The meaning of the symbol Δ for calling attention on this manual is as follows:

The symbol \triangle for calling attention shows a potential danger and means not only an unspecified but general notice for dangers, warnings and cautions. All of notices indicated by this mark are concerned with safety.

1-2 Explanation for signal words (WARNING, A CAUTION)

On this manual, these signal words (Δ WARNING, Δ CAUTION) show a danger level for person and a damage level for property which have a possibility to occur.





In the case that an operator would be slightly wounded or that only the property will be damaged if he/she makes a mistake in the operation.

These levels mentioned above are as follows:

* Classification for the damage

A serious wound: Loss of eyesight, an injury, a burn (by high or low temperature), an electrical shock, a fracture of a bone or poisoning which leaves an aftereffect and needs admission to a hospital or going to hospital for a long term for treatment.

Slight wound: **A** wound which does not need admission to a hospital or going to hospital for a long term for treatment. (**A** wound except for mentioned above.)

Property damage: Large scale damage relating to the building, property, livestock or pets.

1-3 Precaution on Safety for operators in charge of Installation

(It should be handled by an engineer.)

[Notice]

This game machine corresponds to both of JAMMA standard and JAMMA VIDEO standard (JVS). The notice on safety differs with regard to installation because that the connecting procedures and others differ depending on a standard. Be sure to read the article corresponding to the standard after confirming the standard €or the cabinet by reading the manual for cabinet to be used.

<For a cabinet corresponding to JAMMA standard>

^	Be sure to turn OFF the power of cabinet to be used before installation and removal of PC board; otherwise, an operator may be struck by electricity.
WARNING	Be sure to connect +5V (2.5A or more) and +12V (2.0A or more) correctly for power of PC board; otherwise, a wrong connection may cause an accident, such as a fire, and trouble.
	The voltage should be used within the range of ±5%; otherwise, an accident, such as a fire, and trouble may happen.

<For a cabinet corresponding to JAMMA VIDEO standard (JVS)>

~	Be sure to turn OFF the power of cabinet to be used before installation and removal of PC board; otherwise, you may be struck by electricity.
WARNING	 Be sure to connect +5V (2.5A or more) correctly for power of PC board; otherwise, a wrong connection may cause an accident, such as a fire, and trouble.
	• The voltage should be used within the range of $\pm 5\%$; otherwise, an accident, such as a fire, and trouble may happen.

1-4 Precaution on Safety for Operator in charge of Maintenance

(It should be handled by an engineer.)



1-5 Precautions on Safety with regard to Discard



2. Packing Substance Check

This game machine consists of the followings.

[Notice]

Make sure that the following substances are complete.

Name	Description	Qt'y
Game PC board, "TEKKEN 3"	System 12 PC board	1
Operation manual	This manual	1
Title board	Logo "TEKKEN 3" is described.	1
A sticker (+1)	Oblong sticker for move list	1
B sticker (*1)	Oblong sticker for explanation of controls	1
Button seal (*1)	1 sheet printed for two players	1
Kick harness (*2)	Wired 48P extension edge connector	1

- *1) On the adhesive side of A sticker, B sticker and button seal, a "release type" bonding agent, which is hard to leave a mark after peeling it off, is used.
- *2) This game machine corresponds to both of JAMMA standard and JAMMA VIDEO standard (JVS). The kick harness is not necessary if the PC board is connected to a cabinet corresponding to JAMMA VIDEO standard (JVS). (Refer to *"3-3* PC Board" for connection terminal of each standard.)

3. Specifications

3-1 Control Panel

2-P specifications

- 8-direction lever : 1 x 2
- Button switch : 4 x 2
- Start switch : 1 x 2



3-2 Monitor

Direction of monitor:	Horizontal
Scanning retrace line format:	Interlace/non-interlace: selectable
Synchronizing signal:	Composite/separate: selectable (*1)
Horizontal synchronizing frequency:	15.75 kHz
Vertical synchronizing frequency:	60.0 Hz

*1) Only for connection of cabinet corresponding to JAMMA VIDEO standard (JVS)

3-3 PC Board

The PC board corresponds to both of JAMMA standard and JAMMA VIDEO standard (JVS)

Size : 260×230 (mm) (excluding part projected) Power supply (when connecting JAMMA standard terminal) : $+5V \pm 5\%$ (2.5A or more), $+12V \pm 5\%$ (2.0A or more)

Power supply (when connecting JAMMA VIDEO standard (JVS) terminal) :

$+5V \pm 5\%$ (2.5A or more)



*1) Used to connect to a cabinet corresponding to JAMMA standard.

*2)Used to connect to a cabinet corresponding to JAMMA VIDEO standard (JVS).

4. Installation

[Notice]

- This game machine corresponds to both of JAMMA standard and JAMMA VIDEO standard (JVS). Be sure to read the article corresponding to the standard after confirming the standard for the cabinet by reading the manual for cabinet to be used.
- The **JS** mark is indicated on the article for cabinet corresponding to **JAMMA** standard, and the **JVS** mark is indicated on the article for cabinet corresponding *to* **JAMMA** VIDEO standard (JVS).

4-1 Connection to a Cabinet corresponding to JAMMA standard

[Notice]

Use +12V or less for line voltage of coin counter.

4-1-1 Connnection of Control Panel

Connect the **JAMMA** edge connector and kick harness (wired **48P** extension edge connector) packed together to each appropriate switch of control panel with reference to "8.**PC** Board Edge Connector List".

[Notice]

- Be sure to use a JAMMA standard conformable one and a specified one for the JAMMA edge connector.
- Be sure to use a NAMCO specified one (DDK-made: 225D-10024C2-3312) for the 48P extension edge connector.
- Do not connect anything to the blank column on "8.PC Board Edge Connector List"
- Connect each switch and lever input of edge connector to N. O. terminal, such as micro switch and etc.
- I le sure to connect the COM terminal to GND of edge connector for the micro switch wired.

Connection to a Cabinet corresponding to JAMMA VIDEO standard (JVS)

4-2-1 Connection of Control Panel JVS

After being sure to read the manual for cabinet to be used, connect the suitable control panel for this game machine (Refer to "3-1 Control Panel".) to the cabinet.

4-2-2 Connection of PC Board



After being sure to read the manual for cabinet to be used, connect the PC board according to the following procedures. Refer to "8-1-3 Replacement of game PC board on the instruction manual for "CYBERLEAD" if the "CYBERLEAD" made by NAMCO is used as a cabinet.

- (1) Open the PC board loading section of cabinet. If another PC board has been already connected, remove it.
- (2) Install the PC board for this game machine in the PC board loading section correctly so that the cable becomes easy to be connected. (The following figure shows the case that the cabinet "CYBERLEAD" made by NAMCO is used.)



(3) Connect the cable at cabinet side to the concerned connector on the PC board correctly. (Refer to figure below.)



(4) Close the PC board loading section of cabinet.

[Notice]

It is allowed to display the original messages and graphics, which are linked with the game contents of the game machine, on the LED dot-matrix display only if the game machine is used with the cabinet "CYBERLEAD" made by NAMCO. For that purpose, it is necessary to transmit the graphic data to the cabinet in advance. If the original graphic data of the game machine is not transmitted, the following screen is displayed before displaying the game screen when turning ON the power of cabinet. (If the data has been already transmitted, it is not displayed. The mode is shifted to the game mode immediately.)

Transfer LED data? YES NO

After selecting "YES" or "NO" by moving the P1:8-direction lever up and down, settle it with PI-BUTTON 1. It is automatically settled after 10 seconds approximately even if the P1-BUTTON 1 is not pressed. In any case, the item displayed in red is supposed to be selected.

If "NO" is selected, the transmission is not performed, and then the screen above is displayed again when turning ON the power at the next time.

If "YES" is selected, the following screen is displayed, and then the data transmission is performed.



The usual game mode is shifted after finishing the data transmission. The original display of the game machine appears on the LED dot-matrix display. After that, it is not necessary to transmit the data again unless the LED display data in cabinet is initialized (Refer to "6-1-3 Explanation of display contents and how to change it" on the instruction manual "CYBERLEAD".), or unless the data transmission of another game machine is perfomed. If the P1-BUTTON 1 and P1-START switches are pressed at the same time while operating the data transmission, the operation is interrupted, and then the usual game mode is shifted. In this case, it is necessary to transmit the data again when turning ON the power at the next time in order to display the original display of the game machin on the LED dot-matrix display.

5 Adjustment

5-1 Adjusting Switch

The adjusting switch on the *PC* board is as follows:

(1) Optional switch

This switch is a pair of two units. If the #1 is "ON", the mode is in TEST mode. If the #2 is "ON", the screen is in STOP. All of switches is usually "OFF".

[Notice]

The nomal game is not allowed to be performed if the optional switch #2 is in "ON" state.

 (2) Speaker volume Turning it clockwise, the volume of speaker becomes large. Turning it counterclockwise, the volume of speaker becomes small.

[Notice]

The speaker volume can not work for volume adjustment, if the cabinet corresponding to JAMMA VIDEO standard (JVS) is used. After being sure to read the manual for cabinet to be used, perform volume setting at cabinet side.



5-2 TEST Mode

If the TEST switch is turned "ON" while displaying the game screen, the mode is in TEST mode, and then the test menu screen is displayed.

Use the test switch on the cabinet (Refer to "8. PC Board Edge Connector List" to perform connection.) or the optional switch on the PC board. (Refer to "5-1 Adjusting switch".)

After selecting an item (displayed in red) on the test screen by moving the P1:8-direction lever up and down, press the PI-BUTTON 1 to display the selected test screen.

[Notice]

The "JVS CABINET OPTIONS" is not allowed to be selected if the PC board is connected from the JAMMA edge connector. It is allowed to be selected only if the PC board is connected from the connector corresponding to JAMMA VIDEO standard (JVS).

When exiting the TEST mode, be sure to select "EXIT & SAVE" from the test menu screen as below before pressing P1-BUTTON 1 to end it.

[
	DISPLAY TEST	DISPLAY
	SWITCH TEST	WITCH T
	SOUND TEST	OUND T
	JVS CABINET OPTIONS	VS CABI
	GAME OPTIONS	GAME OP
	COIN OPTIONS	COIN OPT
	A.D.S.	A.D.S
	DATA CLEAR	DATA CL
	EXIT & SAVE	EXIT & SA
		Summer

DISPLAY TEST	(5-2-1)
WITCH TEST	(5-2-2)
OUND TEST	(5-2-3)
VS CABINET OPTIONS	(5-2-4)
GAME OPTIONS	(5-2-5)
COIN OPTIONS	(5-2-6)
A.D.S.	(5-2-7)
DATA CLEAR	(5-2-8)
EXIT & SAVE (Exit of TES	T mode)
	(5-2-9)

[Notice]

- If the procedure above is not used for exiting of TEST mode, a changed setting may not be reflected correctly. Be sure to select "EXIT & SAVE" from the test menu screen before pressing P1-BUTTON 1 to end it.
- In both cases that the test switch on the cabinet is the slide type and that the optional switch #1 on the PC board is used, take note of the followings.
 - The mode enters the TEST mode when switching the test switch on the cabinet or the optional switch
 #1 on the PC board to ON from OFF. If the switch has been turned ON before the mode enters TEST mode, turn it ON again after turning it OFF once.
 - The test mode is not exited even if the test switch is turned OFF. Be sure to select "EXIT & SAVE" from the test menu screen before pressing P1-BUTTON 1 to end it.

5-2-1 DISPLAY TEST

This mode performs test and setting on the screen display.

The DISPLAY TEST provides 1 kind of common display and 3 kinds of test pattern.

(1) COLOR EDIT

This screen performs balance adjustment for brightness and color tone of display signal output from the PC board.

(2) DIAGONAL

This screen is used for display check in interlace mode.

(3) COLORBAR

This screen is used for balance check and adjustment for brightness and color tone.

(4) CONVERGENCE

This screen is used for check and adjustment for display size, display position, ratio length to breadth and distortion.

The screen (1), which is the common display, is displayed so as to overlap on the screens (2) to (4). Press P1-BUTTON 3 to select if screen (1) is displayed or not.

The screens (2) to (4) are the test display, The screen (2) is displayed immediately after entering DISPLAY TEST mode. Press PI-BUTTON 1 to select the screen in order of (2),(3),(4) and (2) repeatedly. Pressing P1-START switch, the DISPLAY TEST mode exits and then the test menu screen appears.

(I) COLOR EDIT

This screen performs balance adjustment for brightness and color tone of display signal output from the PC board.

	Non Interlace Contrast: Bright R: Bright G: Bright B:	Scanning retrace line format on monitor Whole contrast Brightness (RED) Brightness (GREEN) Brightness (BLUE)
PREVIOUS VALUE: PI-B	jtton 4	Display how to return a value to the initial value.
EXIT COLOR EDIT: P1-B	JTTON 3	Display how to exit the COLOR EDIT mode.
NEXT COLOR TEST: P1-B	UTTON1	Display how to advance to the next test pattern.
EXIT: P1-START		Display how to return to the test menu screen.

The above screen appears while overlapping on the test pattern.

After selecting an item to be changed by moving the P1:8-direction lever up and down, move it right and left to change the setting.

Pressing P1-BUTTON 4, all of contents changed on the COLOR EDIT screen are canceled.

Pressing P1-BUTTON 3, the COLOR EDIT screen is suspended, and then the display of setting items disappear.

Pressing P1-BUTTON 3 once again, the setting items are displayed again, and then the COLOR edit screen becomes available.

Pressing PI-START switch, whole DISPLAY TEST exits, and then the test menu screen appears.





The diagonal pattern is displayed on the screen.

Press P1-BUTTON 2 to select the color of diagonal pattern in order of WHITE, BLUE, RED, VIOLET, GREEN, LIGHT BLUE, YELLOW, BLACK and WHITE repeatedly.

Press P1-BUTTON 1 to switch the mode to the next test pattern (COLOR BAR).

Press PI-BUTTON 3 to select if the COLOR EDIT screen is displayed or not. (Refer to "(1) COLOR EDIT" on this article.)

Pressing P1-START switch, the DISPLAY TEST exits, and then test menu screen appears.

[Notice]

This test pattern is mainly used to check the screen display in interlace mode (*1). The interlace mode allows to display more precise than the non-interlace mode (*2). However, the screen may not be displayed correctly depending on the monitor to be used due to its property. If the errors, such as dispersion of diagonal, severe flickering on the whole screen and etc., appear on the screen above in interlace mode, use it after switch the mode to "Non-interlace" from "Interlace" in the COLOR EDIT screen. (Refer to "(1) COLOR EDIT" on this article.)

Interlace mode

This display mode allows to do double vertical resolution without change of horizontal/vertical frequencies if the display position of only half line is shifted in vertical direction intentionally once of twice screen displays.

This mode allows to display more precise and more smooth curved and straight lines than the noninterlace mode. (The "CYBERLEAD" made by NAMCO provides the interlace mode as standard setting.)

*2) Non-interlace mode

This display mode shows the routine screen display at the fixed position against "Interlace mode".

(3) COLOR BAR

This screen is used for balance check and adjustment for brightness and color tone.

COLOR BAR	
	COLOR BAR (WHITE)
	COLOR BAR (RED)
	COLOR BAR (GREEN)
	COLOR BAR (BLUE)
ENTER COLOR EDIT: P1-BUTTON 3	Display how to enter the COLOR EDIT mode.
NEXT COLOR TEST: P1-BUTTON 1	Display how to advance to the next test pattern.
EXIT: P1-START	Display how to return to the test menu screen.
They are a second se	

The color bar with brightness gradation is displayed.

Press P1-BUTTON 2 to select the phase of gradation in order of 32, 16,8,4,2 and 32 repeatedly.

Press PI-BUTTON 1 to switch the mode to the next test pattern (CONVERGENCE).

Press PI-BUTTON 3 to select if the COLOR EDIT screen is displayed or not. (Refer to "(1) COLOR EDIT" on this article.)

Pressing P1-STA \mathbb{R} T switch, the DISPLAY E S T exits, and then test menu screen appears.

(4) CONVERGENCE

This screen is used for check and adjustment for display size, display position, ratio length to breadth and distortion.



The cross pattern called as "Cross hatch pattern" is displayed on the screen.

Press PI-BUTTON 2 to select the color of cross hatch pattern in order of WHITE, BLUE, RED, VIOLET, GREEN, LIGHT BLUE, YELLOW, BLACK and WHITE repeatedly.

Press P1-BUTTON I to switch the mode to the next test pattern (DIAGONAL).

Press P1-BUTTON **3** to select **if** the COLOR EDIT screen is displayed or not. (Refer to "(1) COLOR EDIT" on this article.)

Pressing P1-START switch, the DISPLAY TEST exits, and then test menu screen appears.

5-2-2 SWITCH TEST

This mode performs test for switches connected to PC board, such as buttons on the control panel. Pressing P1-BUTTON **3** and 4 at the same time, the test menu screen appears.



5-2-3 SOUND TEST

This mode performs sound output test and speaker setting(MONAURAL/STEREO). Move P1:8-direction lever right and left to change the number of sound. Press P1-BUTTON 1 to play back the sound numbered on the display. Press P1-BUTTON 2 to select the mode STEREO/MONAURAL. Play back the sound number 001 for the stereo output test. Pressing P1-START switch, the test menu screen appears.

SOUND TEST			
	SONG: STATUS:	[0 0 0] 0 0 0 0	Sound number The status of sound output
	SPEAKER OUT:	: STEREO	Present mode (STEREO/MONAURAL) setting status
SET "MONAUF EXIT	RAL": P1-BUTTO : P1-START	N 2	Display how to change the mode (STEREO/ MONAURAL). Display how to return to the test menu screen.

5-2-4 JVS CABINET OPTIONS

This mode performs setting for cabinet corresponding to JAMMA VIDEO standard (JVS).

JVS CABINET OPTIONS <defaults green,<="" in="" th=""><th></th></defaults>	
VIDEO SYNC: Composite	(a)
JAMMA VIDEO STANDARD [STEP 1]	Display with regard to the
Main	(JVS)
I/O 1	
I/O 2	
EXIT:P1-START	

[Notice]

This article is not available if the cabinet is connected from the JAMMA edge connector on the PC board.

Press P1-BUTTON 1 to change the setting. Pressing P1-START switch, the setting screen exits, and then test menu screen appears.

(a) VIDEO SYNC (Synchronizing signal output format of video output)

Composite (Composite synchronization) Separate (Vertlca/horizontal synchronization)

[Notice]

- If the VIDEO SYNC is set at "Separate", the picture becomes more clear than "Composite".
- As for use of cabinet "CYBERLEAD" made by NAMCO, set the VIDEO SYNC at "Composite" if an apparatus is connected *to* the line output display terminal at rear side. (Refer to "4-4 Explanation of external I/O terminal" on the instruction manual "CYBERLEAD".)

5-2-5 GAME OPTIONS

This mode performs setting with regard to the contents of game, such as difficulty level of game and etc.

	GAME OPTIONS <defaults green="" in=""></defaults>
(a)	DIFFICULTY LEVEL: MEDIUM
(b)	FIGHT COUNT <1P GAME>: 2
(c)	FIGHT COUNT <vs game="">: 2</vs>
(d)	LIFE BAR <1P GAME>: 110
(e)	LIFE BAR <vs game="">: 140</vs>
(f)	GUARD DAMAGE: OFF
(g)	NEUTRAL GUARD: ON
(h)	ROUND TIME: 40 SEC.
(i)	CHARACTER CHANGE AT CONTINUE: YES
(j)	CHARACTER CHANGE AT VS GAME: NO
(k)	MUSIC IN ATTRACT: YES
(l)	EVENT MODE: OFF
(m)	HIT COLOR: RED
	EX1T:P1-START

After selecting an item to be changed by moving the P1:8-direction lever up and down, press the P1-BUTTON 1 to change the setting.

Pressing P1-START switch, the setting screen exits, and then test menu screen appears.

(a) DIFFICULTY LEVEL (Difficulty level of game)



ON (exist)	OFF (none)
Cont (easier)	

(h) ROUND TIME (Time per 1 round [second])

20 SEC. 30 SEC. 40 SEC. 50 SEC. 60 SEC.

(i) HARACTER CHANGE AT CONTINUE (Change of character at continue)

YES (possible) NO (impossible)

(i) CHARACTER CHANGE AT VS GAME (Change of character on the player who is being challenged at vs game)

YES (possible) NO (impossible)	1
--------------------------------	---

(k)MUSIC IN ATTRACT (Sound in attract)

YES (noscible)	NO (impossible)
A BOOKT SETECTATION OF THE P	L The Additional Constant

(1) EVENT MODE (Process after vs game)

RED (exist)	GREEN (changed to another color)
-------------	----------------------------------

5-2-6 COIN OPTIONS

This mode performs setting with regard to the game fees, such as the credit number required for 1 play.



After selecting an item to be changed by moving the P1: 8-direction lever up and down, press the P1-BUTTON 1 to change the setting.

Pressing P1-START switch, the setting screen exits, and then test menu screen appears.

[Notice]

- It is impossible to change items (a) to (f) if "YES" has been set in (g) FREE PLAY.
- If the cabinet corresponding to the JAMMA VIDEO standard (JVS) is used for the game machine, items (e) and (f) are set automatically as an initial value so as to be suitable for the connection format on the cabinet. In this case, items (e) and (f) are not allowed to be changed.

(a) START COST (Number of coins required for 1 new play)

1 2 3 4 5 COIN(S)TOSTART

Thick frame: initial value (The rest is the same)

[Notice]

It is impossible to set (b) CONTINUE COST at the larger value than (a) START COST.

(c) COIN CHUTE 1 MECHANICAL, VALUE (Number of coins added when the coin switch 1 works once) 1COINCOUNTAS 1 2 4 4 5 5 COIN

(d) COIN CHUTE 2 MECHANICAL VALUE (Number of coins added when the coin switch 2 works once)

1 COIN COUNT AS COIN

(e) CREDIT MODE (Memory of credit)

COMMON	EACH ONE
(The calculation is performed from one	(P1 and P2 have credits separately.
common credit in the both cases even if	The coin switch 1 corresponds to P1
start switch is pressed.)	to P2 side respectively.)

[Notice]

Check if the coin switch 2 is connected correctly when setting (e) CREDIT MODE to "EACHONE"; otherwise, a coin may not be accepted at P2 side and the play may not be available.

(f) COIN COUNTER (Assignment of coin counter)

1 COUNTER	2 COUNTERS
(Used 1 coin counter common to two	(Used each coin counter for two coin
coin switches)	switches respectively)

[Special article

In the case that a cabinet, which provides each 1 pair of coir, switch and coin counter for P1 side and P2 side respectively, is used:

Setting (e) CREDIT MODE above to "EACH ONE". (f) COIN COUNTER to "2 COUNTERS" after checking each one is connected correctly, each coin counting at P1 side and P2 side is allowed to be logged separately.

(g) FREE PLAY (Free play setting)

MER (from charme)	NO (charge)
TP9 (000 charge)	A APA A Present Figure 1

5-2-7 A.D.S.

This mode allows to read the data with regard to the past play results, such as total play time by this time and etc.

Press P1-BUTTON 1 to select the display screen.

Pressing P1-START switch, the test menu screen appears.

5-2-8 DATA CLEAR

This mode performs clear for the data which is stored even if the power is turned OFF.

BACKUP DATA CLEAR	
CANCEL ADS DATA CLEAR RANKING CLEAR SET DEFAULTS ALL OPTIONS ALL CLEAR	Return to the test menu screen. Clear A.D.S data only. Initialization of ranking data. Initialization of all options. Clear all of data logged.
EXIT: P1-START	Display how to return to the test menu screen.

After selecting an item by moving the P1:8-direction lever up and down, press the P1-BUTTON 1 to perform the selected item.

Pressing P1-START switch, the test menu screen appears.

- CANCEL Return to the test menu screen.
 ADS DATA CLEAP
- (2) ADS DATA CLEAR Clear **A.D.S** data only. (Refer to "5-2-7A.D.S.".)
- (3) RANKING CLEAR (Initialization of ranking data) Initialize all of ranking data, such as straight victories records and etc., at the value on delivery at factory.
- (4) SET DEFAULTS ALL OPTIONS (Initialization of all options) Initialize all options set in TEST mode. (Refer to "5-2TEST mode".)
- (5) ALLCLEAR Perform the items (2) and (3) above at the same time.

5-2-9 EXIT & SAVE (Exit of TEST mode)

This mode returns to the game screen after exiting test mode.

[Notice]

If the exit of TEST mode is not performed in the correct procedures, a changed setting may not be reflected correctly. Be sure to select "EXIT & SAVE' from the test menu screen before pressing P1-BUTTON 1 to end it.

6. Maintenance (It must be handled by an engineer)



[Notice]

- Be sure to use a JAMMA standard conformable one and a specified one for the JAMMA edge connector.
- Be sure to use a NAMCO specified one (DDK-made: 225D-10024C2-2312) for 48P extension edge connector (*1)

The tests for switch, sound and display should be performed periodically to use this game machine in the correct condition. (Refer to "5-2 TEST mode".)

The running in the condition that the **PC** board is in loose fixing and connecting may cause a trouble or malfunction. Check the PC board periodically because that it is loosenedd due to vibration during play.

An alien factor and duston the PC board may cause a trouble or malfunction. Clean the PC board periodically to keep it neat.

[Notice]

Be sure to turn OFF the power of cabinet before cleaning. Be sure to use an anti-static electricity cleaning tools, such as anti-static electricity brush for OA apparatus and etc.

If this game machine does not work correctly, check again that this game machine is installed and set correctly after reading the instruction manual for cabinet and this manual.

If the game machine does not work correctly after all efforts, contact your distributor after turning off the power of cabinet and removing the power plug from the outlet.

[Notice]

- Do NOT perform continuity test through tester; otherwise, the internal voltage of tester may destroy the IC.
- *1) The JAMMA edge connector and **48P** extension edge connector are used for only cabinet corresponding to the JAMMA standard.

7. Transportation

When sending PC boards due to transfer, resale and repair, wrap them with sponge or bubble wrap, and pack them in a card board boxes to protect against any shock from the outside.

[Notice]

Refer to the following list when connecting this game machine to the cabinet corresponding to the JAMMA standard. It is not necessary for cabinet corresponding to the JAMMA VIDEO standard (JVS).
 Be sure to read the concerned item on "4. Installation" when connecting it.

JAMMA edge connector (54P 3.96mm pitch)

Extension edge connector (48P 2.54mm pitch)

Soldering side Terminal No.		Component side	Soldering side	Termi	nal No	Component side	
GND	A	1	GND	Speaker R (-)	A1	B1	Speaker R (+)
GND	В	2	GND	[Yellow]			[Orange]
+5V	С	3	+5V		A2	B2	
+5v	D	4	+5v	-	A3	B3	
	Е	5			A4	B4	
+12V	F	6	+12v	Mis-insertion protection key	A5	B5	Mis-insertion protection key
Mis-insertion protection key	Н	7	Mis-insertion protection key		A6	B6	
Coin counter 2	J	8	Coin counter 1		A7	B7	
	K	9		P2-BUTTON 3 [White, blue]	A8	B8	P2-BUTTON 4 [White, violet]
Speaker (-)	L	10	Speaker(+)		A9	B9	GND [Black]
Audio (GND)	М	11	Audio(+)				GND [Black]
Video (GREEN)	N	12	Video (RED)		A11	B11	
Video (SYNC)	Р	13	Video(BLUE)		A12	B12	
Service switch	R	14	Video(GND)		A13	B13	
	S	15	Test switch		A14	B14	
Coin switch 2	Т	16	Coin switch 1		A15	B15	
2 START	U	17	P1-START switch		A 16	D16	
Pwitch					Δ17	B10	
P2 lever (UP)	V	18	P1 lever (UP)	_	A18	B19	
P2 lever (DOWN)	W	19	P1 lever (DOWN)				PI RUTTON 4
P2 lever (LEFT)	X	20	PI lever (LEFT)		14.1.2	19.1.2	[Violet]
P2 lever (RIGHT)	Y	21	P1 lever (RIGHT)	PI-BUTTON 3	A20	B20	
P2-BUTTON	Z	22	PI-BUTTON	[Blue]			
P2-BUTTON 2	a	23	P1-BUTTON2		A21	B21	
	b	24			A22	B22	
	c	25			A23	B23	
	d	26			A24	B24	
GND	e	27	GND			_	
GND	f	28	GND				