

1ST PRINTING JUNE 01

SEGA



Universal Kit

Kit Installation Instructions
& Service Manual

Switchable *FROM* High Resolution 31K
TO Standard (Low) Resolution 15.75K.

1 - 2 PLAYER GAME

SEGA ENTERPRISES, INC. USA

MANUAL NO. 999-1292

Warranty

Your new Sega Product is covered for a period of 90 days from the date of shipment. This certifies that the Printed Circuit Boards, Power Supplies and Monitor are to be free of defects in workmanship or materials under normal operating conditions. This also certifies that all Interactive Control Assemblies are to be free from defects in workmanship and materials under normal operating conditions. No other product in this machine is hereby covered.

Sellers sole liability in the event a warranted part described above fails shall be, at its option, to replace or repair the defective part during the warranty period. For Warranty claims, contact your Sega Distributor.

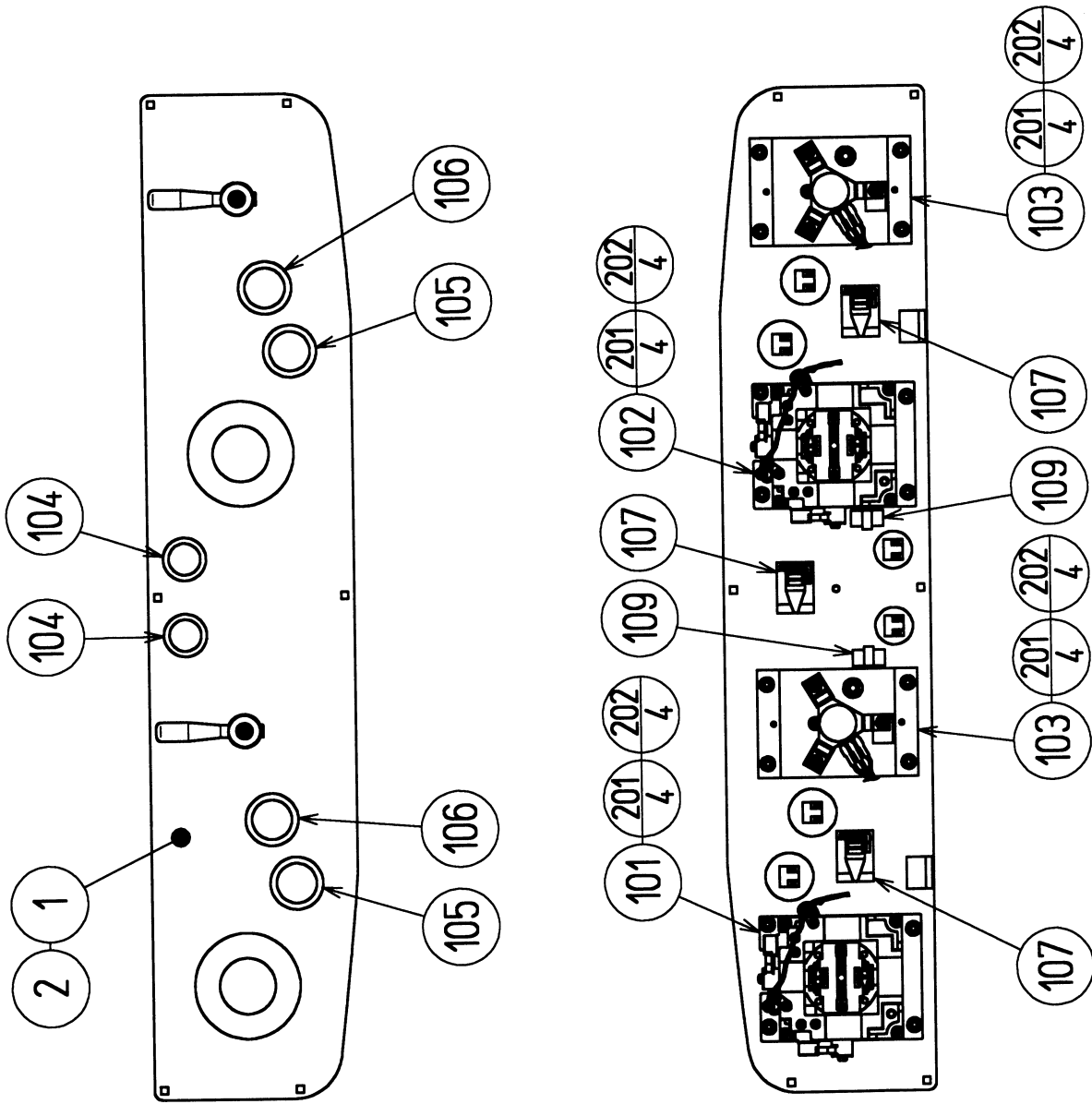
Should the Seller determine, by inspection that the product was caused by Accident, Misuse, Neglect, Alteration, Improper Repair, Installation or Testing, the warranty offered will be null and void.

Under no circumstances is the Seller responsible for any loss of profits, loss of use, or other damages.

This shall be the exclusive written Warranty of the original purchaser expressed in lieu of all other warranties expressed or implied. Under no circumstance shall it extend beyond the period of time listed above.

World Series 2001
 Sega Naomi System
 Kit Contains List

Part #	Desc	Qty
400-5397-01	NAOMI POWER SUPPLY	1
838-13616	AUDIO POWER AMP 2 CH	1
560-5407-UL	AUDIO XFORMER 120V	1
838-13683-93CV1	JAMMA I/O BD (NAOMI)	1
600-7141-200	USB CABLE	1
600-7009-2500	VGA VIDEO CABLE	1
840-0051D-01	ASSY CASE PC1 DIMM BD	1
600-7247-500	CABLE SCSI TYPE 2 500MM	1
LOC. PURCHASE	SERVICE SWT BRKT ASSY	1
XKT-0833	GD-ROM DRIVE KIT	1
610-0630-0010	GD SOFT KIT WS2K1	1
999-1293	MARQUEE WS2K1	1
999-1294	INST SHT AMER LG WS2K1	1
999-1295	INST SHT NAT LG WS2K1	1
999-1296	INST SHT CONTROL WS2K1	1
999-1297	SIDE DECALS WS2K1	2
NOA-20010-01	CONT PNL ASSY WS2K1 (See Breakdown Next Page.)	1



ASSY CTRL PNL 2A4B2S MB2K2 ENG (NOA-20010-01)

(D-2/2)

ITEM NO.	PART NO.	DESCRIPTION
1	HOT-2023	CTRL PNL BASE 2A4B2S
2	NOA-2025-01	CTRL PNL PLATE 2A4B2S ENG
101	610-6723-4B02	ASSY ANALOG JOY 4B PINK
102	610-6723-4B01	ASSY ANALOG JOY 4B GREEN
103	610-0409	ASSY BAT MECHA
104	999-1290	PUSHBUTTON RND YELLOW W/MICRO (2 PER)
105	999-1086	PUSHBUTTON RND GREEN W/MICRO (2 PER)
106	999-1289	PUSHBUTTON RND PINK W/MICRO (2 PER)
107	280-5009-01	CORD CLAMP 21
109	280-5275-SR10	CORD CLAMP SR10
201	050-U00400	U NUT M4
202	060-F00400	FLT WSHR M4
203	060-S00400	SPR WSHR M4
204	050-H00400	HEX NUT M4



SERVICE BULLETIN

SEGA Service Department
45133 Industrial Drive
Fremont, Ca. 94538

<http://www.seuservice.com>
Phone: 415.701.6580
Fax: 415.701.6594

SPECIAL NOTICE FOR ALL SEGA NAOMI KITS

PROBLEM:

The SEGA Naomi Game kits are actually 'JAMMA Dependent'. What this means exactly is they will only install into existing JAMMA Cabinets. If an operator tries to install these kits into a Non-JAMMA cabinet, they will first have to bring the wiring up to JAMMA Standards.

SOLUTION:

- Step 1 Disconnect the games original DC Power Supply. You may only use the power supply provided with your kit. Be sure to set the voltages going to your Game BD to 5.1 and 3.3 volts DC to assure proper operation (Measure on Square Connector at Game BD. Yellow = 5vdc / Brown = 3.3vdc / White = Gnd)
- Step 2 You MUST USE THE COIN METER SUPPLIED WITH YOUR KIT to assure proper Coin acceptance. A minimum 18 Gauge wire should be used from the Coin Meter 1 output line on your JAMMA Harness. The 5vdc (Yellow) wire found in the wiring bag of your kit MUST BE USED for the supply voltage to the meter.



IMPORTANT!

Not following the directions provided herein may cause your game to malfunction.
All electrical work should be performed by the site's Serviceman or Technician.



WARNING!

- In order to prevent an electric shock and short circuit, be sure to turn power off before performing work or touching the interior parts of the product.
- Be careful so as not to damage wirings. Damaged wiring can cause an electric shock or short circuit accident.
- Do not touch places other than those specified. Touching places not specified can cause an electric shock or short circuit accident.

If you have any questions please contact the SEGA Service Department at the numbers given above.

INSTALLATION INSTRUCTIONS

- 1) First. Remove all access panels from the game. Locate the original game Logic PCB's & Power Supply and remove from the Cabinet by first disconnecting all harnesses from the boards. (You need only to splice in the Main Power (110v AC) into the 3-Pin Connector (GRN/WHT/BLK).)
- 2) Remove all existing game harnesses (we suggest using New Jamma Harnesses (*NOT contained in the kit*) to ensure reliability).
- 3) Locate the most convenient and open area of the cabinet to mount the World Series 2001 Naomi System Assembly. Make sure this area is free and clear of all cable harnesses and grounds, cable clamps, etc.

Vacuum out or clean bottom of cabinet of dirt & miscellaneous parts (e.g. screws, loose coins / tokens, etc.).

Good Idea!

Good Idea!

Remove all exterior decals and repair any cabinet damage. Repaint cabinet if necessary. Remove the Monitor Plexi or if your game plexi has Silk-screened artwork, you will need to strip it off.

- 4) Connect the JAMMA Harnesses to the JVS-JAMMA Interface Boards. Separate the wires from each other (i.e. Control Panel, Video, Speaker, Power Supply). Run the various harnesses to the part of the cabinet they go to ensuring they are dressed properly & secured to the cabinet. Locate the Volume/ Speaker/Coin Meter Cable and connect to your existing **Switch Bracket** or use the new one included with the kit. **Note:** *If you are using a VGA Compatible Monitor you can run your VGA Cable directly to the monitor or connect it to your JVS JAMMA Interface for RGB Conversion to your JAMMA Cables.*
- 5) Remove Marquee from cabinet and cut to fit the new World Series 2001 Marquee in place.

REPLACE old Joysticks & Buttons with the **NEW** ones supplied in Kit.

Good Idea!

- 6) First remove all Joystick and Button assemblies from the Control Panel. Remove Lexan and Control Panel Overlay. Proceed to clean surface of the Control Panel by removing all adhesive and dirt. Fill in or plug up existing button holes to set up a blank work area for your new controls.
- 7) Install the new Control Panel Overlay by carefully peeling off the paper backing and laying down on the panel. Smooth it out, starting in the center and working your way to the edges (removing all of the trapped air pockets). If necessary, cut the edges of the overlay excess and fold under panel.
- 8) Cut out the button and Joystick Holes. Install Joystick and buttons from kit into the Control Panel and tighten down. Connect all game harness wires to switches and buttons.

INSTALLATION INSTRUCTIONS

- 9) Proceed to place new decals on the sides of the cabinet. Locate a new monitor bezel, if needed, and replace glass, if required (due scratches). Install Instruction Placard to the back of the Monitor Glass.

NOTE: As a precaution, disconnect the JAMMA Harness from the I/O Boards and turn power on. With a Multi-Meter, measure the 5v and 3.3v. Adjust if necessary to 5.15v DC and 3.3vDC. Measure the +12 to ensure the wires and voltages are in the correct position. Turn power off. Plug in the JAMMA Harness once again to the I/O Boards. The Attract Mode should appear on the screen.

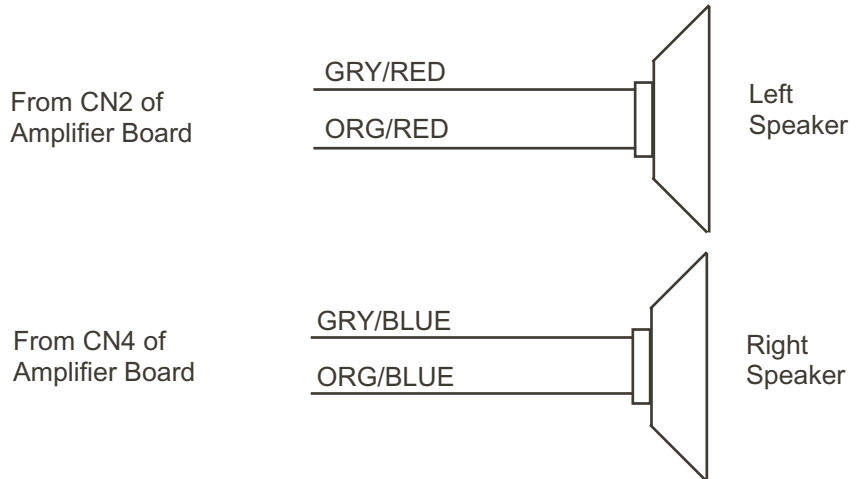
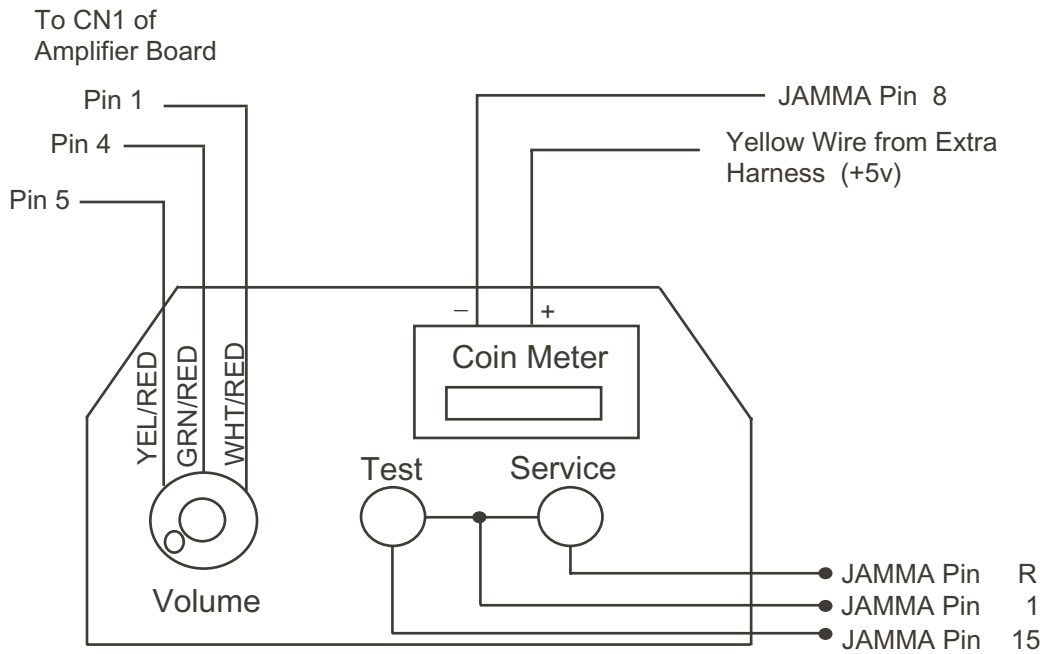
Adjust the **SIZE, CONTRAST, BRIGHTNESS, and COLORS** on the Monitor for optimum appearance. Adjust **VERTICAL/HORIZONTAL** Hold to get a stable picture, if required.



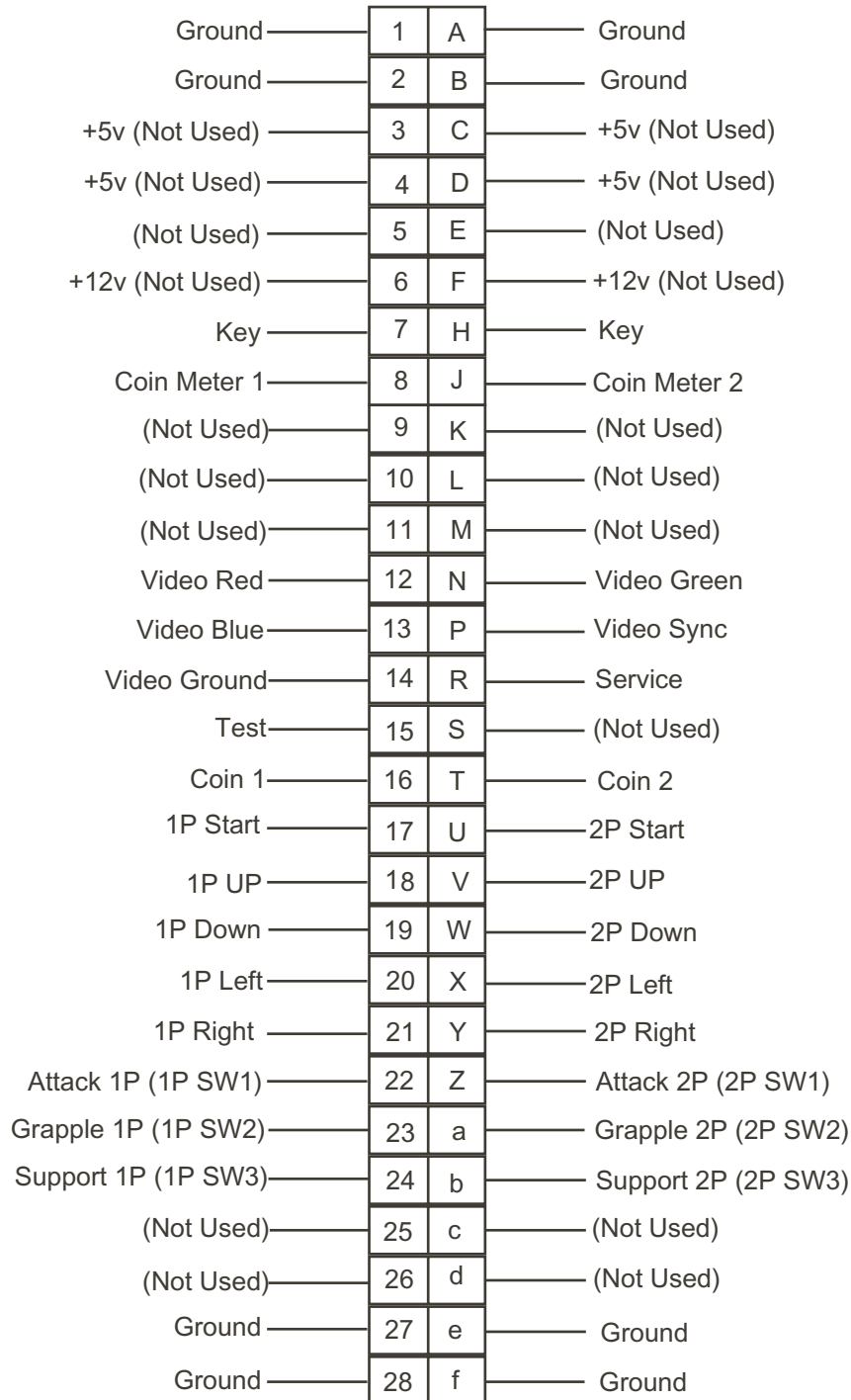
Enter **DIAGNOSTICS** and adjust the Volume Level, test all Buttons & Joystick for proper operation & wiring. Adjust Pricing. Coin-Up and test out a game to ensure proper play functions are as they should be.



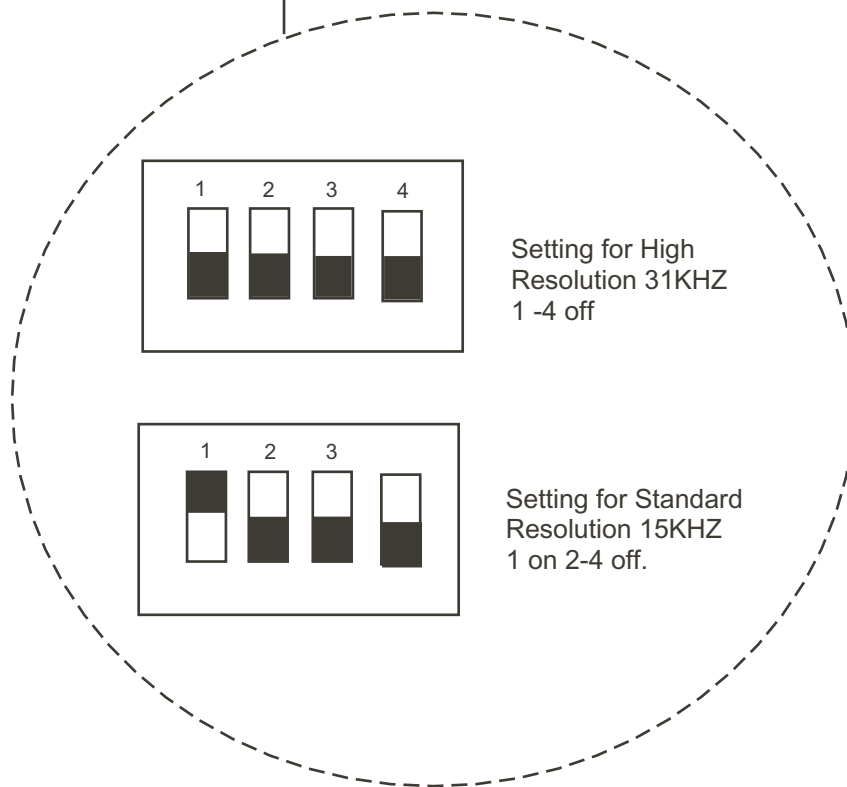
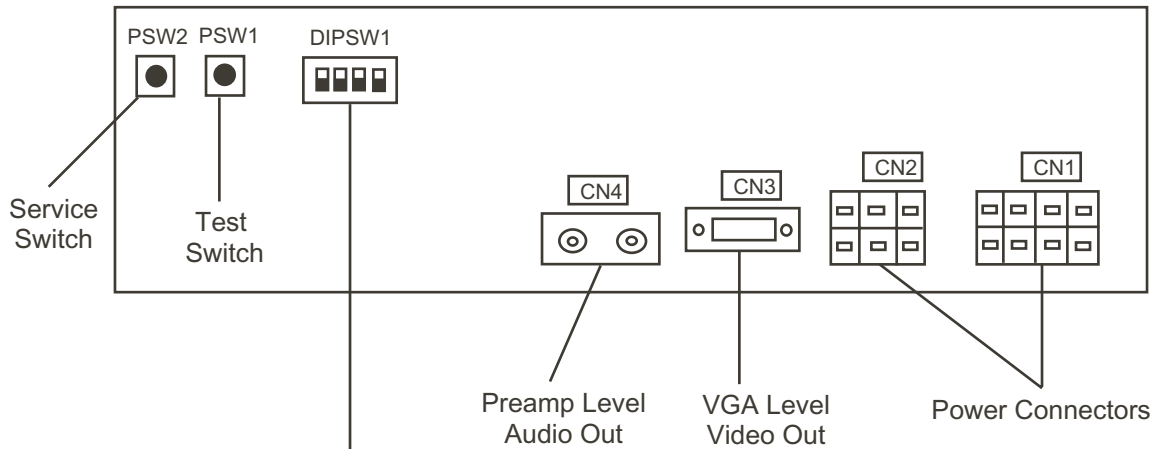
Sega Naomi System Switch Bracket and Speaker Installation Diagrams (Figure 3)



Sega Naomi System JAMMA Harness Wiring (JAMMA I/O BD) (Figure 4)



Sega Naomi System Filter Board Information Connector Description etc.



1. SPECIFICATIONS

① MONITOR

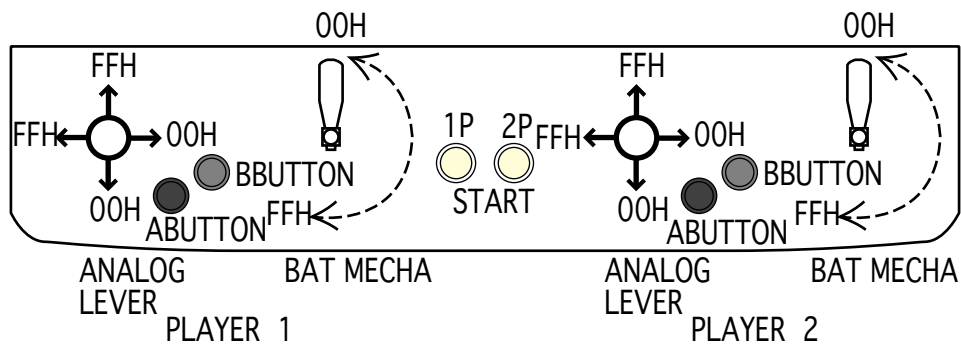
Monitor Position



Horizontal Synchronous Frequency
15/31 kHz

② CONTROL PANEL

- NEW ASTRO CITY, NAOMI CABINET, NET CITY, BLAST CITY
(PART NO. HOT-20011 or NOA-20010-01)



- ANALOG LEVER: Move cursor (for throwing, batting); Specify base (for defense, base running)
 A BUTTON: Throw (for defense); Steal base (for batting); Advance to next base (for base running)
 Enter command (within command acceptance time)
 B BUTTON: Check runner (for throwing); Move between bases (for defense); Return to base (for running)
 Enter command (within command acceptance time)
 BAT MECHA: Swing
 START: Start game; Time out (for throwing, batting)

The analog input on the I/O board uses the following channels:

CH0 : 1P ANALOG LEVER VOLUME VERTICAL UP(FFH) DOWN(00H)

CH1 : 1P ANALOG LEVER VOLUME HORIZONTAL LEFT(FFH) RIGHT(00H)

CH2 : 1P BAT MECHA VOLUME STANDARD POS.(00H) MAX(FFH)

CH3 : (RESERVE)

CH4 : 2P ANALOG LEVER VOLUME VERTICAL UP(FFH) DOWN(00H)

CH5 : 2P ANALOG LEVER VOLUME HORIZONTAL LEFT(FFH) RIGHT(00H)

CH6 : 2P BAT MECHA VOLUME STANDARD POS.(00H) MAX(FFH)

CH7 : (RESERVE)

③ Minimum DIMM Memory Capacity 256 MB

Removing and Attaching the BAT MECHA

If you need to remove the BAT MECHA as in the case of a failure, open the control panel base and remove the BAT MECHA through the following procedure.

To reinstall the BAT MECHA, reverse the removing procedure, being certain that the BAT MECHA is faced in the correct direction.

For instructions on opening the control panel base, refer to the Instruction Manual of the cabinet.



WARNING!

To prevent electric shock, be sure to turn off the power for the cabinet when removing or attaching the BAT MECHA.

- ① Remove the wiring connector (AMP 3P, white) located near the volume.
- ② Remove the tamperproof screw clamping the bat center axis on the front side of the control panel.

Tightening/loosening of the tamperproof screw should use the tamperproof screw M4 wrench (540-0006-01) that is included as an accessory for the NAOMI CABINET, NET CITY, and NEW ASTRO CITY cabinet.

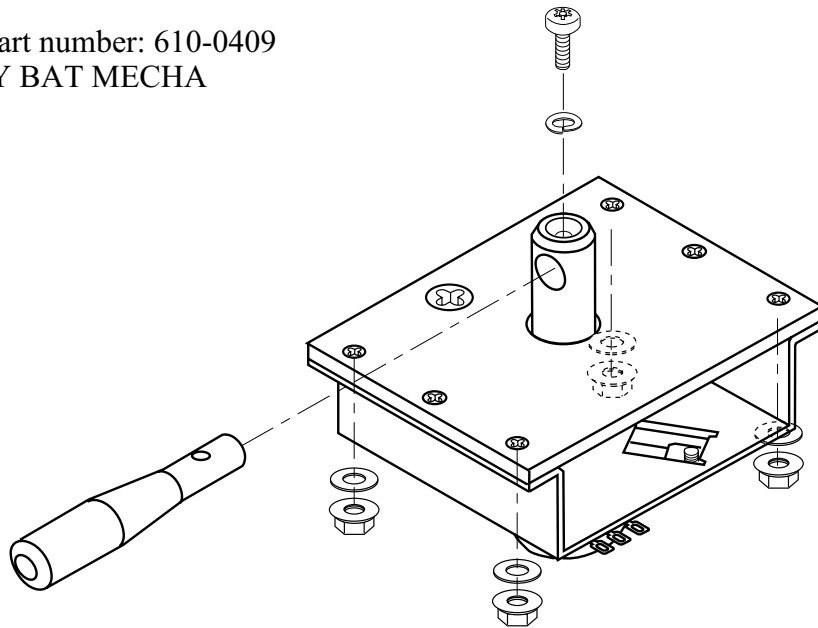
- ① The tamperproof screw M4 wrench is not included with the following cabinets: 1 2 3
② Versus CITY, New VERSUS CITY, and BLAST CITY.

If the wrench is not available, please order the following part numbers:

- Wrench type (M4): 540-0006-01
- Screwdriver type (M4): 540-0018

- ③ Remove the four flange nuts clamping the BAT MECHA body on the back side of the control panel.

BAT MECHA Part number: 610-0409
Part name: ASSY BAT MECHA



The above figure does not show the wiring of the volume and its connector (AMP 3P, white).

2. CONTENTS OF GAME

- This is a sports action game where the Major League Baseball in the United States of America was taken as a subject matter.
- In this game, the following teams appear: 14 American and 16 National teams, and two all-star teams from the two leagues.
- The number of players appearing in the game is over 700. All of the 30 really existing ballparks also appear there.
- The game player or players operate their favorite teams to participate in the baseball game, aiming at the win.
- The following play modes are available: Player vs. CPU, Player vs. Player, and Game of Intrusion.

HOW TO PLAY THE GAME

- First select your favorite from the 32 teams.
Use the lever to designate the selected team, and use the A Button for determination. This applies also to all the subsequent operations.
- Next select the desired one from the 30 ballparks.
- Then select the starting pitcher. You can select the desired pitcher from the five candidates appearing on the screen.
- Finally select one of three levels: Easy, Standard, and Hard. The fielding strategy you use depends on the level you selected.

LEGEND - HARD -: Hard.
Both catching and throwing the ball are operated by the player. The speed of the pitched ball, i.e., pace, is the maximum.

VETERAN - MEDIUM -: Standard.
Both catching and throwing the ball are operated by the player. The pace is the standard.

ROOKIE - EASY -: Easy.
All the operations to catching the ball are made by the CPU. All the subsequent operations are made by the player.
The pace is the minimum.

- The game start.
The shortest way to the win is to take advantage of the strong points of the individual baseball players to play the game.
- Apart from the score of the actual baseball game, game points may increase or decrease, depending on the contents of the baseball game.
If the resulting number of game points is listed at an upper rank when the game is cleared, your name is included in the entry.
- In the Player vs. CPU or Player vs. Player mode, the game is cleared if the play continues until the entire baseball game ends, and if you have won, you see the ending.
- If the difference in score reaches the preset value during the progress of the game, the game is immediately treated as a called game, resulting in Game Over.

- The settings in GAME ASSIGNMENTS in the Test Mode control how the game ends:

EXTRA INNING: If this is ON, the extra part of the baseball game continues to a maximum of 12th innings.
If this is OFF, the baseball game ends when the bottom of the ninth inning ends (even if the score is even, i.e., the game is drawn).

CALLED GAME: Can be set in the 5 to 10 range.
When the difference in score reaches the setting, the baseball game ends (even if the bottom of that inning is not yet completed).

- If the game play begins at the other seat while a player is in progress at either 1P or 2P seat, you enter the Game of Intrusion Mode.
For any play in the Game of Intrusion Mode, the starting inning varies with the GAME ASSIGNMENTS settings.

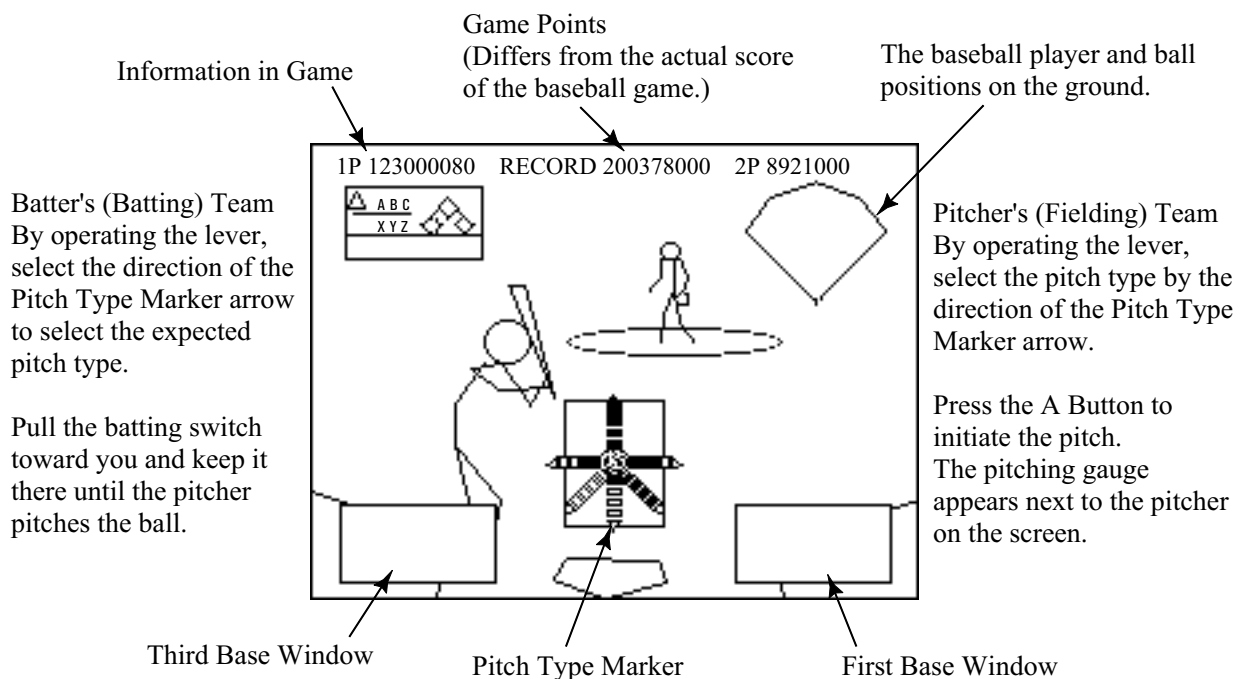
INNINGS: For 1 inning, the game begins at the top of the ninth inning.
For 2 innings, the game begins at the top of the eighth inning.
For 3 innings, the game begins at the top of the seventh inning.
For all innings, the game begins at the top of the first inning.

In the Game of Intrusion Mode, the game may continue to up to the bottom of the ninth inning. The winner can subsequently continue the play in the Player vs. CPU Mode.

If a draw results from a baseball game in the Game of Intrusion Mode, Game Over results for both of the players.

GAME SCREEN

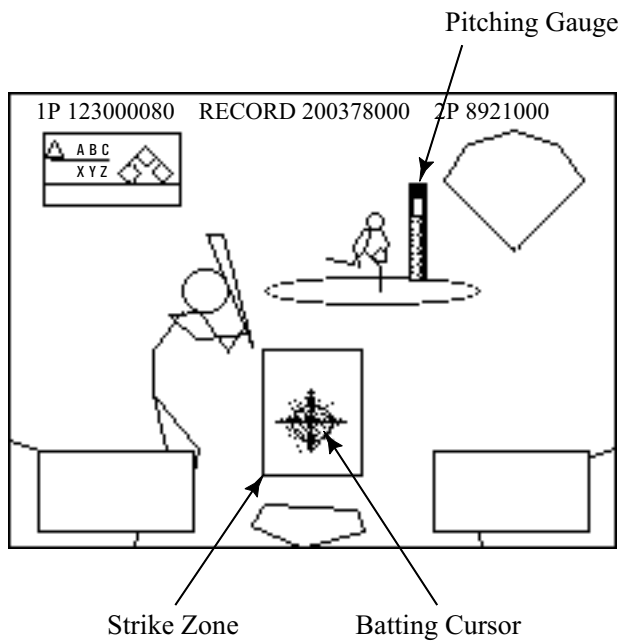
Pitching & Batting Screen



Batter's (Batting) Team

By operating the lever, move the batting cursor to aim at the ball.

Release the batting switch timely to hit the ball.



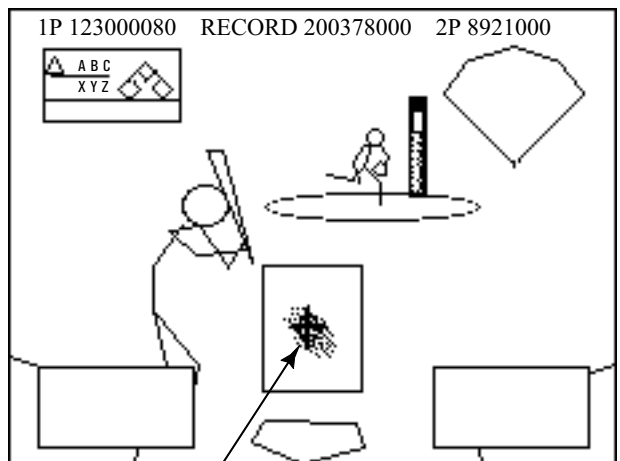
Pitcher's (Fielding) Team

Select the course of the ball using the lever.

While observing the pitching gauge, press the A Button timely (best when MAX appears at the top of the game).

Batter's (Batting) Team

If your expectation turns out right, the batting cursor is highlighted and the probability of hit increases.



Pitcher's (Fielding) Team

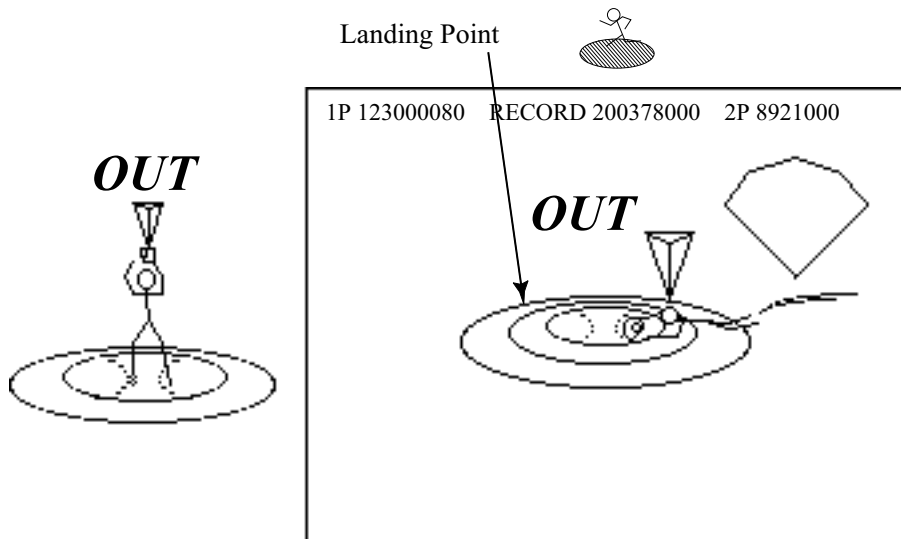
Pressing the button timely improves all of the speed and control of the ball and the sharpness of breaking balls.

If you press the button untimely (too early or late), all of the speed and control of the ball and the sharpness of breaking balls will be poor reversely.

The cursor shape changes depending on the expected pitch type.

If your expectation turns out right, the ball will be hit more easily and to a further point, with the cursor color changed.

Fielding Screen



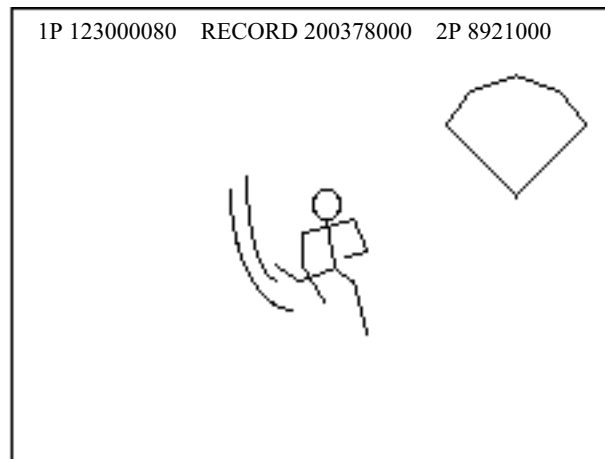
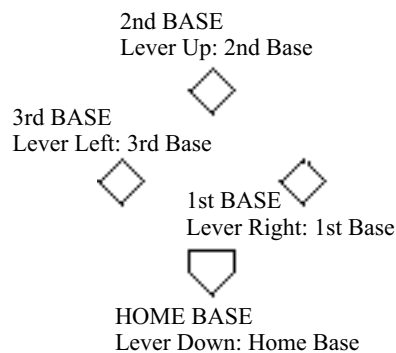
Fielding Team

Using the lever, move a fielder to the expected landing point of the ball. By pressing the B Button, you can replace the fielder you want to move.

When approximating to the ball, the fielder automatically catches the ball.

For example, the ball is occasionally carried away by wind.

If you press the A Button timely, the fielder exhibits a super catch by fine play. If you selected ROOKIE-EASY- for the level at the start of the game, the above operations are unnecessary.

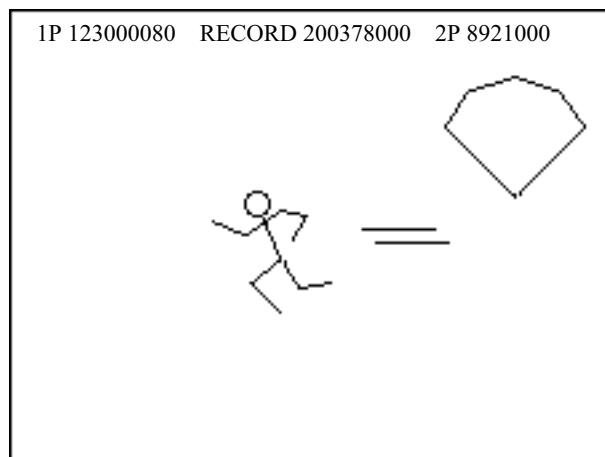


Throw/Shift

Select the desired base using the lever.

Pressing the A Button causes the fielder to throw the ball to the base you selected.

Pressing the B Button causes the fielder to run toward the base you selected.



Base running

Select the desired base using the lever.

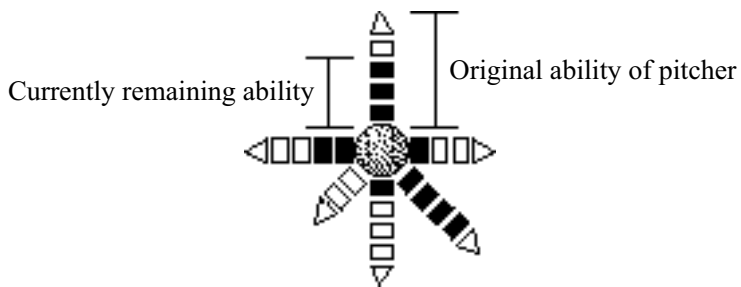
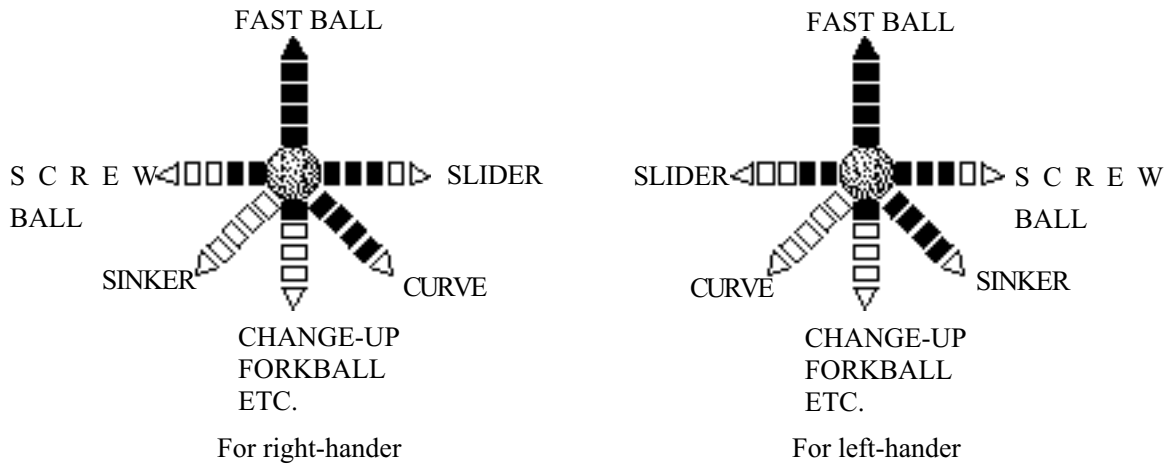
Pressing the A Button causes the fielder to run toward the base you selected.

Pressing the B Button causes the fielder to return to the previous base.

While you hold the A and B Buttons together, the field stays there.

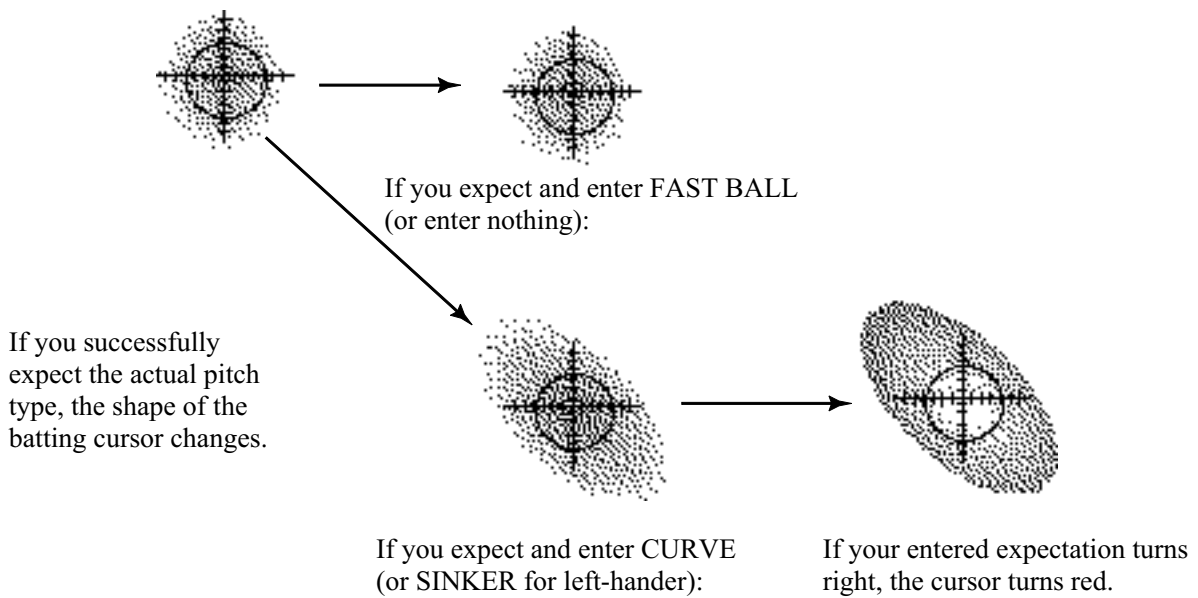
○ Pitch Type Marker

The pitch type marker shows the available pitch types.



○ Batting Cursor

If you successfully expect the actual pitch type, the shape of the batting cursor changes.



○ NAMES AND ABBREVIATIONS OF THE TEAMS AND BALLPARK NAMES
APPEARING IN THE GAME

The team names are listed alphabetically.

American League

1. Anaheim Angels/ANA
:Edison International Field
2. Baltimore Orioles/BAL
:Oriole Park at Camden Yards
3. Boston Red Sox/BOS
:Fenway Park
4. Chicago White Sox/CHW
:Comiskey Park
5. Cleveland Indians/CLE
:Jacobs Field
6. Detroit Tigers/DET
:Comerica Park
7. Kansas City Royals/KC
:Kauffman Stadium
8. Minnesota Twins/MIN
:Hubert H.Humphrey Metrodome
9. New York Yankees/NYY
:Yankee Stadium
10. Oakland Athletics/OAK
:Network Associates Coliseum
11. Seattle Mariners/SEA
:SAFECO Field
12. Tampa Bay Devil Rays/TB
:Tropicana Field
13. Texas Rangers/TEX
:The Ballpark in Arlington
14. Toronto Blue Jays/TOR
:SkyDome

National League

1. Arizona Diamondbacks/ARI
:BankOne Ballpark
2. Atlanta Braves/ATL
:Turner Field
3. Chicago Cubs/CHC
:Wrigley Field
4. Cincinnati Reds/CIN
:Cinergy Field
5. Colorado Rockies/COL
:Coors Field
6. Florida Marlins/FLA
:Pro Player Stadium
7. Houston Astros/HOU
:Enron Field
8. Los Angeles Dodgers/LA
:Dodger Stadium
9. Milwaukee Brewers/MIL
:Miller Park
10. Montreal Expos/MON
:Olympic Stadium
11. New York Mets/NYM
:Shea Stadium
12. Philadelphia Phillies/PHI
:Veterans Stadium
13. Pittsburgh Pirates/PIT
:PNC Park
14. St. Louis Cardinals/STL
:Busch Stadium
15. San Diego Padres/SD
:Qualcomm Park at Jack Murphy Stadium
16. San Francisco Giants/SF
:Pacific Bell Park

3. TEST MODE

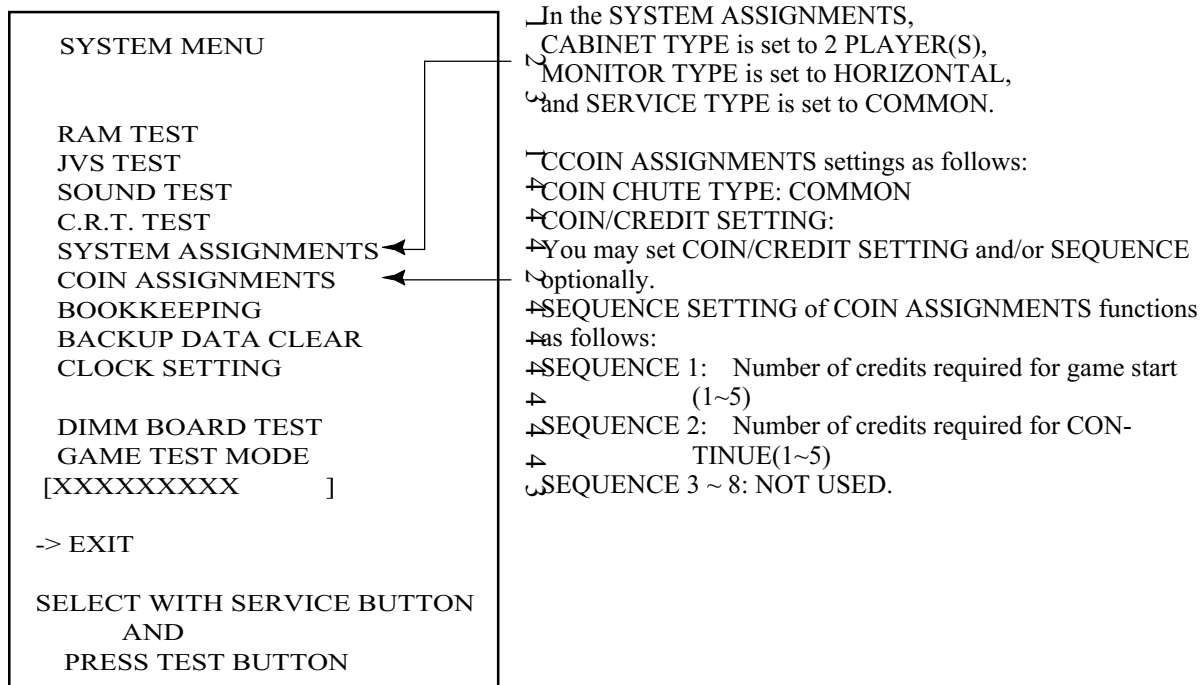
A. SYSTEM MENU



When settings are changed in SYSTEM ASSIGNMENTS, COIN ASSIGNMENTS, and GAME ASSIGNMENTS of GAME TEST MODE, be sure to exit from the test mode of SYSTEM MENU screen. The contents of setting changes are stored in the IC on the BOARD when exiting from the Test Mode. If the power is turned off in the Test Mode (before exiting), the contents of setting changes are ineffective. In this case, the settings remain unchanged.

This test mode mainly allows the IC Board to be checked for accurate functioning, monitor color to be adjusted as well as COIN ASSIGNMENTS and GAME ASSIGNMENTS to be adjusted.

- 1) After turning power on, press the TEST Button to have the following SYSTEM MENU displayed.

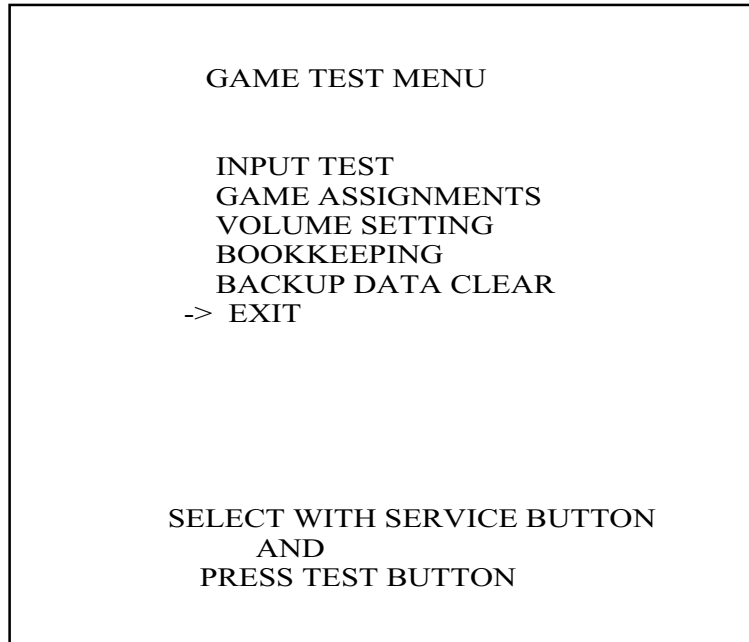


- 2) Press the SERVICE Button to move the arrow. Bring the arrow to the desired item and press the TEST Button.
- 3) Press the TEST Button in the GAME TEST MODE to display the GAME TEST MENU peculiar to this game. See the next page onward.
- 4) Upon finishing the test, bring the arrow to EXIT and press the TEST Button to return to the Game mode.

For detailed explanations as regards the SYSTEM TEST MODE, refer to GD-ROM SERVICE MANUAL (420-6620-01).

B. GAME TEST MODE

By selecting "GAME TEST MODE" and pressing the TEST Button on the System Test Menu Screen, the Test Mode Menu Screen (Game Test Mode Menu Screen) appears, which is unique to this game.



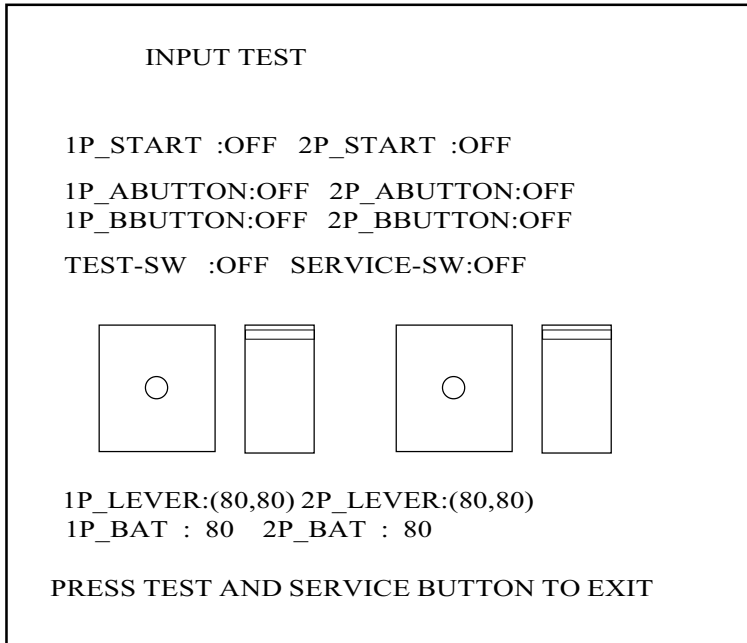
GAME TEST MENU Screen

- Pressing the SERVICE Button moves the arrow (->) on the screen. By moving the arrow, select the item you want to run.
- Pressing the TEST Button runs the currently selected item. You are brought to the screen for that item, and can change or adjust the settings.
- With "EXIT" selected, pressing the TEST Button returns you to the System Test Menu Screen.
- All the subsequent GAME TEST MODE operations can basically be made using the B and A Buttons instead of the SERVICE and TEST Buttons.

SERVICE Button - B Button
TEST Button - A Button

a. INPUT TEST

This test checks the input devices.
Using this screen, check the input devices periodically.
Pressing the TEST and SERVICE Buttons together returns you to the Game Test Menu Screen.



INPUT TEST Screen

Operate each of the input devices. If the indication at the right of the device label changes from OFF to ON, the device is normal.
LEVER and BAT indicate the lever and batting switch volume control values, respectively. Check whether each of the values changes and the cursor moves smoothly according to the lever or batting switch operations you make.

- Lever and batting switch settings
LEVER: Check that, when you move the lever fully to the top, bottom, left, or right, the cursor, marked by a circle (Å) in the figure, moves securely from an end to another in the frame while the value below the frame is changing.
BAT: Check that, when you move the batting switch fully from an end to another in the movable range, the cursor, marked by horizontal bars in the figure, moves securely from the top (or bottom) to the bottom (or top) while the value below the frame is changing.

If the cursor does not move from an end to another, retry to set a proper value with VOLUME SETTING and then perform the recheck on this Test Screen.

b. GAME ASSIGNMENTS



Once you have made change to the settings, select and run EXIT and exit the GAME TEST MODE. The new settings do not take effect until this mode is exited.

This screen lets you make change to the game difficulty and other settings.

Changing Procedure

- ① Press the SERVICE Button to move the arrow to the item to which you want to make change.
- ② Pressing the TEST Button changes the indication located at the right of the currently selected item. Change it to the desired one.
- ③ Press the SERVICE Button to select EXIT, and press the TEST Button. This returns you to the Game Test Menu Screen.

```

                GAME ASSIGNMENTS

DIFFICULTY      NORMAL
INNINGS        2 INNINGS
EXTRA INNING    ON
CALLED GAME     10
INITIAL TEAM 1P NYY
                2P NYM
-> EXIT

                SELECT WITH SERVICE BUTTON
                AND
                PRESS TEST BUTTON
```

GAME ASSIGNMENTS Screen

- **DIFFICULTY:** Set the difficulty by changing the pitching speed of the pitcher or modifying the CPU's routine of thinking. Set one of the following five levels:

VERY EASY - EASY - NORMAL - HARD - VERY HARD
 Easier $\xrightarrow{\hspace{10em}}$ Harder

- **INNINGS:** Set the number of innings you can play with the start-enabled (or continuable) credits.
 When each setting has been made, an additional credit is required each time any inning in parentheses (Å@) ends.

1 INNING setting: (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)
 2 INNINGS setting: (1, 2) (3, 4) (5, 6) (7, 8, 9) (10, 11, 12)
 3 INNINGS setting: (1, 2, 3) (4, 5, 6) (7, 8, 9) (10, 11, 12)
 ALL INNINGS setting: No additional credit is required even if you play the extra part of the baseball game to a maximum of 12th innings.

- **EXTRA INNING:** Set whether the game may continue to extra innings.
 If this is OFF, the game ends even if the score is even after the end of the bottom of the ninth inning.
- **CALLED GAME:** Set the difference in score that allows the game to be established as a called game. The value may be 5 to 10.
 When the difference in score reaches the setting, the game ends.
- **INITIAL TEAM:** Set the team that is first selected on the Select Team Screen.

c. VOLUME SETTING



- Normal play is guaranteed only after all the input devices have been set up properly.
Be sure to make the proper settings before you begin demonstration for the selling purpose.
- Once you have made change to the settings, select and run EXIT WITH SAVE and exit the GAME TEST MODE. The new settings do not take effect until this mode is exited.

This screen lets you set the sensitivity of the input devices.
If you are unsatisfied with the operability or have adjusted or replaced the volume control of an input device, make the settings on this screen.

```
VOLUME SETTING
PLAYER1
LEVER_H  MAX(FFH) MIN(00H) NOW(80H)
LEVER-V  MAX(FFH) MIN(00H) NOW(80H)
BAT      MAX(FFH) MIN(00H) NOW(00H)

PLAYER2
LEVER-H  MAX(FFH) MIN(00H) NOW(80H)
LEVER-V  MAX(FFH) MIN(00H) NOW(80H)
BAT      MAX(FFH) MIN(00H) NOW(00H)

EXIT WITH SAVE
-> EXIT WITHOUT SAVE

SELECT WITH SERVICE BUTTON
AND
PRESS TEST BUTTON
```

VOLUME SETTING Screen

Setting Procedure

① Move the lever and batting switch fully in the movable range.

② Release the lever and batting switch, and leave them unloaded.

Move Lever Horizontally (LEVER-H)

Move the lever fully to the left or right, and then leave it unloaded.

Move Lever Vertically (LEVER-V)

Move the lever fully to the top or bottom, and then leave it unloaded.

Batting Switch (BAT)

Move the batting switch fully, and then leave it unloaded.

③ Move the SERVICE Button to align the arrow with EXIT WITH SAVE, and press the TEST Button. Save the settings, and return to the Game Test Menu Screen.

- If you press the TEST Button with the arrow aligned with EXIT WITHOUT SAVE, you return to the Game Test Menu Screen without making change to the settings.
- After adjustment, be sure to use INPUT TEST to check that the values change properly according to the operations you make. If no improvements are observed even after the settings are retried, a component such as the lever or batting switch may have failed.

d. BOOKKEEPING

This screen lists the data to be saved.
Pressing the TEST Button returns you to the Game Test Menu Screen.

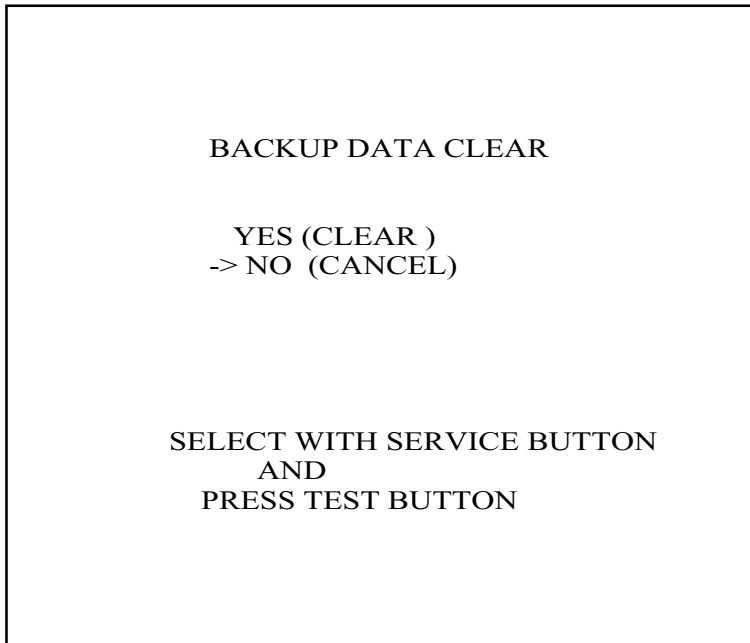
BOOKKEEPING	
NUMBER OF GAMES	0
TOTAL PLAY TIME	0D 00H 00M 00S
AVERAGE PLAY TIME	00M 00S
LONGEST PLAY TIME	00M 00S
SHORTEST PLAY TIME	00M 00S

PRESS TEST BUTTON TO EXIT

BOOKKEEPING Screen

- NUMBER OF GAMES: Total number of games played
- TOTAL PLAY TIME: Play time

e. BACKUP DATA CLEAR



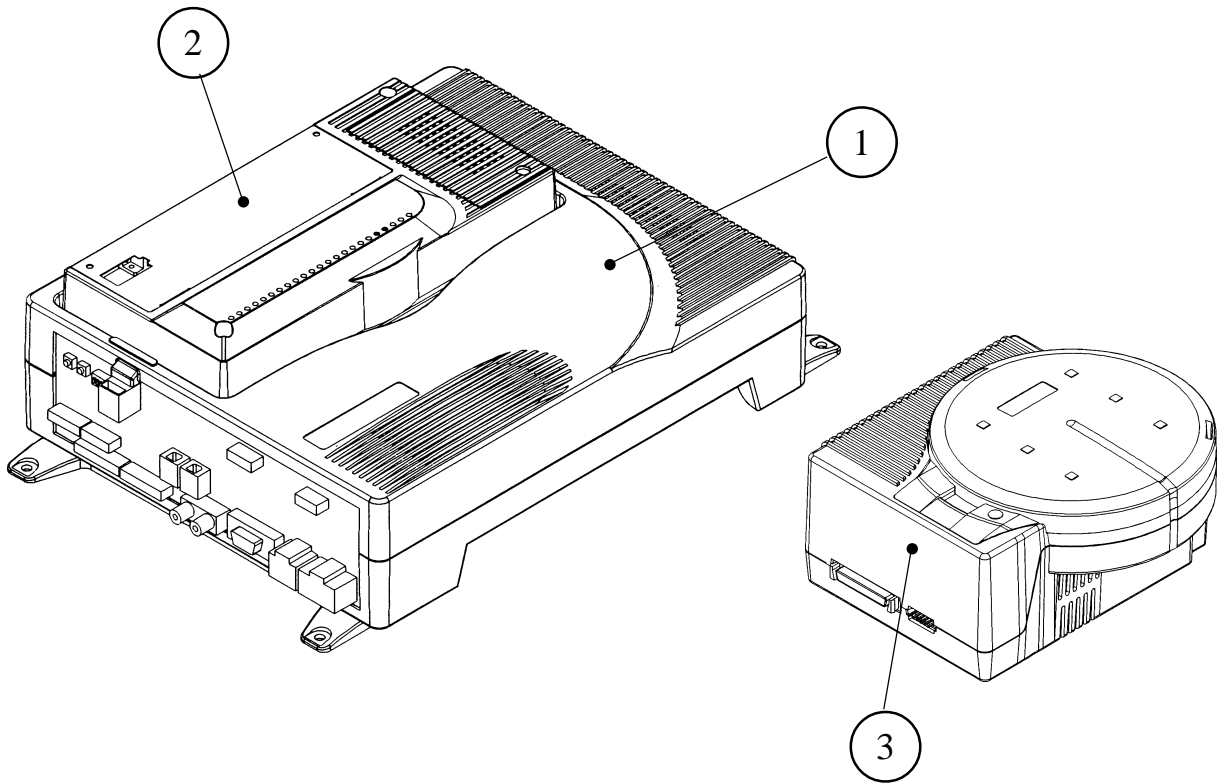
BACKUP DATA CLEAR Screen

This screen is used to initialize BOOKKEEPING and the High Score Ranking. To clear the data about the coins/credits, you have to run BACKUP DATA CLEAR in the SYSTEM TEST MODE. Clearing the data does not influence any game settings (except the data). When clearing, use the SERVICE Button to bring the arrow (->) to "YES (CLEAR)" and press the TEST Button. When the data has been cleared, "COMPLETED" will be displayed. Press the TEST Button to return to the Menu mode. Bring the arrow to "NO (CANCEL)" and press the TEST Button to return to the Menu mode without clearing the data.

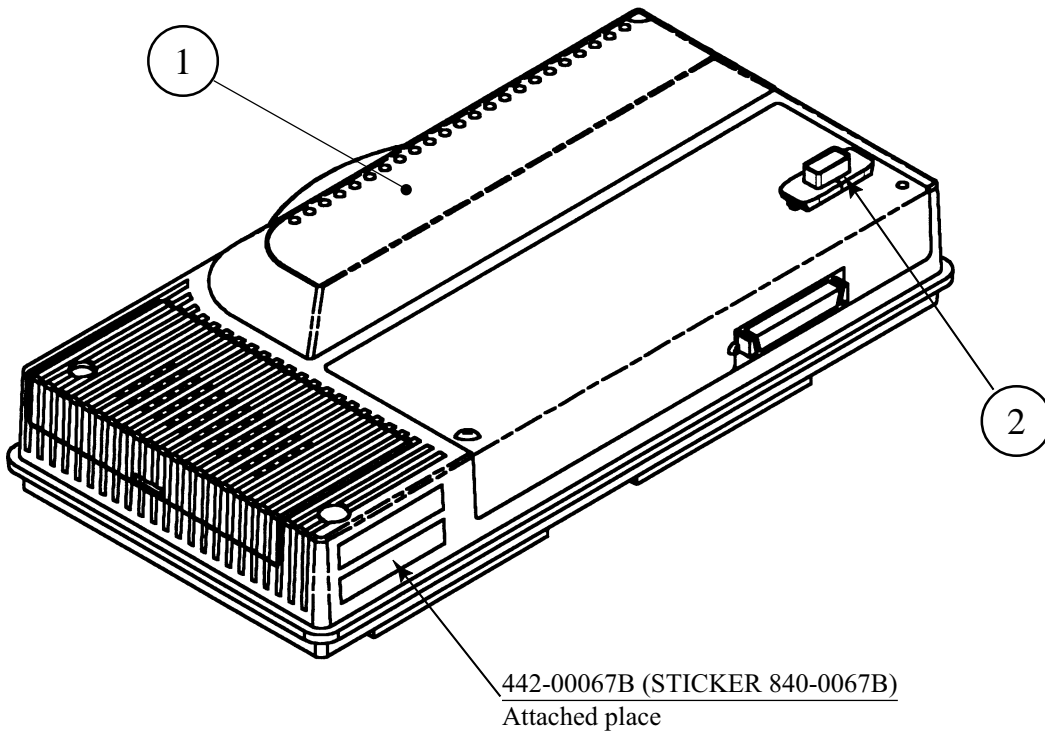
4. GAME BOARD



- Do not expose the Game Board so as to avoid causing an accident or malfunctioning.
- Static electricity discharge can damage electronic parts on the IC Board. Before starting work by opening the Shield Case Lid, be sure to touch grounded metallic surfaces to discharge physically charged static electricity.
- When replacing the Game Board, refer to the CVT Manual and Instruction Manual.



	PART NO.	DESCRIPTION
①+②	840-0051D-01 840-0051D-02 840-0051D-03 840-0051D-04	ASSY CASE NAO PCI DIMM BD USA ASSY CASE NAO PCI DIMM BD EXP ASSY CASE NAO PCI DIMM BD KOR ASSY CASE NAO PCI DIMM BD AUS
①	840-0001A-01 840-0001A-02 840-0001A-03 840-0001A-04	ASSY CASE NAOMI MAIN BD USA ASSY CASE NAOMI MAIN BD EXP ASSY CASE NAOMI MAIN BD KOR ASSY CASE NAOMI MAIN BD AUS
②	840-0001F	ASSY CASE NAO DIMM BD COM
③	610-0617 610-0617-01	GD-ROM DRIVE UNIT NAOMI GD-ROM DRIVE UNIT NAOMI VA2



	PART NO.	DESCRIPTION
①	840-0001F	ASSY CASE NAO DIMM BD COM
②		KEY CHIP
① + ②	840-0067B	DIMM BD NAO MB2K2

5. SOFT KIT



Handling the GD-ROM Disk

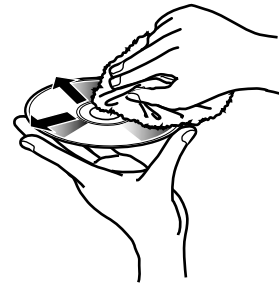
- Do not contaminate the disks with your fingerprints or dust particles. Contaminated disks may lower audio and video quality.
- When cleaning the disks, do not use volatile chemicals (benzine, thinner, etc.), cleaning sprays, and antistatic agents.
- Do not use cracked, warped, or damaged disks.

Do not attach papers or seals onto the disks; do not scratch the disks.

Do not use the disks with a sign of peeled seals, tapes, etc.

Observing these instructions, do not insert such a non-usable disk into the GD-ROM drive. Otherwise the inserted disk can not be ejected.

- When cleaning a heavily contaminated disk, use clean cloth that has been soaked in water and squeezed. Then remove moisture with dry cloth.
- When holding a disk, be careful not to contaminate it with your fingerprints.

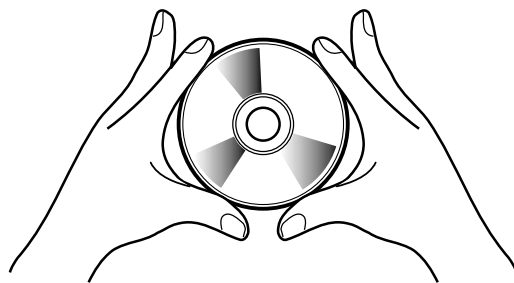


Use clean cloth to wipe the disk gently and into a radial direction.

How to Hold a Disk

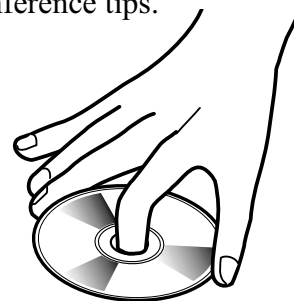
With both hands:

Put your thumbs and forefingers of both hands on the disk's 4 circumference tips.



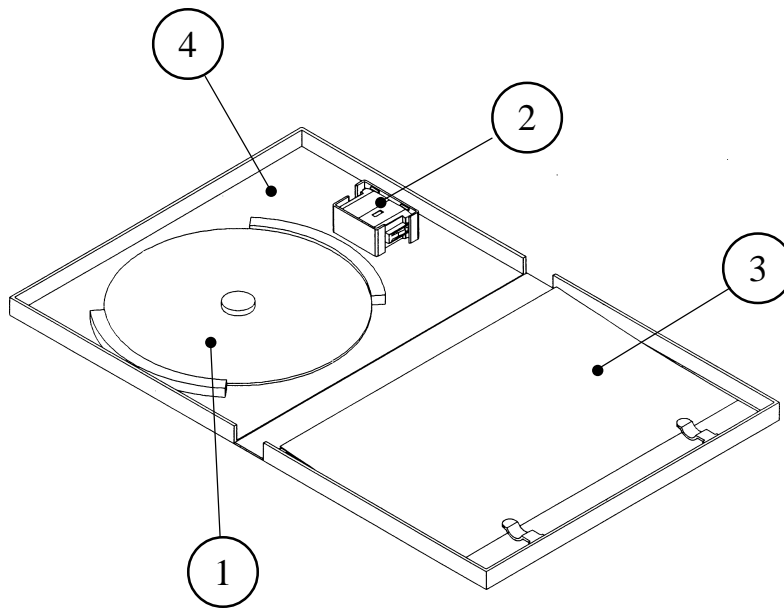
With one hand:

Insert your forefinger into a central hole and at the same time put your thumb and middle finger on the disk's 2 circumference tips.

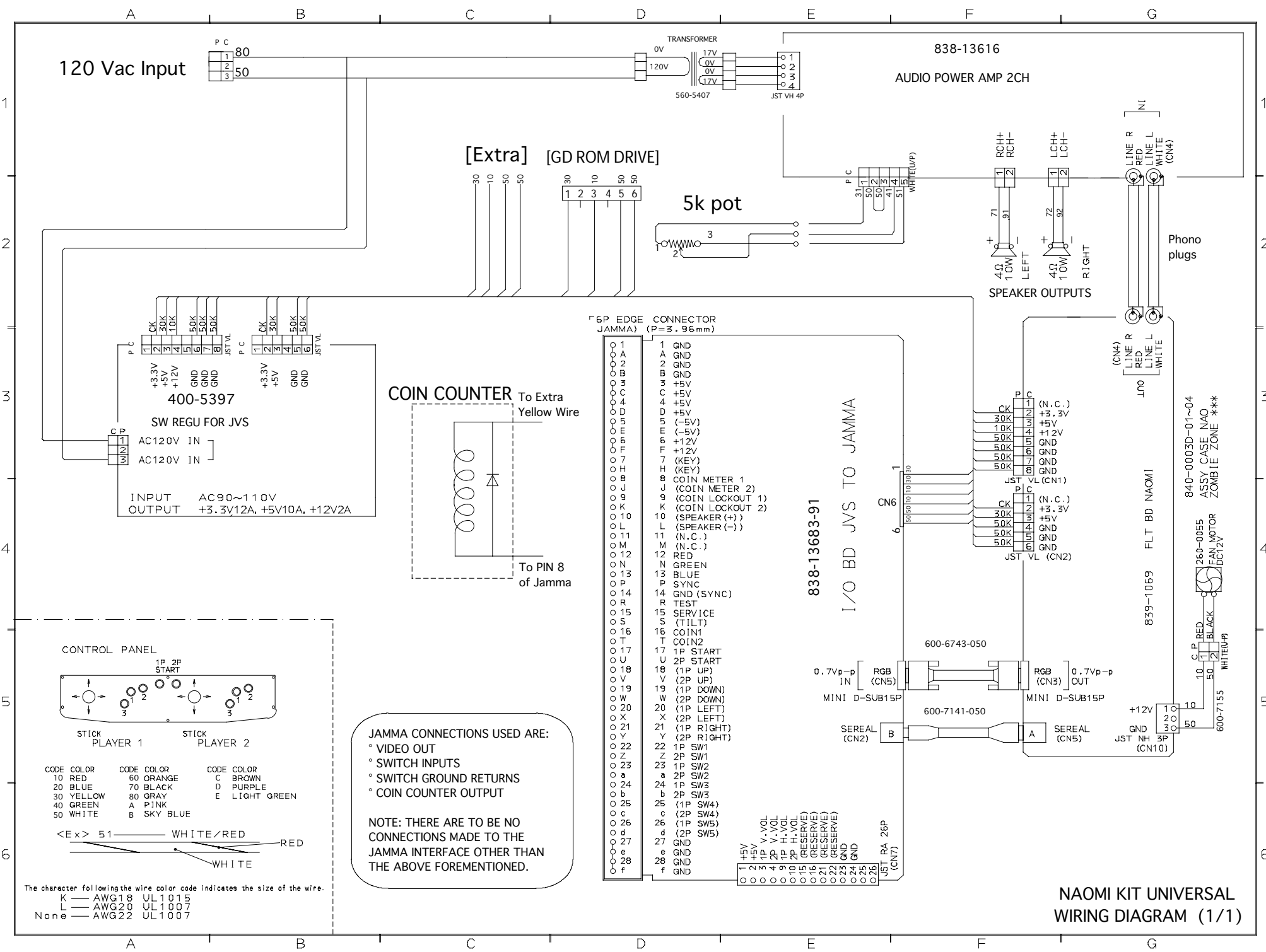


How to Handle the Key Chip

- The key chip is a precision device. Handle it carefully because it may be damaged by heat, shock, and static electricity.
- Use the key chip with the GD-ROM disk of the corresponding game that has been shipped together with the key chip.

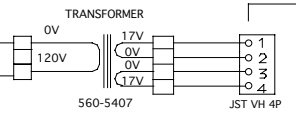


	PART NO.	DESCRIPTION
① + ② + ③ + ④	610-0624-0010	GD SOFT KIT MB2K2 ENG
①	GDS-0010 *	NAOMI GDROM MB2K2
②		KEY CHIP
③	420-6621-0010E	SERVICE MANUAL MB2K2 ENG
④	253-5507	DISK CASE WITH IC HOLDER



120 Vac Input

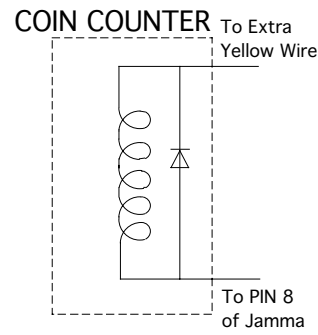
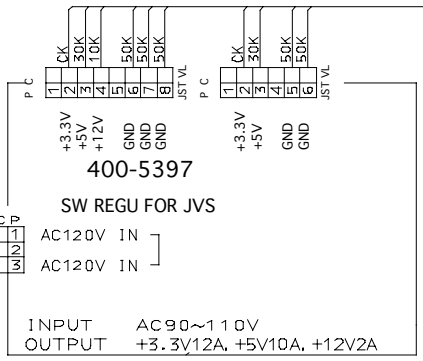
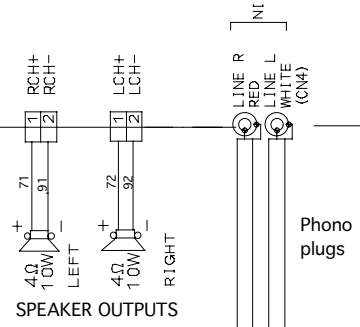
P	C
1	80
2	
3	50



838-13616
AUDIO POWER AMP 2CH

[Extra] [GD ROM DRIVE]

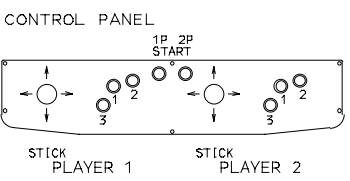
5k pot



6P EDGE CONNECTOR
JAMMA (P=3.96mm)

1	GND	17	1P START
2	A GND	18	2P START
3	B GND	19	V (2P UP)
4	C +5V	20	W (2P DOWN)
5	D +5V	21	X (2P LEFT)
6	E (-5V)	22	1P SW1
7	F +12V	23	2P SW1
8	G (KEY)	24	1P SW2
9	H (KEY)	25	2P SW2
10	J COIN METER 1	26	1P SW3
11	K (COIN LOCKOUT 1)	27	2P SW3
12	L (COIN LOCKOUT 2)	28	1P SW4
13	M (SPEAKER +)	29	2P SW4
14	N (SPEAKER -)	30	1P SW5
15	O (N.C.)	31	2P SW5
16	P (N.C.)	32	GND
17	Q GREEN	33	GND
18	R BLUE	34	GND
19	S SYNC	35	GND
20	T GND (SYNC)	36	GND
21	U R TEST	37	GND
22	V SERVICE	38	GND
23	W S (TILT)	39	GND
24	X COIN1	40	GND
25	Y COIN2	41	GND
26	Z 1P START	42	GND
27	a 2P START	43	GND
28	b 1P UP	44	GND
29	c 2P UP	45	GND
30	d 1P DOWN	46	GND
31	e 2P DOWN	47	GND
32	f 1P LEFT	48	GND
33	g 2P LEFT	49	GND
34	h 1P RIGHT	50	GND
35	i 2P RIGHT	51	GND
36	j 1P SW1	52	GND
37	k 2P SW1	53	GND
38	l 1P SW2	54	GND
39	m 2P SW2	55	GND
40	n 1P SW3	56	GND
41	o 2P SW3	57	GND
42	p 1P SW4	58	GND
43	q 2P SW4	59	GND
44	r 1P SW5	60	GND
45	s 2P SW5	61	GND
46	t GND	62	GND
47	u GND	63	GND
48	v GND	64	GND
49	w GND	65	GND
50	x GND	66	GND
51	y GND	67	GND
52	z GND	68	GND
53	a GND	69	GND
54	b GND	70	GND
55	c GND	71	GND
56	d GND	72	GND
57	e GND	73	GND
58	f GND	74	GND
59	g GND	75	GND
60	h GND	76	GND
61	i GND	77	GND
62	j GND	78	GND
63	k GND	79	GND
64	l GND	80	GND
65	m GND	81	GND
66	n GND	82	GND
67	o GND	83	GND
68	p GND	84	GND
69	q GND	85	GND
70	r GND	86	GND
71	s GND	87	GND
72	t GND	88	GND
73	u GND	89	GND
74	v GND	90	GND
75	w GND	91	GND
76	x GND	92	GND
77	y GND	93	GND
78	z GND	94	GND
79	a GND	95	GND
80	b GND	96	GND
81	c GND	97	GND
82	d GND	98	GND
83	e GND	99	GND
84	f GND	100	GND

838-13683-91
I/O BD JVS TO JAMMA



CODE	COLOR	CODE	COLOR	CODE	COLOR
10	RED	60	ORANGE	C	BROWN
20	BLUE	70	BLACK	D	PURPLE
30	YELLOW	80	GRAY	E	LIGHT GREEN
40	GREEN	A	PINK		
50	WHITE	B	SKY BLUE		

JAMMA CONNECTIONS USED ARE:

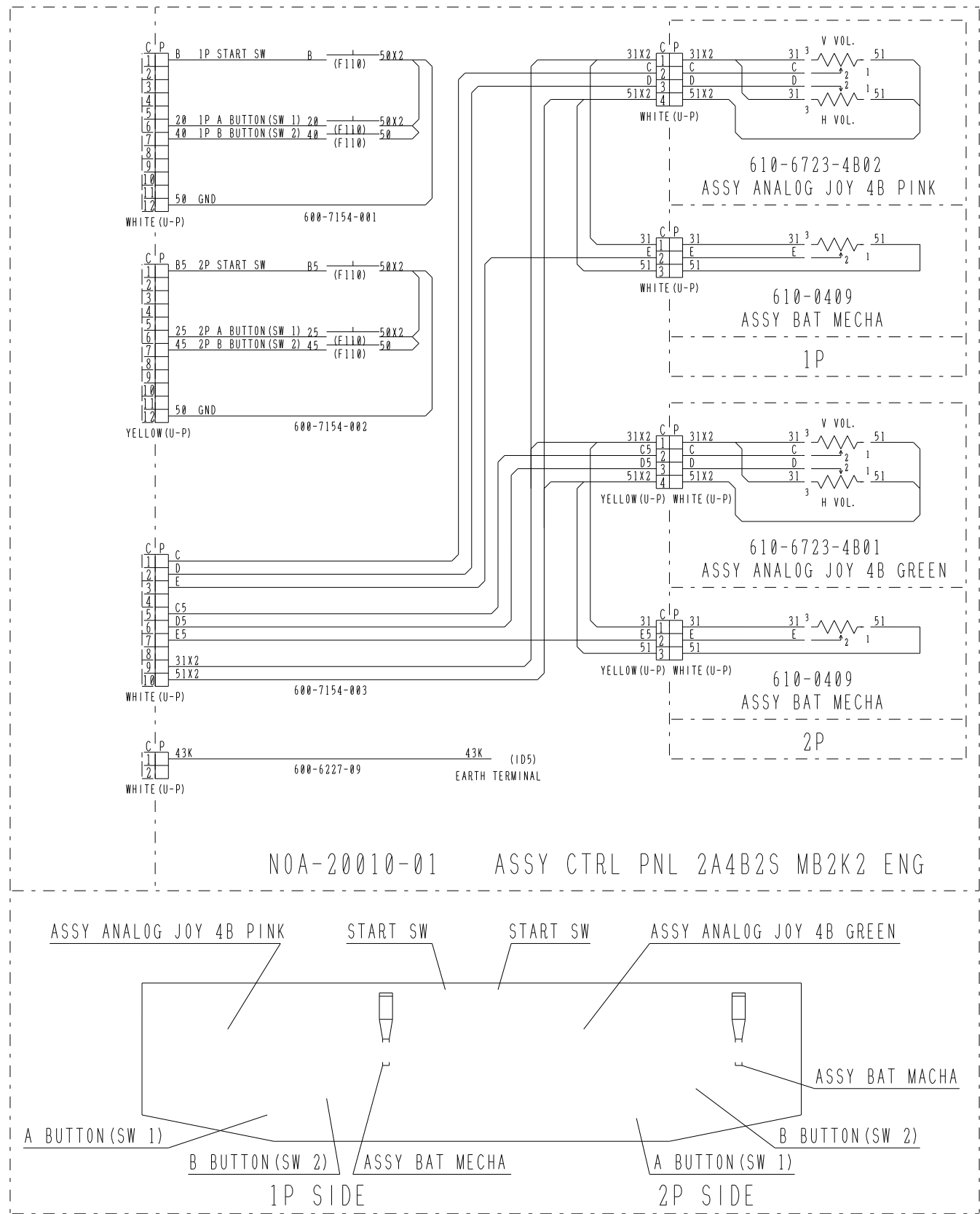
- VIDEO OUT
- SWITCH INPUTS
- SWITCH GROUND RETURNS
- COIN COUNTER OUTPUT

NOTE: THERE ARE TO BE NO CONNECTIONS MADE TO THE JAMMA INTERFACE OTHER THAN THE ABOVE FOREMENTIONED.

The character following the wire color code indicates the size of the wire.

K — AWG18 UL1015
L — AWG20 UL1007
None — AWG22 UL1007

NAOMI KIT UNIVERSAL
WIRING DIAGRAM (1/1)



8	BLACK	E	LIGHT GREEN	43	EARTH WIRE
7	ORANGE	D	PURPLE		
5	WHITE	C	BROWN	U	ANG16 UL1015
4	GREEN	B	SKY BLUE	K	ANG18 UL1015
3	YELLOW	A	PINK	L	ANG20 UL1007
2	BLUE	9	GRAY		ANG22 UL1007
1	RED		WIRE COLOR		

設計	製図	検図	承認
柳瀬	柳瀬	小山	吉本
04/24-'01	04/24-'01	04/24-'01	04/24-'01

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 DIAGRAM NO.: (1/X)

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