To ensure safe operation of this product, be sure to read this Operation Manual before use.

Keep this Operation Manual together with the "Projector User’s Manual" in a safe place for quick access whenever needed.

The actual product may differ slightly from the illustrations in this Operation Manual.

The machine specifications or the information in this Operation Manual may be changed without prior notice.
Introduction

Thank you very much for purchasing LOST LAND ADVENTURE (referred to as "the machine" in this manual).

This Operation Manual describes:
• How to safely operate, install, transport, move, service and dispose of the machine.
• How to make full use of the machine's functions and operate it correctly.
• How to ensure the safety of players and bystanders.

Contact for this machine and machine repair inquiries
• For inquiries regarding the machine or machine repairs, contact your distributor.

This Operation Manual includes the following separate volume:
Projector User's Manual

The copyrights, trademarks and other rights used by the machine are noted at the end of this Operation Manual.
1. Safety Precautions -Be sure to read to ensure safe operation-

Instructions to the Owner

If you outsource the work for operating, installing, moving, transporting, servicing or disposing the machine to other people, ensure that these people read the relevant sections of this Operation Manual carefully before starting work, and observe the corresponding precautions.

1-1 Levels of Risk

The safety and property damage precautions on the machine labels and in this Operation Manual are classified according to their risk level, as follows.

⚠️ WARNING : Failure to avoid these risks may result in serious injury or death
⚠️ CAUTION : Failure to avoid these risks may result in light injury or damage to other property

Notes about functionality that are not linked to safety are indicated with the following symbol

⚠️ NOTICE : Information about product functions or protection

1-2 Definition of “Technician”

This Operation Manual is designed for arcade personnel. However, the sections marked “Must be performed by a technician” in the Table of Contents are written for technicians. These tasks must be performed by technicians only.

Technician: A person involved in design, manufacture, inspection or service at an amusement device manufacturer, or a person involved routinely in the service or management (such as repair) of amusement devices and who has specialist knowledge of electricity, electronics or mechanical engineering equivalent to or higher than that of a technical high school graduate.
1-3 Critical Safety Precautions

WARNING

- Should an abnormality occur, turn off the power switch immediately to stop operations. Then, be sure to disconnect the power cord plug from the outlet. Operating the machine while the abnormality persists may result in a fire or accident.
- The projector unit has high-temperature/high-voltage parts after turning off the main power switch. Be careful not to touch it carelessly, as doing so may result in burns or electric shock.
- Dust accumulating on the power cord plug may result in a fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in a fire or burns.
- Damage to the power cord may result in fire, electric shock or electrical leakage. Be sure to observe the following.
  - Keep the power cord away from heaters.
  - Do not twist the power code
  - Do not forcibly bend the power code
  - Do not alter the power code
  - Do not bundle the power code
  - Do not pull the power code (Always unplug by holding the plug and not the power code.)
  - Do not place objects on the power code.
  - Do not allow the power cord to be caught between the machine and other device or the wall.
  - Do not do anything else that might damage the power cord.
- Do not expose the power cord and power cord plug to water. It may result in electric shock or electrical leakage.
- Do not touch the power cord plug with wet hands. It may result in electric shock.
- The power supply capacity of this machine is AC 120V, maximum current consumption 6.5A for U.S. specifications and AC 230V, maximum current consumption 3.2A for EU specifications. To prevent fire and electrical shock, use indoor wiring in accordance with these power supply specifications.
- Use a power supply voltage within the range of AC 120V ± 10V for U.S. specifications and AC 230V ± 10V for EU specifications. Using a voltage outside this range may cause fire or electrical shock. Note that the use with AC 120V for U.S. specifications and AC 230V for EU specifications are recommended to ensure the machine operates under the optimal conditions.
- To ensure safe use of the machine, be sure to perform the pre-operation inspection (see “7-1 Pre-operation Inspection” on page 39) and service (see “8B. Maintenance” on page 145). Omitting these inspections or service may result in an accident.
- Use the consumables and service parts (including screws) that are specified by BANDAI NAMCO Games Inc. To order parts, contact your distributor.
- Do not modify the machine without permission. Do not perform any operations that are not described in this Operation Manual. Modifying the machine may create unforeseen hazards.
- If you decide to transfer ownership of this machine, be sure to provide this Operation Manual and the Projector User’s Manual with the machine.
1. Safety Precautions - Be sure to read to ensure safe operation

**CAUTION**

• The projector of this machine uses a mercury lamp as the light source. The internal pressure of this lamp increases when lit. This lamp has the characteristics shown below. Be sure to fully understand these points, and handle the lamp with sufficient care.
  • Impact, degradation or other factors may cause the lamp to burst, emit loud noise, or reach the end of its life and no longer light up.
  • The time until the lamp bursts or reaches the end of its life differs according to the lamp.
  • Continued use past the replacement time increases the risk of the lamp bursting.
  • If the lamp bursts, glass shards may scatter inside the machine and exit the machine through the ventilation holes or other openings. If the lamp bursts, the tiny amount of mercury gas sealed inside the lamp may be discharged together with glass particles from the ventilation holes of the projector unit or other openings.
  • Check the lamp operating time occasionally with the Test mode, and prepare a new lamp when the replacement time approaches. (See “7-4-4 (5) PROJECTOR TEST” on page 59.)

• In case the lamp breaks...
  • Should the lamp, lens or other glass part break, handle any glass shards with care to avoid injury or damage, and contact your distributor.
  • Should the lamp burst, disconnect the power cord plug of the machine from the outlet, evacuate the room, and ventilate the room thoroughly. Then, clean the area around the machine thoroughly, and dispose of any foodstuffs that were located around the machine.
  • If you suspect that glass particles or mercury gas entered your eyes or that you may have breathed in these substances when the lamp burst, consult a doctor immediately.
1. Safety Precautions - Be sure to read to ensure safe operation -

1-4 Machine Warning Labels

**WARNING**

- The warning labels attached to the machine contain important information for ensuring safety. Be sure to observe the following.
  - To ensure that the warning labels attached to the machine are always clearly visible, install the machine in an appropriate location with ample illumination and keep the labels clean at all times. Make sure that the labels are not hidden by other machines or objects.
  - Do not remove or alter the warning labels.
  - If a warning label becomes excessively dirty or damaged, replace it with a new one.
  To order warning labels, contact your distributor.

**Front of the Cabinet**

- **MAXIMUM CAPACITY 2 PEOPLE**
  - **CAUTION**
  - Do not use this machine if you are pregnant or have a history of diabetes, high blood pressure, or heart disease. Use the machine in a well-ventilated area.
  - Do not use the machine if you have a history of high blood pressure, diabetes, or heart disease.
  - Do not use the machine if you have a history of high blood pressure, diabetes, or heart disease.

- **Caution curtain**
- **Capacity limit (EXP)**
  - Part No.: 461-813

- **WARNING**
  - When installing and operating the machine, please remove this part by reading the operation manual. Otherwise, the customers may get injured or turn over.
  - When moving the machine, before separating and moving the machine, please attach this part. Otherwise, the machine may be turned over.

- **Warning sticker Service B (EXP)**
  - Part No.: 461-539

- **Warning sticker Installation and Transport B (EXP)**
  - Part No.: 461-814
Inside the Cabinet

**CAUTION**
To avoid eye injury, do not directly look into the projector.

Caution sticker
Projector (EXP)
Part No.: 461-621

**Danger overhead.**
Watch your head POD (EXP)
Part No.: 461-622

**WARNING**
To avoid an electrical shock and/or injury, be sure that the power is turned off before opening the service door. Only qualified personnel should attempt to service the game.

Warning sticker Service B (EXP)
Part No.: 461-539

**WARNING**
When installing and operating the machine, please remove this part by reading the operation manual. Otherwise, the customers may get injured or turn over. When moving the machine, please attach this part. Otherwise, the machine may be turned over.

Warning sticker
Installation and Transport B (EXP)
Part No.: 461-814
1. Safety Precautions - Be sure to read to ensure safe operation

■ Projector Unit
(NP-PE401H(V1))

![Image of Projector Unit](attachment:projector_image.png)

- Be sure to use the lamp dedicated to this projector, NP24LP(V1) for NP-PE401H(V1).
- Caution: This projector requires a specific lamp.

**Underside**

- Be sure to use the lamp dedicated to this projector, NP24LP(V1) for NP-PE401H(V1).
- Caution: This projector requires a specific lamp.

**CAUTION:** To prevent electric shock, do not open the cover. No user-serviceable parts inside.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

**CAUTION:** Use only accessories designated for this projector.
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2. Specifications

(1) Power supply rate
   - US specification: AC 120 ±10 V
   - EU specification: AC 230 ±10 V

(2) Power consumption rate
   - US specification: 700 W
   - EU specification: 700 W

(3) Maximum current consumption
   - US specification: 6.5 A
   - EU specification: 3.2 A

(4) Display unit
   - 180° spherical screen + Projector with the dedicated lens

(5) Dimensions when installed
   - Width (W) 2,800 x Depth (D) 2,310 x Height (H) 2,300 [mm]

(6) Weight
   - 1) When installed: 440 kg
   - 2) When disassembled:
     - Oval dome: 18 kg
     - Side tower (L) assembly: 50 kg
     - Side tower (R) assembly: 60 kg
     - Center assembly: 150 kg
2) When disassembled
- Oval dome
  Width (W) 1,245 x Depth (D) 1,200 x Height (H) 2,000 [mm]

- Side tower (L) assembly, Side tower (R) assembly
  Width (W) 960 x Depth (D) 800 x Height (H) 1,925 [mm]
2. Specifications

- Center assembly

Width (W) 1,250 x Depth (D) 800 x Height (H) 1,950 [mm]
3. Package Contents

3-1 Packing List

The following items are included when this machine is shipped.

- Make sure that all the items below are contained in the product package.
- If any items are missing, contact your distributor.
- Since package boxes are reused when transporting the machine, keep the boxes in a safe place.
- Place the projector unit in the dedicated package box for transportation.

<table>
<thead>
<tr>
<th>Package No.</th>
<th>Contents</th>
<th>Weight (kg)</th>
<th>Outside dimensions (W×D×H)</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/13</td>
<td>Center assembly</td>
<td>150</td>
<td>1,250 × 800 × 1,950</td>
<td>1</td>
</tr>
<tr>
<td>2/13</td>
<td>Side tower (L) assembly</td>
<td>120</td>
<td>960 × 800 × 1,925</td>
<td>1</td>
</tr>
<tr>
<td>3/13</td>
<td>Roof frame D (L), Roof frame D (R), etc.</td>
<td>14</td>
<td>870 × 330 × 270</td>
<td>1</td>
</tr>
<tr>
<td>4/13</td>
<td>LEDBOX unit for signs</td>
<td>11</td>
<td>1,360 × 370 × 220</td>
<td>1</td>
</tr>
<tr>
<td>5/13</td>
<td>Tower joint base (L), Tower joint base (R), etc.</td>
<td>21</td>
<td>700 × 600 × 310</td>
<td>1</td>
</tr>
<tr>
<td>6/13</td>
<td>Roof frame A (L), Roof frame B (R), etc.</td>
<td>23</td>
<td>1,680 × 330 × 300</td>
<td>1</td>
</tr>
<tr>
<td>7/13</td>
<td>Face base (L), Face base (R)</td>
<td>18</td>
<td>950 × 750 × 410</td>
<td>1</td>
</tr>
<tr>
<td>8/13</td>
<td>Dome base (L), Dome base (R), etc.</td>
<td>15</td>
<td>1,580 × 480 × 190</td>
<td>1</td>
</tr>
<tr>
<td>9/13</td>
<td>Roof panel (L), Roof panel (R), etc.</td>
<td>28</td>
<td>1,050 × 860 × 170</td>
<td>1</td>
</tr>
<tr>
<td>10/13</td>
<td>Projector base, Center speaker</td>
<td>22</td>
<td>840 × 660 × 360</td>
<td>1</td>
</tr>
<tr>
<td>11/13</td>
<td>Oval dome</td>
<td>18</td>
<td>1,245 × 1,200 × 2,000</td>
<td>3</td>
</tr>
<tr>
<td>12/13</td>
<td>Face, etc.</td>
<td>14</td>
<td>1,445 × 465 × 395</td>
<td>1</td>
</tr>
<tr>
<td>13/13</td>
<td>Projector</td>
<td>13.4</td>
<td>600 × 600 × 285</td>
<td>1</td>
</tr>
</tbody>
</table>

* This Operation Manual is packed in 12/13.
3-2  Package Details

■ Package 1/13  Center assembly

Width (W) 1,250 x Depth (D) 800 x Height (H) 1,950 [mm]
Weight : 150 kg

- List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Center assembly</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Cash box key</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Service key</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Projector cover</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Gun camera bracket</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Gun camera PC board base</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(with Gun camera PC board)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Power cord (exclusive for this machine)</td>
<td>3m</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>AC cord clamp</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
### 3. Package Contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Torx bolt (M5 x 8)</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>Torx bolt (M5 x 16)</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>Button head bolt (M6 x 16)</td>
<td></td>
<td>77</td>
</tr>
<tr>
<td>12</td>
<td>Button head bolt (M6 x 25)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Button head bolt (M6 x 30)</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>14</td>
<td>Button head bolt (M6 x 35)</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>15</td>
<td>Button head bolt (M6 x 40)</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>Cap screw (M) (M4 x 8)</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>17</td>
<td>Flat washer (ø5.5 x 20 x t1)</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>18</td>
<td>Flat washer (ø6.5 x 22 x t1.6)</td>
<td></td>
<td>119</td>
</tr>
<tr>
<td>19</td>
<td>Countersunk washer nut (M4)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>Countersunk washer nut (M6)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>Cap nut (M6)</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>22</td>
<td>Hexagon nut (M6)</td>
<td></td>
<td>20</td>
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</tbody>
</table>
3. Package Contents

- Package 2/13  Side tower (L) assembly, Side tower (R) assembly
  Width (W) 960 x Depth (D) 800 x Height (H) 1,925 [mm]
  Weight : 120 kg

- List of contents

<table>
<thead>
<tr>
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<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Side tower (L) assembly</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Side tower (R) assembly</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
3. Package Contents

Package 3/13

Width (W) 870 x Depth (D) 330 x Height (H) 270 [mm]
Weight : 14 kg

- List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roof frame D (L) (with fan)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Roof frame D (R) (with fan)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Roof frame E (L)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Roof frame E (R)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Corner cover (L)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Corner cover (R)</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
3. Package Contents

Package 4/13

Width (W) 1,360 x Depth (D) 370 x Height (H) 220 [mm]
Weight: 11 kg

● List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LEDBOX unit for signs</td>
<td></td>
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</tbody>
</table>
### Package Contents

**Package 5/13**

Width (W) 700 x Depth (D) 600 x Height (H) 310 [mm]
Weight : 21 kg

#### List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
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<tbody>
<tr>
<td>1</td>
<td>Tower joint base (L)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Tower joint base (R)</td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Tower joint cover</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Tower joint cover (S)</td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>Harness cover (L)</td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>Harness cover (R)</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>Dome holder</td>
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<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Roof frame C cover</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Tower joint plate (L)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Tower joint plate (R)</td>
<td></td>
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</tr>
<tr>
<td>11</td>
<td>Projector mask support(EXP)</td>
<td></td>
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</tr>
<tr>
<td>12</td>
<td>Blank door</td>
<td>(US specification only)</td>
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</table>
3. Package Contents

Package 6/13

Width (W) 1,680 x Depth (D) 330 x Height (H) 300 [mm]
Weight : 23 kg

- List of contents

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<th>Name</th>
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<tbody>
<tr>
<td>1</td>
<td>Roof frame A (L)</td>
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<td>Roof frame A (R)</td>
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<td>3</td>
<td>Roof frame B (L)</td>
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<td>4</td>
<td>Roof frame B (R)</td>
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</tbody>
</table>
3. Package Contents

Package 7/13

Width (W) 950 x Depth (D) 750 x Height (H) 410 [mm]
Weight : 18 kg

- List of contents

<table>
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<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
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<tbody>
<tr>
<td>1</td>
<td>Face base (L)</td>
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<tr>
<td>2</td>
<td>Face base (R)</td>
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</tbody>
</table>
3. Package Contents

Package 8/13

Width (W) 1,580 x Depth (D) 480 x Height (H) 190 [mm]
Weight : 15 kg

- List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dome base (L)</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Dome base (R)</td>
<td></td>
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<tr>
<td>3</td>
<td>Dome base bracket</td>
<td></td>
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</table>
3. Package Contents

Package 9/13

Width (W) 1,050 x Depth (D) 860 x Height (H) 170 [mm]
Weight : 28 kg

- List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roof panel (L)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Roof panel (R)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Roof frame C (with fan)</td>
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<td>1</td>
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</tbody>
</table>
3. Package Contents

Package 10/13

Width (W) 840 x Depth (D) 660 x Height (H) 360 [mm]
Weight : 22 kg

- List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Projector base</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Center speaker</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Package 11/13 Oval dome (3 pcs.)

Width (W) 1,245 x Depth (D) 1,200 x Height (H) 2,000 [mm]
Weight : 18 kg (1 pc.)
### Package 12/13

Width (W) 1,445 x Depth (D) 465 x Height (H) 395 [mm]
Weight : 14 kg

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
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<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operation Manual (this manual)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Face</td>
<td></td>
<td>2</td>
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<tr>
<td>3</td>
<td>Curtain</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Block panel</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Sign panel (EXP)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>POP (B) (EXP)</td>
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<td>7</td>
<td>POP (C) (EXP)</td>
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<tr>
<td>8</td>
<td>POP (D) (EXP)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Poster (EXP)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>LAN cable, 20 m</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Inside curtain</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>USB dongle</td>
<td></td>
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</tbody>
</table>
3. Package Contents

- Package 13/13 Projector

  Width (W) 600 x Depth (D) 600 x Height (H) 285 [mm]
  Weight : 13.4 kg

- List of contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Specification</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Projector unit</td>
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<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Projector User’s Manual</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Remote control</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Remote control battery</td>
<td>AAA</td>
<td>2</td>
</tr>
</tbody>
</table>
4. Overall Configuration (Part Names)

- Side tower (L) assembly
- Roof assembly
- Face tape LED
- Side tower (R) assembly
- Sign tape LED (red), (white)
- Center assembly
- Joint unit (R)
- Joint unit (L)
- Side tower (R) assembly
- Air ventilation holes
- Center assembly
- Joint unit (R)
- [Projector assembly]
- Projector
- Gun camera
- PC board
- [Cord box assembly]
- Power cord
- Main power switch
- Fuse
- LAN cable
- [Front assembly]
4. Overall Configuration (Part Names)

- Service panel
- Fuse
- System power switch
- Service door
- Coinbox assembly
- AMP PC board
- NA-JV (S) PC board
- Seat (R)
- Switching regulator
- PIN pad
- Authentication camera
- Bill validator
- Seat (L)
- Gun assembly
- Coin door
- Game PC board
- 1P switch
- 2P switch
- [Inside service door]
5. Installation and Delivery Conditions

WARNING
- Install the machine according to the instructions in this Operation Manual. Failure to follow these instructions may result in fire, electric shock, injury or malfunction.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in fire or burns.
- Be sure to install the ground wire. Failure to install the ground wire may result in electric shock. In the event of electrical leakage (see “8A-14 Connecting the Power Cord and Ground Wire” on page 138).
- Install the machine securely by using the level adjusters. Unstable machine installation may result in an accident or injury (see “8A-12 Level Adjuster Adjustment” on page 133).

5-1 Installation Conditions

WARNING
- Do not block the ventilation holes of the machine with any objects or a wall, etc. If the ventilation holes are blocked, the inside of the machine may become hot and result in fire or malfunction.

5-1-1 Installation Locations to Avoid

WARNING
- The machine is designed for indoor use. Never install the machine outdoors or in the following locations.
  - A location exposed to direct sunlight
  - A location exposed to rain or water leaks
  - A damp location
  - A dusty location
  - A location close to heaters
  - A hot location
  - An extremely cold location
  - A location exposed to condensation caused by temperature differences
  - A location that obstructs an emergency exit or fire extinguishing equipment
  - An unstable location or a location exposed to vibration
- The machine is not suitable for installation in an area where a water jet could be used.

This machine cannot be used at high altitude (1,500m or higher) as the cooling efficiency of the projector decreases due to thin air.

Do not install the machine in the following locations, as the screen may become difficult to see or the game may malfunction.

- Locations exposed to direct sunlight
- Locations where a spotlight shines on the screen
5. Installation and Delivery Conditions

5-1-2 Play Zone during Operation

**WARNING**

- Create a play zone around the machine so that players leaving the machine do not bump into bystanders or passersby.

**NOTICE**

- To install this machine, provide a play zone and maintenance zone roughly as illustrated in the following figure. Be sure to preserve the play zone and maintenance zone as they are also required for maintenance purposes.
- A ceiling height of 2 m 50 cm or more is required.

---

5-2 Dimensions Required for Delivery Route (Doors, Corridors, etc.)

The following are the minimum clearances required for delivery entrances and corridors.

- Center assembly
  1,250 (W) x 800 (D) x 1,950 (H) [mm]

- Side tower (L), (R) assembly
  960 (W) x 800 (D) x 1,925 (H) [mm]

- Oval dome
  1,000 (W) x 2,000 (D) x 1,200 (H) [mm]

Therefore, dimensions larger than the above are required for all delivery routes.
6. Moving and Transporting

---

**WARNING**

- This machine cannot be moved in the installed condition. If it is moved/transported without disassembling, an accident may occur. Be sure to move/transport this machine following the procedures instructed in this document.
- Do not leave the machine on a slope. It may fall over or result in an accident.

---

6-1 Moving (Same Floor)

---

**WARNING**

- To move this machine, disassemble the front assembly, center assembly, side tower (L) assembly, side tower (R) assembly, and roof assembly, and separate the front assembly and roof assembly as in the initial shipping condition (see “8A. Installation and Assembly” on page 86).
- To move this machine, install the support caster bracket A (with caster) and support caster bracket B (L) (with caster) to the side tower (L) assembly and the support caster bracket A (with caster) and support caster bracket B (R) (with caster) to the side tower (R) assembly. If an assembly is moved without such parts, it may cause falling or an accident (see “8A-11 Mounting the Front and Center Assemblies” on page 129).
- Moving this machine should be performed by 2 or more persons. Otherwise, it may cause falling or an accident.

---

**NOTICE**

- Do not subject the machine to impact while lowering it.
- Move the machine carefully to avoid damaging it.
- Make sure to lift up the level adjuster to the highest position even when the travel distance is short (see “8A-12 Level Adjuster Adjustment” on page 133).
- Handle the LAN cable and power cable with care. Be particularly careful when disconnecting and connecting the communication cables (see “8A-14 Connecting the Power Cord and Ground Wire” on page 138 and “8A-15 Connecting the LAN Cable” on page 140).
6-2 Transporting

6-2-1 Transporting Manually (Stairways etc.)

**WARNING**

- In case of transporting this machine by hand, disassemble the front assembly, center assembly, side tower (L) assembly, side tower (R) assembly, and roof assembly, and separate the front assembly and roof assembly as in the initial shipping condition (see “8A. Installation and Assembly” on page 86).
- In case of transporting this machine by hand, install the support caster bracket A (with caster) and support caster bracket B (L) (with caster) to the side tower (L) assembly and the support caster bracket A (with caster) and support caster bracket B (R) (with caster) to the side tower (R) assembly. If an assembly is transported without such parts, it may cause falling or an accident (see “8A-11 Mounting the Front and Center Assemblies” on page 129).
### WARNING

- When transporting the machine manually, be sure to use the following number of people. Overburdening yourself may result in an accident or injury.
  - Side tower (L) assembly (50 kg): 4 people or more
  - Side tower (R) assembly (60 kg): 4 people or more
  - Center assembly (150 kg): 8 people or more

---

**NOTICE**

- Do not subject the machine to impact while lowering it.
- Move the machine carefully to avoid damaging it.
6-2-2 Loading to/Unloading from a Vehicle

**WARNING**

- To load or unload this machine to/from a vehicle, disassemble the front assembly, center assembly, side tower (L) assembly, side tower (R) assembly, and roof assembly, and separate the front assembly and roof assembly as in the initial shipping condition (see “8A. Installation and Assembly” on page 86).
- To load or unload this machine to/from a vehicle, install the support caster bracket A (with caster) and support caster bracket B (L) (with caster) to the side tower (L) assembly, and the support caster bracket A (with caster) and support caster bracket B (R) (with caster) to the side tower (R) assembly (see “8A-11 Mounting the Front and Center Assemblies” on page 129).
- To load or unload this machine to/from a vehicle, connect the side tower (L) assembly and side tower (R) assembly using shipping bracket A, shipping bracket B, and shipping bracket C. If an assembly is loaded to or unloaded from a vehicle without connecting, it may cause falling or an accident (see “8A-3-2 Removing the Shipping Brackets from the Side Tower (L) and Side Tower (R) Assemblies” on page 92).
- When using a forklift to transport the machine, observe the following. Failure to observe the following instructions may result in an accident, such as the machine falling over.
  - Confirm that this machine is in the same condition as it was shipped.
  - Be sure to insert the fork into the specified positions.
  - Make sure that the machine is balanced properly during transportation.

**NOTICE**

- Do not subject the machine to impact while lowering it.
- Move the machine carefully to avoid damaging it.
- Make sure to lift up the level adjuster to the highest position (see “8A-12 Level Adjuster Adjustment” on page 133).
- Make sure not to inflict a shock when unloading from a forklift.
6-2-3 Transporting on a Vehicle

**WARNING**

- When transporting the machine on a vehicle, secure the machine firmly so that it does not move during vehicle transport. Failure to secure the machine may result in an accident.
- When transporting this machine by a vehicle, make sure to disassemble each Assembly (see “6-1 Moving (Same Floor)” on page 32), and connect the side tower (L) assembly and side tower (R) assembly using shipping bracket A, shipping bracket B, and shipping bracket C. If an assembly is loaded to a vehicle and transported without connecting, it may cause falling or an accident (see “8A-3-2 Removing the Shipping Brackets from the Side Tower (L) and Side Tower (R) Assemblies” on page 92).

**NOTICE**

- Do not subject the machine to impact while lowering it.
- Make sure to lift up the level adjuster to the highest position when transporting.
- Move the machine carefully to avoid damaging it.
- When securing the machine with a rope, observe the following.
  - Be sure to secure the machine with the rope or belt in the position shown in the figure on the next page.
  - Place blankets or other shock absorbing materials between the machine and the rope or belt to protect the machine surfaces.
- Since package boxes are reused when transporting the machine, keep the boxes in a safe place.
- Place the projector unit in the dedicated package box for transportation.
- Place polystyrene foam or other shock absorbing materials between the machine and the truck bed and any other equipment or items to protect the machine surfaces.
- When transporting the machine in rainy weather, use a vehicle with a cargo cover, a container truck, or similar vehicle to protect the machine from direct exposure to rain.
6. Moving and Transporting

- Side tower (L) and (R) assemblies
- Center assembly
- Rope hook
- Polystyrene foam, etc.
- Rope or belt
- Polystyrene foam, etc.
7. Operation

**WARNING**

- Should an abnormality occur, turn off the main power switch immediately to stop operations. Then, be sure to disconnect the power cord plug from the outlet. Operating the machine while the abnormality persists may result in fire or accident.
- Dust accumulating on the power cord plug may result in fire. Inspect the plug regularly and remove any dust.
- Fully insert the power cord plug into the outlet. Poor contact may generate heat and result in fire or burns.
- Before operating the machine, be sure to check that installation has been performed according to the instructions and specified procedures (see “5. Installation and Delivery Conditions” on page 30) in this Operation Manual. Failure to install the machine correctly may result in fire, electric shock, injury or malfunction.
- The warning labels attached to the machine contain important information for ensuring safety. Be sure to observe the following. (For the warning label locations, see “1-4 Machine Warning Labels” on page 4.)
  - To ensure that the warning labels are always clearly visible, install the machine in an appropriate location with ample illumination and keep the labels clean at all times.
  - Make sure that the labels are not hidden by other machines or objects.
  - Do not remove or alter the warning labels.
  - If a warning label becomes excessively dirty or damaged, replace it with a new one.
  - To order warning labels, contact your distributor.
- In order to ensure safe use of the machine, be sure to perform the pre-operation inspection (“7-1 Pre-operation Inspection” on page 39) and service (“8B-1 Inspection and Maintenance” on page 145) described in this Operation Manual.
- If players start feeling ill because of the game images or light stimulation, they must stop playing and take a break immediately.
- In rare cases, stimulation by lights or video images may cause the player to have a seizure or lose consciousness. If this happens, advise the player to seek immediate medical assistance.
- Set the volume inside the cabinet within the range that alarm devices and warning announcements in the establishment are audible to players.

**CAUTION**

- In order to ensure the safety of players, be careful not to let people play under the following conditions. This is required to prevent accidents.
  - People under the influence of alcohol
  - People who are injured or ill
  - People who are pregnant
  - People with heart conditions
  - People with other ailments
- This machine is designed for two players. Make sure that three or more do not enter to prevent accidents.
- This machine is not intended for use by persons (including children) with reduced physical, mental or sensory capabilities, or those with lack of experience and knowledge of the machine, unless they are supervised or given instruction by a person responsible for their safety. Children should be supervised to ensure that they do not play with the machine.
7. Operation

7-1  Pre-operation Inspection

7-1-1  Safety Inspection (Before Turning on the Main Power Switch)

Check the items below before starting machine operations.
If there is an abnormality, resolve it by referring to “8B-2 Troubleshooting” on page 146.

**WARNING**

Before operating the machine, check the following locations. This is required to prevent accident or injury.

(1) Are all warning labels in place? (See “1-4 Machine Warning Labels” on page 4.)
(2) Are all warning labels legible? (See “1-4 Machine Warning Labels” on page 4.)
(3) Are all the level adjusters adjusted to prevent shaking of this machine? (See “8A-12 Level Adjuster Adjustment” on page 133.)
(4) Is the specified play zone provided? (See “5-1-2 Play Zone during Operation” on page 31.)
(5) Is the machine installed to prevent players and other customers from tripping over the power cord and LAN cable?
(6) Is the ventilation free from obstructions?
(7) Is the rubber cover of the gun assembly undamaged?
(8) Is the cushion rubber of the coinbox assembly undamaged?
(9) Is the corner cover of the projector assembly undamaged?
(10) Is the speaker guard of the projector assembly undamaged?
7-1-2 Safety Inspection (After Turning on the Main Power Switch)

After turning on the main power switch, please check the following points. If an error is identified, please turn off the power switch immediately and stop operation.

After that, pull the power supply plug from the outlet and contact the distributor.

1. Is any part of the power cord or plug abnormally hot?
2. Does touching the machine give a tingling electric shock?
3. Is there a burning smell, abnormal noise or vibration?
4. Are there any other abnormalities or malfunctions?

7-1-3 Functional Inspection (After Turning on the Main Power Switch)

After turning on the main power switch, please check the following points. (See “7-3-1 Turning the Power Switch ON” on page 48.)

1. Check the buttons (Is ON/OFF responsive?) and gun assembly motion. (See “7-4-4 Input / Output Test (I/O TEST)” “(1) SWITCH TEST” on page 53.)
2. Check the sound. (Is there sound coming from each speaker?) (See “7-4-6 Sound Test (SOUND TEST)” on page 64.)
3. Set the volume inside the cabinet within the range that alarm devices and warning announcements in the establishment are audible to players.
4. Check whether each LED lamp lights up. (See “7-4-4 Input / Output Test (I/O TEST)” “(7) LED TEST” on page 53.)
5. Check the image. (Is the image projected correctly from the projector?)

Check the following inspection items by pressing the service switch and actually playing the game. (See “7-4-4 Input / Output Test (I/O TEST)” on page 53.)

6. Check the motion of the gun assembly. (See “(2) GUN TEST” on page 55.)
7. Check the motion of the gun assembly sight. (See “(3) GUN INITIALIZE” on page 57.)
8. Check the motion of the gun assembly vibration. (See “(4) MOTOR TEST” on page 58.)
9. Check the motion of switches. (See “(1) SWITCH TEST” on page 54.)
7-2 How to Play the Game

This section describes how to operate this machine and the rules of the game.

7-2-1 Game Summary

This is a mysterious adventure gun game in which one or two players simultaneously shoot bullets from the gun controllers to fight off monsters.
The gun types automatically change as the game progresses.

7-2-2 PIN Code

The PIN code entered on the PIN pad on this machine allows you to save the play results and other information.
A PIN code between 4 digits and 12 digits is acceptable.
Up to 1000 PIN codes may be stored in this machine. When the number of PIN codes exceeds 1000, the older ones will be deleted in sequence.

7-2-3 Use of PIN Codes for This Machine

Players can save the artifacts they win during the game, the stages they clear and their nicknames in the machine by entering a PIN code when the game is finished.
Also, they can always get a “bonus ticket” to give them an advantage on their next play.
Players can play a continuation of the game in the next play by means of the saved PIN code as well as the bonus ticket.

7-2-4 How to Operate the Gun Controller

The gun controllers are used as weapons during the mysterious adventure gun game.
The sight shows the shooting position of bullets, which are shot by pulling the gun trigger.
Bullets are shot one after another if the gun trigger is held down.
When not playing the mysterious adventure gun game, the gun controllers are used for selecting items or entering the selection.
The sight shows the position selected, and the selection is confirmed by pulling the gun trigger.
7-2-5 Rules of the Game

(1) INSERT CREDIT(S) while the Attraction screen is displayed to fill up the credits, and then press the Start button to start the game.

(2) Select the stage to play on “Stage Select”. Set the sight of the gun controller on the stage to play, and pull the gun trigger to select.
   - Move to “PIN Code Entry” by pressing any key on the PIN pad when “Ready for PIN entry...” is displayed on the screen.
   - In PIN Code Entry, a PIN code saved in this machine may be entered for use. Enter the PIN code using the keys on the PIN pad, and press the # key to confirm. If the PIN code is saved in this machine, the game data of that PIN code is displayed. Those players using the PIN code can gain an advantage by applying the effect of their bonus ticket.
   - When two players are playing, a screen pops up to ask them whether PIN code is used by the left player (1P) or right player (2P) after the # key is pressed. Set the sight of the gun on the button of the player who wishes to use the PIN code, and pull the gun trigger to select.
   - Set the sight on the “View Guide” button and pull the trigger to move to “Artifact Guide”. This screen shows the artifacts the player using the PIN code has collected in the previous plays.
   - The complete rendition is displayed if certain conditions have been fulfilled when moving to Artifact Guide.
   - Players with four types of “Keystones” can select Stage 5. When two players use their PIN codes, their Keystones can be added together.

(3) The adventure of the selected stage begins. Shoot the attacking monsters to destroy them.
   - Players can shoot their guns only when the sight on the screen is displayed as “○”.
   - They cannot shoot their guns when the sight on the screen is shown as “×”.
   - The gun types automatically change as the game progresses.
   - When two players are playing the game, they can shoot the more aggressive “Combination Shot” by moving their sights closer to each other.
   - The health bar is reduced if bitten by monsters or hit by bullets or torches.
   - Circular target markers are sometimes indicated on the monster bodies, backgrounds and objects flying at players.
   - The health bar is also reduced when the target markers are not destroyed within a given period of time. The target markers include normal markers and combined markers indicated as “Shoot Together!”. The combined markers can be destroyed only with the Combination Shot.

(4) When the health bar reaches 0, a message is displayed to ask players whether they want to continue the game. The game may be continued by filling up the credits and pressing the Start button.
   - The game ends when the countdown for continuing reaches 0.
   - If there are not enough NBLINE points, the message for continuation is not displayed and the game is over.
7. Operation

- **Attract Mode**
  - Insert coins, use credits

- **Stage Select**
  - Confirm the stage
  - Select a stage
    - Press a key on the PIN pad

- **PIN Code Entry**
  - Enter a PIN code
    - Check saved game data
      - Ticket application screen

- **Artifact Guide**
  - View artifacts
    - Shoot the “EXIT” button / Timeout
    - Press a key on the PIN pad

- **Start the selected stage**
(5) The stage is cleared when the stage boss is defeated.
   • Players get Keystones when they clear stages.
   • When PIN codes are used, the Keystones can be saved as the play result. The saving status remains
     unchanged if the Keystones of the stage are already saved.

(6) In the “Stage Result”, the three most expensive artifacts the player collected on the stage are announced.
   • When one player is playing the game, the Play rank is announced.
   • When two players are playing the game, the player who collected the more expensive artifacts is
     praised, and their Combination rate is announced.
   • The Combination rate increases when players destroy a larger number of monsters or use the
     Combination Shots more frequently.

(7) The screen moves to “Stage Select” again if another stage may be played immediately after clearing the
    stage.
   • The played stage cannot be selected again until the screen shows Game Over and returns to the
     Attraction screen.
   • When Stage 5 is cleared, the screen automatically moves to the ending screen to end the game even if
     the other stages can still be played.

(8) When all the entered players finish the game, the screen moves to “Artifact Guide” so they can browse the
    treasures they collected during this play.

(9) When no PIN code is used, the screen moves to “New PIN Registration” and to ask players if they want to
    save a new PIN code.
   • If “Save” is pressed, the screen moves to “PIN Code Entry”. Enter the PIN code using the keys on the
     PIN pad, and press the # key to confirm. If a new PIN code is saved in this machine, the screen moves
     to “Name Entry”. If it fails to save the PIN code, “Name Entry” is skipped.

(10) On the “Name Entry” screen, the software keyboard is displayed for the target player. Set the sight on the
    character to enter using the gun controller, and pull the gun trigger to enter the character.
    • Set the sight on the tab to change the character types, and pull the gun trigger to change the software
      keyboard display and switch the character types.
    • Set the sight on the Delete button or Delete All button, and pull the gun trigger to delete one entered
      character or all characters.
    • Set the sight on the Enter button, and pull the gun trigger to enter.
    • This screen is skipped if there is no player to be displayed.

(11) Draw for tickets.
    • Those players using their PIN code can always win a “bonus ticket” that can give them an advantage on
      their next play. The ticket data can be saved in this machine.

(12) If a player not using a PIN code is listed in the high-score rank, the screen then moves to “Name Entry” to
    allow the player to register his/her name in “Total Ranking”.
    • If a player using a PIN code is listed in the high-score rank, the nickname saved in the machine is
      automatically registered.

(13) The screen moves to the Game Over screen.
    • When the player is listed in the high-score rank, the “Total Ranking” is displayed before returning to the
      Attraction screen.
7. Operation

### 7-2-6 Gun Types and Their Characteristics

1. **Machine gun**
   
   A bullet is shot by pulling the gun trigger of the gun controller (gun assembly). Bullets are shot one after another if the gun trigger is held down.

2. **Grenade launcher**

   Similarly to the machine gun, grenades are shot one after another if the gun trigger is held down although the burst speed is slower than that of the machine gun.

   Due to the slow grenade speed, a time lapse before the grenade hits must be taken into consideration for successful shooting.

3. **Rocket launcher**

   Similarly to the machine gun, rockets are shot one after another if the gun trigger is held down although the burst speed is slower than that of the machine gun.

   Due to the slow rocket speed, a time lapse before the bullet hits must be taken into consideration for successful shooting.

4. **Cannon**

   Similarly to the machine gun, round shots are shot one after another if the gun trigger is held down although the burst speed is much slower than that of the machine gun.

   Due to the very slow round shot speed, a time lapse before the bullet hits must be taken into consideration for successful shooting.
7-2-7 Game Systems

(1) Combination Shot
When two players are playing the game, the sights significantly change by moving them close to each other to allow them to shoot the aggressive “Combination Shot”. The combined markers can be destroyed only by the Combination Shot, and the use of the Combination Shot facilitates destroying up monsters.

(2) Artifact collection
Players might collect artifacts if they shoot monsters or backgrounds.
There are 50 royal artifacts and 50 Jack collection artifacts, for a total of 100 artifacts.
There are five types of royal artifacts which are completed by collecting 10 fragments for each type.
When a royal artifacts is completed, an advantage is gained for the next play.
Rarity and prices are set for the Jack collection artifacts. When two players are playing the game, the player who collects the more expensive artifacts is the winner in “Stage Result”.
Some artifacts pop up only in the “rare item drop rate boost” mode.
To boost the rare item drop rate, 10 fragments of the Royal Vase must be collected to complete the Vase or a bonus ticket to boost the rate must be owned.
No more than two of the same artifacts may be owned.

(3) Puzzle solving
In the middle of a stage, a puzzle-solving event may occur.
The player can win artifacts by solving puzzles.
The more correct answers the player provides, the rarer the artifacts he/she wins.

(4) Keystones
The player always wins Keystones when he/she clears a stage.
The player can save the Keystones using a PIN code, and start the game next time owning the Keystones.
Players owning all Keystones between Stages 1 and 4 can select Stage 5. When two players are playing the game, their Keystones can be added together.

(5) Ending
When Stage 5 is cleared, the game ends.
The ending scene varies depending on the number of artifacts the player owns at the time he/she selected and entered Stage 5. The ending displays include the normal and true endings.

(6) Bonus ticket
Those players using PIN codes always win a bonus ticket at the end of the game. The ticket may be saved in the machine.
If the player uses the PIN code on the next play, the bonus ticket is always used to give an advantage.

(7) SINGLE STAGE GAME MODE
When the SINGLE STAGE GAME MODE is turned ON in the COIN OPTIONS of the test mode, the players can continue the game infinitely within the single stage selected.
• The game ends if not continued within the stage.
• If the player fills up the credits and presses the Start button for Player 1 or 2 on the Continue screen displayed when the stage is cleared, the player can continue playing a different stage.
7. Operation

7-2-8 Joining the Game Midway and Game Over

(1) The insertion of credits is always accepted during the game.

(2) Fill up the credits and press the Start button for Player 1 or 2 while “PRESS START BUTTON” is displayed on the bottom of the screen to let the player join the play midway without the use of a PIN code. Players cannot join the play midway while “GAME OVER” or “PLEASE WAIT” is displayed on the screen bottom.

(3) If a PIN code is entered before pressing the Start button, the player can join the play midway using the PIN code saved in the machine. The PIN Code Entry for joining the play midway is displayed on the bottom of the screen if any key on the PIN pad is pressed while “Ready for PIN entry...” is displayed on the screen.
   • Enter the PIN code using the keys on the PIN pad, and press the # key to confirm. When there is a PIN code saved in the machine, “Start game with this data” is displayed and then the loaded game data is displayed.

(4) When the credits are filled up and the Start button is pressed while “Start game with this data” is displayed, the player joins the game midway using the PIN code saved in this machine. When “Start game with this data” is not displayed where the countdown for the PIN Code Entry for joining the game midway reaches 0 or the player changes the screen to the Continue screen, the player joins the game midway without using the PIN code.

(5) The game ends if the health bar reaches 0 during a stage and the player does not choose to continue.

(6) If the player uses a PIN code, his/her artifacts, Keystones and bonus tickets are automatically saved when the game ends. However, no artifacts the player has collected at the stage division point at the time the game ends are saved.
7-3  Power Switch and Adjustment Switches

7-3-1  Turning the Power Switch ON

This machine has the following two types of power switches.
(a) Main power switch (in the cord box assembly)
    This switch is used to turn on/off this machine.

(b) System power switch (in the service door)
    This switch is used to perform forced restarting of the game PC board when an error occurs.
    When restarting, turn on the switch again 30 seconds or more after turning off the system power switch.

When starting this machine, please turn on both the main power switch and the system power switch.

- After turning off the main power switch, it takes time to restart the projector and nothing may be displayed on the screen for around 10 minutes. Use the system power switch to restart the game PC board.
7-3-2 Adjustment Switches

Open the service door inside the machine to access the adjustment switches.

(a) Service switch (red)
Press this switch with the door open to increase the number of credits without operating the coin counter. When credits are entered with the service switch, the face tape LED and sign tape LED lamps flash in red and " is displayed at CREDIT(S) on the lower part of the screen.

(b) Test switch
After turning on this switch, test mode is active to conduct the monitor test and other testing for each part (see "7-4 Test Mode" on page 50).

(c) Select switch
Select the items and details (numerical value) by tilting this switch up and down on the test mode.

(d) Enter switch (green)
After selecting the items and details (numerical value) with the select switch, press this switch to confirm.
7-4 Test Mode

7-4-1 About the Main Menu Screen (MENU)

1. Unlock the service door using the service key, and turn on the test switch. The “MENU” screen is displayed.

2. Tilt the select switch up and down to select an item. The selected item flashes.

3. Press the enter switch to confirm the selection. The screen displays the contents of the selected item.

4. When all adjustments have been made, turn off the test switch. The screen returns to the game screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Refer to</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) NETWORK ICON</td>
<td>Shows the circuit status. This is only displayed for the online version.</td>
<td>—</td>
</tr>
<tr>
<td>(b) COIN OPTIONS</td>
<td>Sets the game fees.</td>
<td>Page 51</td>
</tr>
<tr>
<td>(c) GAME OPTIONS</td>
<td>Sets the game details.</td>
<td>Page 52</td>
</tr>
<tr>
<td>(d) I/O TEST</td>
<td>Conducts the I/O test on switches and equipment.</td>
<td>Page 53</td>
</tr>
<tr>
<td>(e) MONITOR TEST</td>
<td>Adjusts the monitor.</td>
<td>Page 63</td>
</tr>
<tr>
<td>(f) SOUND TEST</td>
<td>Adjusts sound, etc.</td>
<td>Page 64</td>
</tr>
<tr>
<td>(g) BOOKKEEPING</td>
<td>Shows the bookkeeping data.</td>
<td>Page 66</td>
</tr>
<tr>
<td>(h) OTHERS</td>
<td>Tests PCBs and resets the memory.</td>
<td>Page 68</td>
</tr>
<tr>
<td>(i) NETWORK OPTIONS</td>
<td>Configures the network settings. This is only displayed for the online version.</td>
<td>Page 73</td>
</tr>
<tr>
<td>(j) RELOAD NBLINE POINTS</td>
<td>Charges NBLINE points.</td>
<td>Page 78</td>
</tr>
<tr>
<td>(k) LEFT CREDIT</td>
<td>Shows the remaining credits of the previous play.</td>
<td>—</td>
</tr>
<tr>
<td>(l) USE CREDIT</td>
<td>Shows the remaining credits used during the previous play.</td>
<td>—</td>
</tr>
<tr>
<td>(m) STAGE</td>
<td>Displays the total number of stages cleared during the previous play.</td>
<td>—</td>
</tr>
</tbody>
</table>
7-4-2 Game Cost Settings (COIN OPTIONS)

This screen changes the game fees.

1. Select “COIN OPTIONS” on the “MENU” screen, and press the enter switch. The “COIN OPTIONS” screen is displayed.

2. Tilt the select switch up and down to select an item. The selected item flashes.

3. Press the enter switch to confirm the selection, and use the select switch to change the contents. After the item contents have been changed, press the enter switch to return to item selection.

4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

### “COIN OPTIONS” screen

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) GAME COST</td>
<td>2</td>
</tr>
<tr>
<td>(b) CONTINUE COST</td>
<td>2</td>
</tr>
<tr>
<td>(c) SINGLE STAGE GAME MODE</td>
<td>OFF</td>
</tr>
<tr>
<td>(d) GAME COST</td>
<td>3</td>
</tr>
<tr>
<td>(e) FREE PLAY</td>
<td>OFF</td>
</tr>
</tbody>
</table>

*Default settings are shown in green while other setting values are in yellow.*
7-4-3 Game Contents Settings (GAME OPTIONS)

This screen changes the game options.

1. Select “GAME OPTIONS” on the “MENU” screen, and press the enter switch.
   The “GAME OPTIONS” screen is displayed.

2. Tilt the select switch up and down to select an item.
   The selected item flashes.

3. Press the enter switch to confirm the selection, and use the select switch to change the contents.
   After the item contents have been changed, press the enter switch to return to item selection.

4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

---

### GAME OPTIONS

[DEFAULT IN GREEN]

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) DIFFICULTY</td>
<td>Sets the game difficulty. The higher the difficulty setting, the more significantly the health bar is reduced and the more easily smashed when damaged. A: VERY EASY  B: EASY  C: NORMAL  D: HARD  E: VERY HARD</td>
<td>C</td>
</tr>
<tr>
<td>(b) HIT-COLOR</td>
<td>Sets the colors of the player’s damage and smashing effect of monsters (snakes and scarabs). Select RED or GREEN.</td>
<td>RED</td>
</tr>
<tr>
<td>(c) HI-SCORE INITIALIZE</td>
<td>Resets the HI-SCORE data only. When this item is selected, “HI-SCORE INITIALIZE?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.</td>
<td></td>
</tr>
</tbody>
</table>

*Default settings are shown in green while other setting values are in yellow.
7-4-4 Input / Output Test (I/O TEST)

This screen performs the input / output tests for the switches and devices.

1. Select “I/O TEST” on the “MENU” screen and press the enter switch. The “I/O TEST” screen is displayed.

2. Tilt the select switch up and down and select the items to be displayed.

3. Press the enter switch to confirm the item. After confirming, the screen changes to the display of the contents of each item.

4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

---

**I/O TEST**

- SWITCH TEST
- GUN TEST
- MOTOR TEST
- PROJECTOR TEST
- LED TEST
- AUTH CAMERA TEST
- EXIT

**I/O PCB:** CONNECT OK

- Data display

---

**Item** | **Description**
---|---
(a) SWITCH TEST | Performs the switch test.
(b) GUN TEST | Adjusts the gun controller.
(c) MOTOR TEST | Performs the motor test.
(d) PROJECTOR TEST | Checks the projector lamp use time.
(e) LED TEST | Performs the LED test.
(f) AUTH CAMERA TEST | Performs the authentication camera test.
(g) I/O PCB | PCB CHECK status is displayed. When it is normal, “CONNECT OK” is displayed. When it is abnormal, “CONNECT NG!” is displayed.
(h) Data display | Data sent is displayed as it is.
### (1) SWITCH TEST

This screen checks the input of switches.

1. Select “SWITCH TEST” on the “I/O TEST” screen, and press the enter switch. The “SWITCH TEST” screen is displayed.

2. The display changes when switches are input.

3. Press the enter switch while tilting the selector switch up to return to the “I/O TEST” screen.

#### “SWITCH TEST” screen

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) COIN</td>
<td>When the coin switch is input, the count increases by “1”. When it exceeds “999”, the count returns to “0”. The coin counter works together with this input.</td>
</tr>
<tr>
<td>(b) SERVICE PANEL</td>
<td>“ON” is displayed when the service panel door is open.</td>
</tr>
<tr>
<td>(c) SERVICE SW</td>
<td>“ON” is displayed when the service switch is pressed.</td>
</tr>
<tr>
<td>(d) TEST SW</td>
<td>“ON” is displayed when the test switch is ON.</td>
</tr>
<tr>
<td>(e) UP SELECT SW</td>
<td>“ON” is displayed when the select switch is tilted up.</td>
</tr>
<tr>
<td>(f) DOWN SELECT SW</td>
<td>“ON” is displayed when the select switch is tilted down.</td>
</tr>
<tr>
<td>(g) ENTER SW</td>
<td>“ON” is displayed when the enter switch is pressed.</td>
</tr>
<tr>
<td>(h) 1P GUN TRIGGER</td>
<td>“ON” is displayed when the gun trigger of Player 1 is pulled.</td>
</tr>
<tr>
<td>(i) 1P START</td>
<td>“ON” is displayed when the Start button of Player 1 is pressed.</td>
</tr>
<tr>
<td>(j) 2P GUN TRIGGER</td>
<td>“ON” is displayed when the gun trigger of Player 2 is pulled.</td>
</tr>
<tr>
<td>(k) 2P START</td>
<td>“ON” is displayed when the Start button of Player 2 is pressed.</td>
</tr>
<tr>
<td>(l) PIN PAD INPUT</td>
<td>Characters pressed on the PIN pad (0 to 9, *, and #) are displayed on the screen. Up to 12 characters are displayed. The 13th and later characters are hidden from the left.</td>
</tr>
</tbody>
</table>
(2) GUN TEST

This screen checks the gun assembly sight and performs gun camera forced resetting.

1. Select “GUN TEST” on the “I/O TEST” screen and press the enter switch. “GUN TEST” (sight and vibration check) screen is displayed.

On this screen, the gun trigger does not react.

---

**“GUN TEST” (sight and vibration check) screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) AIM AT SCREEN TO CHECK GUN ACCURACY</td>
<td>The gun test message is displayed.</td>
</tr>
<tr>
<td>(b) +OUT OF SCREEN 1P+ +OUT OF SCREEN 2P+</td>
<td>When the gun assembly sight goes out of the effective screen (within white solid line), an announcement for out of screen is displayed.</td>
</tr>
<tr>
<td>(c) 1P gun cross (pink)</td>
<td>The sight is displayed in pink at the point where the 1P gun assembly is aiming.</td>
</tr>
<tr>
<td>(d) 2P gun cross (blue)</td>
<td>The sight is displayed in blue at the point where the 2P gun assembly is aiming.</td>
</tr>
</tbody>
</table>
2. Press the service switch to display the "GUN TEST" (pre-calibration check) screen.

```
GUN TEST

PULL EACH GUN TRIGGER,
THEN START GUN INITIALIZE
+OUT OF SCREEN 1P+
+OUT OF SCREEN 2P+
```

**“GUN TEST” (pre-calibration check) screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>PULL EACH GUN TRIGGER, THEN START GUN INITIALIZE</td>
</tr>
<tr>
<td>(b)</td>
<td>+OUT OF SCREEN 1P+ +OUT OF SCREEN 2P+</td>
</tr>
<tr>
<td>(c)</td>
<td>1P gun cross (pink)</td>
</tr>
<tr>
<td>(d)</td>
<td>2P gun cross (blue)</td>
</tr>
</tbody>
</table>

3. By pulling the gun trigger, the screen moves to the “GUN INITIALIZE” screen of the gun assembly which was pulled.
   * If the both gun triggers are pulled at the same time, the 1P side will be prioritized.
   * Press the service switch to cancel and return to the GUN TEST (sight and vibration check) screen.

4. Press the enter switch to return to the “I/O TEST” screen.
(3) GUN INITIALIZE

The sight of the gun assembly on which the gun trigger was pulled is individually adjusted on the "GUN TEST" (pre-calibration check) screen.

1 According to the instructions displayed in section (b), pull the gun trigger while aiming at the displayed cross.
   * If the gun hits out of screen or a place a certain distance away from the crosses during calibration, "RETRY" will be displayed and an error sound will be produced. It will not move to the next cross.
   * Press the enter switch to discard the data during calibration and return to the "GUN TEST" screen.

2 After the calibration is complete, "FINISHED" is displayed. After saving the data for calibration, the screen returns to the "GUN TEST" screen.

---

**“GUN INITIALIZE” (sight calibration) screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) GUN INITIALIZE xxP</td>
<td>The gun assembly being tested (1P or 2P) is displayed.</td>
</tr>
<tr>
<td>(b) Message display</td>
<td>The following messages are displayed.</td>
</tr>
<tr>
<td></td>
<td>AIM AT TOP LEFT OF THE CROSS AND PULL GUN TRIGGER.</td>
</tr>
<tr>
<td></td>
<td>AIM AT TOP RIGHT OF THE CROSS AND PULL GUN TRIGGER.</td>
</tr>
<tr>
<td></td>
<td>AIM AT BOTTOM LEFT OF THE CROSS AND PULL GUN TRIGGER.</td>
</tr>
<tr>
<td></td>
<td>AIM AT BOTTOM RIGHT OF THE CROSS AND PULL GUN TRIGGER.</td>
</tr>
<tr>
<td></td>
<td>AIM AT CENTER OF THE CROSS AND PULL GUN TRIGGER.</td>
</tr>
<tr>
<td></td>
<td>FINISHED: Adjustment is finished.</td>
</tr>
<tr>
<td>(c) (Cross marking)</td>
<td>The next cross to aim at is displayed. (Only one marking is actually displayed.)</td>
</tr>
</tbody>
</table>
(4) MOTOR TEST

This screen checks vibration motor of the gun assembly.
The motor of the gun assembly whose gun trigger was pulled continues to vibrate.

1 Select “MOTOR TEST” on the “I/O TEST” screen and press the enter switch. The “MOTOR TEST” screen is displayed.

2 Select (a) or (b) and press the enter switch. Then, the motor automatic vibration ON/OFF of the gun assembly of the 1P/2P side is switched. When it is set to ON, the motor continues to vibrate.

3 Select “EXIT” and press the enter switch to return to the “I/O TEST” screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) AUTOMATIC ACTION OF MOTOR 1</td>
<td>Switches between ON and OFF for the motor automatic vibration of the gun assembly on the 1P side.</td>
</tr>
<tr>
<td>(b) AUTOMATIC ACTION OF MOTOR 2</td>
<td>Switches between ON and OFF for the motor automatic vibration of the gun assembly on the 2P side.</td>
</tr>
</tbody>
</table>
(5) PROJECTOR TEST

This screen checks the projector lamp use time.

1. Select “PROJECTOR TEST” on the “I/O TEST” screen and press the enter switch. The “PROJECTOR TEST” screen is displayed.

2. Press the enter switch to confirm the item. After confirming, the screen changes to the display of contents of each item.

3. Select “EXIT” and press the enter switch to return to the “I/O TEST” screen.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) LAMP TIME (H)</td>
<td>The projector lamp use time is displayed. The approximate lifetime of the projector lamp is 3,300 hours in Eco mode.</td>
</tr>
<tr>
<td>(b) REMAINING</td>
<td>The approximate remaining time is displayed for the projector lamp use time.</td>
</tr>
<tr>
<td>(c) TEMPERATURE</td>
<td>Inlet (external air) temperature is displayed.</td>
</tr>
<tr>
<td>(d) LAMP REPLACEMENT LOG</td>
<td>The projector lamp replacement log is displayed.</td>
</tr>
<tr>
<td>(e) LAMP TIME RESET</td>
<td>Resets the projector lamp use time. After selecting this item, “LAMP TIME RESET?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.</td>
</tr>
<tr>
<td>(f) FACTORY DEFAULT SET</td>
<td>Resets to the factory default settings.</td>
</tr>
</tbody>
</table>
(6) LAMP REPLACEMENT LOG

This screen displays the resetting time of projector lamp use time and the projector lamp use time log.

1. Select “LAMP REPLACEMENT LOG” on the “PROJECTOR TEST” screen and press the enter switch. The “LAMP REPLACEMENT LOG” screen is displayed.

2. Press the enter switch to return to the “PROJECTOR TEST” screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Log display screen</td>
</tr>
</tbody>
</table>

The projector lamp log for the past 10 cases is displayed in the order of “log number/ lamp use time / date / month (three English characters) / year / day (three English characters) / hour / minute / second”.

**LAMP REPLACEMENT LOG**

1. 99999 H 30/Mar/2014 FRI 23:59:59
2. 99999 H 29/Mar/2014 THU 23:59:59
3. 99999 H 28/Mar/2014 WED 23:59:59
5. 99999 H 26/Mar/2014 MON 23:59:59
7. 99999 H 24/Mar/2014 SAT 23:59:59
10. 99999 H 21/Mar/2014 WED 23:59:59

ENTER SW:EXIT
# LED TEST

This screen performs the LED lighting test.

1. Select “LED TEST” on the “I/O TEST” screen and press the enter switch. The “LED TEST” screen is displayed.

2. Tilt the select switch up and down to select the LED to be tested. Press the enter switch once to turn on the selected LED lamp. Press again to turn it off.

3. Select “EXIT” and press the enter switch to return to the “I/O TEST” screen. After the completion of LED TEST, all the LED lamps are set to OFF.

### “LED TEST” screen

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) ALL</td>
<td>Turns ON/OFF all the LED lamps.</td>
</tr>
<tr>
<td>(b) 1P START</td>
<td>Turns ON/OFF the LED lamp of the 1P start button.</td>
</tr>
<tr>
<td>(c) 2P START</td>
<td>Turns ON/OFF the LED lamp of the 2P start button.</td>
</tr>
<tr>
<td>(d) SIGN WHITE</td>
<td>Turns ON/OFF the sign tape LED (white) lamp.</td>
</tr>
<tr>
<td>(e) SIGN RED</td>
<td>Turns ON/OFF the sign tape LED (red) lamp.</td>
</tr>
<tr>
<td>(f) EYE LIGHT</td>
<td>Turns ON/OFF the face tape LED lamp simultaneously.</td>
</tr>
<tr>
<td>(g) CAM LIGHT</td>
<td>Turns ON/OFF the authentication camera white LED lamp.</td>
</tr>
</tbody>
</table>
(8) AUTH CAMERA TEST

This screen streams an image in the finder in the center of the screen to read a QR code.

1. Select “AUTH CAMERA TEST” on the “I/O TEST” screen and press the enter switch. The “AUTH CAMERA TEST” screen is displayed.

2. Tilt the select switch up and down and select “SCAN”. Press the enter switch.

3. Select “EXIT” and press the enter switch to return to the “MENU” screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) SCAN (ON or OFF)</td>
<td>After selecting “ON”, QR code reading starts. During reading, “SCANNING…” is displayed. If reading is successfully completed, the string of characters read is displayed on the screen. If there is a failure on the authentication camera upon starting of reading, “08-01 AUTH CAMERA ERROR” is displayed. Note that playing of the game is still possible with the error. It is recommended to use QR code reading of “Version 3, Error Correction Level H” to “Version 10, Error Correction Level H”. *QR codes are to the provided yourself.</td>
</tr>
</tbody>
</table>
7-4-5 Monitor Test (MONITOR TEST)

The screen performs the monitor (projector) test to check the color tone.

1. Select “MONITOR TEST” on the “MENU” screen and press the enter switch. The “MONITOR TEST” screen is displayed.

2. Tilt the select switch up and down and select the items to be displayed. The selected item flashes.

3. Press the enter switch to move to the test screen of the items.

4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

---

**MONITOR TEST**

- (a) GRADATION PATTERN
- (b) CROSSHATCH PATTERN
- (c) VIEW ANGLE AND FOCUS ADJUST PATTERN
- (d) FULL WHITE
- EXIT

**“MONITOR TEST” screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) GRADATION PATTERN</td>
<td>Displays the gradation pattern.</td>
</tr>
<tr>
<td>(b) CROSSHATCH PATTERN</td>
<td>Displays the crosshatch pattern.</td>
</tr>
<tr>
<td>(c) VIEW ANGLE AND FOCUS ADJUST PATTERN</td>
<td>Displays the view angle and focus adjust pattern.</td>
</tr>
<tr>
<td>(d) FULL WHITE</td>
<td>Displays the full white pattern.</td>
</tr>
</tbody>
</table>
7-4-6 Sound Test (SOUND TEST)

**WARNING**

- Set the volume inside the cabinet within the range that alarm devices and warning announcements in the establishment are audible to players.

This screen performs the volume setting and stereo check.

1. Select “SOUND TEST” on the “MENU” screen and press the enter switch. The “SOUND TEST” screen is displayed.

2. Tilt the select switch up and down to select the item to be changed. The selected item flashes.

3. Press the enter switch and confirm the item.
   - If the service switch is pressed on the “SOUND TEST” screen, the test sound is played in the order of (CENTER – LEFT – RIGHT – SUB WOOFER) from the speaker installed in the cabinet.

4. After the item is confirmed, change the contents of the item using the select switch.

5. After changing the contents of the item, press the enter switch to return to the selection of items.

6. Select “EXIT” and press the enter switch to return to the “MENU” screen.

<table>
<thead>
<tr>
<th>SOUND TEST</th>
<th>[DEFAULT IN GREEN]</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLUME</td>
<td></td>
</tr>
<tr>
<td>GAME</td>
<td>(0-15)</td>
</tr>
<tr>
<td>ATTRACT</td>
<td>(0-15)</td>
</tr>
<tr>
<td>OUTPUT LEVEL</td>
<td></td>
</tr>
<tr>
<td>CENTER</td>
<td>100%</td>
</tr>
<tr>
<td>LEFT</td>
<td>100%</td>
</tr>
<tr>
<td>RIGHT</td>
<td>100%</td>
</tr>
<tr>
<td>SUB WOOFER</td>
<td>100%</td>
</tr>
<tr>
<td>MESSAGE</td>
<td></td>
</tr>
<tr>
<td>GAME CENTER</td>
<td></td>
</tr>
<tr>
<td>EXIT</td>
<td></td>
</tr>
</tbody>
</table>

**“SOUND TEST” screen**

SELECT SW:CHOOSE
SERVICE SW: SPEAKER CHECK
ENTER SW: ENTER
### 7. Operation

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) VOLUME</td>
<td>GAME: Adjust the master volume of the game.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(Settable range: 0 to 15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATTRACT: Adjust the master volume during attract demonstration.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(Settable range: 0 to 15)</td>
<td></td>
</tr>
<tr>
<td>(b) OUTPUT LEVEL</td>
<td>CENTER: Adjust the center speaker volume.</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(Settable range: 0 to 100)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LEFT: Adjust the left speaker volume.</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(Settable range: 0 to 100)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RIGHT: Adjust the right speaker volume.</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>(Settable range: 0 to 100)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SUB WOOFER: Adjust the subwoofer volume.</td>
<td>100%</td>
</tr>
<tr>
<td>(c) MESSAGE</td>
<td>Current sound volume (&quot;GAME&quot; or &quot;ATTRACT&quot;) and currently sounding speaker (&quot;CENTER&quot;, &quot;LEFT&quot;, &quot;RIGHT&quot; or &quot;SUB WOOFER&quot;) are displayed.</td>
<td></td>
</tr>
</tbody>
</table>

*Default settings are shown in green while other setting values are in yellow.*
7-4-7 Game Data Display (BOOKKEEPING)

This screen displays the operation time, play counts and other data.

1. Select “BOOKKEEPING” on the “MENU” screen and press the enter switch. The “BOOKKEEPING” screen is displayed.

2. Tilt the select switch up and down to select the item to be changed. The selected item flashes.

3. Press the enter switch and confirm the item.

4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

**“BOOKKEEPING” screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) NOW</td>
<td>The current time is displayed.</td>
</tr>
<tr>
<td>(b) SINCE</td>
<td>The time the bookkeeping was reset is displayed.</td>
</tr>
<tr>
<td>(c) POWER ON TIME</td>
<td>The cumulative total of the power supply activated time is displayed in real time.</td>
</tr>
<tr>
<td>(d) TOTAL PLAY TIME</td>
<td>The cumulative total of the cabinet occupation time is displayed.</td>
</tr>
<tr>
<td>(e) FIRST PLAY TIME</td>
<td>The first play total time is displayed.</td>
</tr>
<tr>
<td>(f) CONTINUE PLAY TIME</td>
<td>The continue play total time is displayed.</td>
</tr>
<tr>
<td>(g) TOTAL PLAY COUNT</td>
<td>The cumulative total of the play counts is displayed.</td>
</tr>
<tr>
<td>(h) FIRST PLAY COUNT</td>
<td>The total of first play counts is displayed.</td>
</tr>
<tr>
<td>(i) CONTINUE PLAY COUNT</td>
<td>The total number of continue plays is displayed.</td>
</tr>
<tr>
<td>(j) TOTAL COIN</td>
<td>The total number of coins input is displayed.</td>
</tr>
<tr>
<td>(k) TOTAL SERVICE</td>
<td>The total number of service credits is displayed.</td>
</tr>
<tr>
<td>(l) ERROR LOG</td>
<td>The error log is displayed.</td>
</tr>
<tr>
<td>(m) BOOKKEEPING INITIALIZE</td>
<td>Resets the bookkeeping. After selecting this item, “BOOKKEEPING INITIALIZE?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.</td>
</tr>
</tbody>
</table>
7. Operation

(1) Error log (ERROR LOG)

This screen is used to check the history of errors occurred.

1. Select “ERROR LOG” on the “BOOKKEEPING” screen and press the enter switch. The “ERROR LOG” screen is displayed.

2. Tilt the select switch up and down to select the items. The selected item flashes. 10 recent errors with the occurrence date and time are displayed on one page and up to 50 errors can be checked. The latest one is displayed on top of the “ERROR LOG (1/5)” and the oldest one is displayed on the bottom of the “ERROR LOG (5/5)”.

3. Press the enter switch and confirm the items.

4. Select “EXIT” and press the enter switch to return to the “BOOKKEEPING” screen.

```
ERROR LOG
1/5

1  00-00 ERROR NAME  30/Mar/2014 FRI  23:59:59
2  00-00 ERROR NAME  29/Mar/2014 THU  23:59:59
3  00-00 ERROR NAME  28/Mar/2014 WED  23:59:59
4  00-00 ERROR NAME  27/Mar/2014 TUE  23:59:59
5  00-00 ERROR NAME  26/Mar/2014 MON  23:59:59
6  00-00 ERROR NAME  25/Mar/2014 SUN  23:59:59
7  00-00 ERROR NAME  24/Mar/2014 SAT  23:59:59
8  00-00 ERROR NAME  23/Mar/2014 FRI  23:59:59
9  00-00 ERROR NAME  22/Mar/2014 THU  23:59:59
10 00-00 ERROR NAME  21/Mar/2014 WED  23:59:59

NEXT
PREVIOUS
EXIT

SELECT SW:CHOOSE ENTER SW:ENTER
```

Item Description

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Log display</td>
<td>The error log up to the present is displayed.</td>
</tr>
<tr>
<td>(b) NEXT</td>
<td>Move to the next page. (If the fifth page is displayed, this is not displayed.)</td>
</tr>
<tr>
<td>(c) PREVIOUS</td>
<td>Move to the previous page. (If the first page is displayed, this is not displayed.)</td>
</tr>
</tbody>
</table>
### 7-4-8 OTHERS

This screen is used for resetting, etc. of settings.

1. Select “OTHERS” on the “MENU” screen, and press the enter switch. The “OTHERS” screen is displayed.
2. Tilt the select switch up and down to select an item to change. The selected item flashes.
3. Press the enter switch to confirm the selection.
4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

#### OTHERS

[DEFAULT IN GREEN]

**NBLINE SHOP NAME**  HONGKONG／WONDER PARK PLUS

**ROM**  LLA100-2-NA-MPR0-C28(Rev.1.00.28)

**CLOCK**  27/Aug/2014 WED 23:59:59

**S/N**  123456-123456

**LANGUAGE (*)**  ENG

**SUBTITLE**  ON

**CLOCK SETTING**

**MAINTENANCE TIME SETTING (*)**

**BACKUP MEMORY INITIALIZE**

**EXIT**

(*) After you change the settings, reboot automatically.

SELECT SW:CHOOSE  ENTER SW:ENTER

"OTHERS" screen
### 7. Operation

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>NB LINE SHOP NAME</td>
<td>The shop name is displayed.</td>
</tr>
<tr>
<td>(b)</td>
<td>ROM</td>
<td>The version and revision number of the program on the disc are displayed.</td>
</tr>
<tr>
<td>(c)</td>
<td>CLOCK</td>
<td>The current time is displayed.</td>
</tr>
<tr>
<td>(d)</td>
<td>S/N</td>
<td>The software serial number is displayed.</td>
</tr>
<tr>
<td>(e)</td>
<td>LANGUAGE</td>
<td>The language setting is displayed. ENG</td>
</tr>
<tr>
<td>(f)</td>
<td>SUBTITLE</td>
<td>Selects whether subtitles are required. ON: Subtitled / OFF: Not subtitled ON</td>
</tr>
<tr>
<td>(g)</td>
<td>CLOCK SETTING</td>
<td>Sets the time, TIME ZONE, and DAYLIGHT SAVING TIME.</td>
</tr>
<tr>
<td>(h)</td>
<td>MAINTENANCE TIME SETTING</td>
<td>Configures the MAINTENANCE TIME setting.</td>
</tr>
<tr>
<td>(i)</td>
<td>BACKUP MEMORY INITIALIZE</td>
<td>Resets settings and deletes bookkeeping and other records. When this item is selected, “BACKUP MEMORY INITIALIZE?” is displayed and NO and YES are displayed to the right of the message. If NO is selected, it returns to the previous screen. If YES is selected, “COMPLETE!” is displayed after resetting and it returns to the previous screen.</td>
</tr>
<tr>
<td>(j)</td>
<td>(*)</td>
<td>The system is automatically restarted after the test mode if the settings of the items with this mark are changed.</td>
</tr>
</tbody>
</table>
(1) CLOCK SETTING

This screen is used to set the time.
For the online version, the time cannot be set as the base time (UTC +0) will be acquired from the network.
For the offline version, the base time can be changed on the "CLOCK ADJUSTMENT" screen.

1. Select "CLOCK SETTING" on the "OTHERS" screen, and press the enter switch. The "CLOCK SETTING" screen is displayed.
2. Tilt the select switch up or down to select an item to change. The selected item flashes.
3. Press the enter switch to confirm the selection.
4. Select "EXIT" and press the enter switch to return to the "OTHERS" screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) CLOCK</td>
<td>The current time is displayed.</td>
<td>—</td>
</tr>
<tr>
<td>(b) CLOCK ADJUSTMENT</td>
<td>Sets the current time.</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>This is only displayed for the offline version.</td>
<td></td>
</tr>
<tr>
<td>(c) TIME ZONE</td>
<td>Sets the TIME ZONE.</td>
<td>OFF</td>
</tr>
<tr>
<td></td>
<td>Select a time offset between -14:00 and +14:00.</td>
<td></td>
</tr>
<tr>
<td>(d) DAYLIGHT SAVING TIME</td>
<td>Sets DAYLIGHT SAVING TIME.</td>
<td>OFF</td>
</tr>
<tr>
<td></td>
<td>Select OFF, +0:30 or +1:00.</td>
<td></td>
</tr>
</tbody>
</table>
(2) CLOCK ADJUSTMENT

This screen is used to set the time. This is only displayed for the offline version.

1. Select “CLOCK ADJUSTMENT” on the “CLOCK SETTING” screen, and press the enter switch. The “CLOCK ADJUSTMENT” screen is displayed.

2. Tilt the select switch up or down to select an item to change. The selected item flashes.

3. Press the enter switch to confirm the selection.

4. Select “EXIT” and press the enter switch to return to the “CLOCK SETTING” screen.

```
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) CLOCK</td>
<td>The set time is displayed.</td>
<td>The set time of the internal clock.</td>
</tr>
<tr>
<td>(b) YEAR</td>
<td>Sets the year.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select a number between 00 and 99.</td>
<td></td>
</tr>
<tr>
<td>(c) MONTH</td>
<td>Sets the month.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select a month between 01 Jan and 12 Dec.</td>
<td></td>
</tr>
<tr>
<td>(d) DAY</td>
<td>Sets the date.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select a number between 01 and 31.</td>
<td></td>
</tr>
<tr>
<td>(e) HOUR</td>
<td>Sets the hour.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select a number between 00 and 23.</td>
<td></td>
</tr>
<tr>
<td>(f) MINUTE</td>
<td>Sets the minute.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select a number between 00 and 59.</td>
<td></td>
</tr>
<tr>
<td>(g) SET</td>
<td>Confirms the set time.</td>
<td></td>
</tr>
</tbody>
</table>
```
(3) MAINTENANCE TIME SETTING

This screen configures the MAINTENANCE TIME settings. The system is restarted at the preset time to prevent defects by long-term continuous operation. When settings are changed, the system is automatically restarted after turning off the test mode.

1. Select “MAINTENANCE TIME SETTING” on the “OTHERS” screen, and press the enter switch. The “MAINTENANCE TIME SETTING” screen is displayed.

2. Tilt the select switch up and down to select an item to change. The selected item flashes.

3. Press the enter switch to fix the selection.

4. Select “EXIT” and press the enter switch to return to the “OTHERS” screen.

---

**“MAINTENANCE TIME SETTING” screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) CLOCK</td>
<td>Displays the current time.</td>
<td>—</td>
</tr>
<tr>
<td>(b) MAINTENANCE TIME</td>
<td>Displays the MAINTENANCE TIME currently set.</td>
<td>07:00:00</td>
</tr>
<tr>
<td>(c) HOUR</td>
<td>Sets up the hour. Select a number between 00 and 23.</td>
<td>07</td>
</tr>
<tr>
<td>(d) MINUTE</td>
<td>Sets up the minute. Select a number between 00 and 59.</td>
<td>00</td>
</tr>
<tr>
<td>(e) SET</td>
<td>Fix the time setting.</td>
<td>—</td>
</tr>
</tbody>
</table>
7-4-9 Network Setting (NETWORK OPTIONS)

This screen checks and sets up the network.

1. Select “NETWORK OPTIONS” on the “MENU” screen, and press the enter switch. The “NETWORK OPTIONS” screen is displayed.

2. Tilt the select switch up and down to select the item to be displayed. The selected item flashes.

3. Press the enter switch to confirm the selection. The screen displays the contents of the selected item.

4. Select “EXIT” and press the enter switch to return to the “MENU” screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) NETWORK STATUS</td>
<td>Checks the network status.</td>
</tr>
<tr>
<td>(b) LOCAL NETWORK CHECK</td>
<td>Checks the local network.</td>
</tr>
<tr>
<td>(c) UPDATE CHECK</td>
<td>Displays the update status.</td>
</tr>
</tbody>
</table>
(1) NETWORK STATUS

This screen checks the network status.

1. Select “NETWORK STATUS” on the “NETWORK OPTIONS” screen, and press the enter switch. The “NETWORK STATUS” screen is displayed.

2. Tilt the select switch up and down to select an item. The selected item flashes.

3. Press the enter switch to confirm the selection.

4. Select “EXIT” and press the enter switch to return to the “NETWORK OPTIONS” screen.

**NETWORK STATUS**

- PCB ID: ABGN-0999999
- LICENSE: 05-34 ERROR AUTH NG
- UPDATE SERVER: 05-34 ERROR AUTH NG
- GAME SERVER: LINK OK
- IP ADDRESS: 000.000.000.000
- SUBNETMASK: 000.000.000.000
- GATEWAY: 000.000.000.000
- NBLINE ROUTER: 000.000.000.000
- PRIMARY DNS: 000.000.000.000
- SECONDARY DNS: 000.000.000.000
- NBLINE VENUE: HONGKONG/WONDER PARK PLUS

**“NETWORK STATUS” screen**
### Item Description

**Item** | **Description**
--- | ---
(a) Network status display | The following items are displayed:
  - PCB ID: Serial ID for NBLINE authentication
  - LICENSE: NBLINE authentication result
  - UPDATE SERVER: Connection status of the update server
  - GAME SERVER: Connection status of the game server
  - IP ADDRESS: IP address of the cabinet
  - SUBNETMASK: Setting value of the subnet mask
  - GATEWAY: IP address of the gateway
  - NBLINE ROUTER: IP address of the NBLINE router
  - PRIMARY DNS: IP address of the primary DNS
  - SECONDARY DNS: IP address of the secondary DNS

(b) NBLINE VENUE | The shop name is displayed.

(c) Warning message display regarding offline operation | The following message is displayed when the game is operated offline:
  - When operated offline
    - [NOTICE] The network is not available now.
    - If the offline condition lasts ○○ hours, you will be unable to start the game.
    - (○○ indicates the time remaining for offline operation)
  - When offline operation is not available
    - (When the remaining operating time reaches zero)
    - (When the number of unsent notifications on billing information exceeds the specified number)
    - 22-01 ERROR
    - There is an error with the network so the game cannot start.
    - Please check the network according to the manual.

(d) NETWORK STATUS CHECK | Reacquires the network status.

---

**NOTICE**

- Reacquire the network status avoiding the server maintenance time as NETWORK STATUS CHECK cannot be check connection during server maintenance (see “7-5 Network” on page 79).
(2) LOCAL NETWORK CHECK

This screen checks the local network status.

1. Select “LOCAL NETWORK CHECK” on the “NETWORK OPTIONS” screen, and press the enter switch. The “LOCAL NETWORK CHECK” screen is displayed.

2. Tilt the select switch up and down to select “CHECK START”, and press the enter switch. The local network is checked.

3. Select “EXIT” and press the enter switch to return to the “NETWORK OPTIONS” screen.

LOCAL NETWORK CHECK

<table>
<thead>
<tr>
<th>CHECK START</th>
<th>START</th>
</tr>
</thead>
<tbody>
<tr>
<td>CABLE</td>
<td>OK</td>
</tr>
<tr>
<td>NBLINE ROUTER</td>
<td>OK</td>
</tr>
<tr>
<td>CONTENT ROUTER</td>
<td>OK</td>
</tr>
<tr>
<td>HOPS</td>
<td>1</td>
</tr>
</tbody>
</table>

SELECT SW: CHOOSE ENTER SW: ENTER

“LOCAL NETWORK CHECK” screen

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) CHECK START</td>
<td>Checks the communication status of the local network.</td>
</tr>
<tr>
<td>(b) CABLE</td>
<td>Checks whether the LAN cable is connected to the game PC board.</td>
</tr>
<tr>
<td>(c) NBLINE ROUTER</td>
<td>Checks whether the system can be connected to the NBLINE router.</td>
</tr>
<tr>
<td>(d) CONTENTS ROUTER</td>
<td>Checks whether the system can be connected to the contents router.</td>
</tr>
<tr>
<td>(e) HOPS</td>
<td>Checks how many routers are contained in the route to the NBLINE router.</td>
</tr>
<tr>
<td></td>
<td>If the LAN cable is properly connected, there should be the NBLINE router</td>
</tr>
<tr>
<td></td>
<td>and contents router, which means the HOPS should be “2”. If no contents</td>
</tr>
<tr>
<td></td>
<td>router is used, HOPS should be “1”.</td>
</tr>
</tbody>
</table>
(3) UPDATE CHECK

This screen shows the update status of the game. The update data if any is automatically downloaded during online operation. After the download of update data is complete, the software is automatically updated when turning on the main power switch.

1. Select the “UPDATE CHECK” on the “NETWORK OPTIONS” screen, and press the enter switch. The “UPDATE CHECK” screen is displayed.

2. Press the enter switch to return to the “NETWORK OPTIONS” screen.

```
UPDATE CHECK

LICENSE   OK   (a)
UPDATE SERVER  LINK OK   (h)
CURRENT GAME Rev. 00.28   (c)
UPDATE PERMISSION Rev. 01.02   (d)
DOWNLOADING GAME Rev. 01.02   (e)
DOWNLOAD PROGRESS 100%   (f)

UPDATE STATUS  UPDATE AVAILABLE
Please turn OFF the power switch, and turn it ON again.

ROM   LLA100-2-NA-MPR0-C28(Rev.1.00.28)   (h)
CLOCK   30/Aug/2014 SAT 23:59:59   (i)
S/N   123456-123456   (j)

ENTER SW:EXIT
```

“UPDATE CHECK” screen

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) LICENSE</td>
<td>The NBLINE authentication result is displayed.</td>
</tr>
<tr>
<td>(b) UPDATE SERVER</td>
<td>The connection status to the update server is displayed.</td>
</tr>
<tr>
<td>(c) CURRENT GAME Rev.</td>
<td>The current game revision number is displayed.</td>
</tr>
<tr>
<td>(d) UPDATE PERMISSION Rev.</td>
<td>The game revision number permitted for updating is displayed.</td>
</tr>
<tr>
<td>(e) DOWNLOADING GAME Rev.</td>
<td>The downloading game revision number is displayed.</td>
</tr>
<tr>
<td>(f) DOWNLOAD PROGRESS</td>
<td>The download status is displayed.</td>
</tr>
<tr>
<td>(g) UPDATE STATUS</td>
<td>The update status is displayed.</td>
</tr>
<tr>
<td></td>
<td>• UPDATE AVAILABLE: An update is available</td>
</tr>
<tr>
<td></td>
<td>• UPDATE NOT AVAILABLE: No update is available</td>
</tr>
<tr>
<td></td>
<td>The game is updated when powering on the machine next time.</td>
</tr>
<tr>
<td></td>
<td>• UPDATE NOT REQUIRED: No update is required</td>
</tr>
<tr>
<td></td>
<td>The update data permitted for updating is being downloaded.</td>
</tr>
<tr>
<td></td>
<td>The software is the latest version.</td>
</tr>
<tr>
<td>(h) ROM</td>
<td>The version and revision number of the program on the disc are displayed.</td>
</tr>
<tr>
<td>(i) CLOCK</td>
<td>The current time is displayed.</td>
</tr>
<tr>
<td>(j) S/N</td>
<td>The software serial number is displayed.</td>
</tr>
</tbody>
</table>
7-4-10 RELOAD NBLINE POINTS

Check the NBLINE points saved in this machine.

1. Select “RELOAD NBLINE POINTS” on the “MENU” screen and press the enter switch. The “RELOAD NBLINE POINTS” screen is displayed.

2. Tilt the select switch up and down to select “CHECK SERVER POINTS” and press the enter switch. NBLINE points are checked.

3. Press the enter switch to return to the “MENU” screen.

**“RELOAD NBLINE POINTS” screen**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) S/N</td>
<td>The software serial number is displayed.</td>
</tr>
<tr>
<td>(b) NBLINE SERVER</td>
<td>The status of connection with the NBLINE server is displayed.</td>
</tr>
<tr>
<td>(c) POINT REMAIN</td>
<td>NBLINE points saved in this machine are displayed.</td>
</tr>
</tbody>
</table>
| (d) CHECK SERVER POINTS | NBLINE points are checked.  
If there is an NBLINE point charged on the server side, the NBLINE point will be charged to this machine.  
If there is an NBLINE point which has been consumed on the casing side and is not sent, the NBLINE point will be sent to the server side.  
If there is a network error, selection of this item is not available. |
7. Operation

7-5 Network

7-5-1 Indication of Network Status on the Title Screen

The connection to NBLINE is displayed on the title screen.

(a) Connection status to NBLINE

- **Online**: Normally connected to NBLINE.
- **Offline**: Not connected to NBLINE. See “8B-4 Problems Concerning the Network” on page 154 and take necessary actions for proper operation.
7-6 Maintenance Time

In order to reduce the load on the game PC board after long-term continuous use, the machine will be automatically restarted at the MAINTENANCE TIME, and the system will be cleared.

* The default MAINTENANCE TIME setting is 7:00 am.
* For changing the MAINTENANCE TIME, see "7-4-8 (3) MAINTENANCE TIME SETTING" on page 72.
* The machine will not be restarted while the game is being played.
  Restart occurs when the screen returns to “Attraction” after the game.
7. Operation

7-7 Software Update

- After the software update preparation starts, do not turn off the main power switch until the update has been completed and the title screen is displayed. Failure to follow this instruction may cause data corruption on the HDD.
- To protect the electrical circuit, turn off the main power switch and wait for 30 seconds or more before turning it on again.
- Early software updating is recommended to avoid inconvenience to customers who play the game.

1. When there is software update data on the server of the network, the update data will be automatically downloaded. The download progress status can be checked on “UPDATE CHECK” of the test mode.

2. After downloading of the update data is complete, the software update will be performed in the following cases.
   - When the main power switch or the system power switch is turned off and turned on again
   - When automatic rebooting is performed (See “7-6 Maintenance Time” on page 80.)

3. After the software update is complete, check the revision number of the software on the title screen.
7-8 Cleaning

**NOTICE**
- Please refrain from using thinner, benzene, gasoline, or other organic solvents. They may degrade the material.

1) Cleaning the Screen Surface

Wipe off dirt and dust on the screen surface with a damp soft cloth and then wipe with a dry soft cloth.

2) Cleaning the Smoke Panel (EXP)

Wipe off dirt and dust on the center assembly smoke panel (EXP) with a dry soft cloth. If it is extremely dirty, wipe off the dirt with a damp cloth and then wipe with a dry soft cloth.
(3) Cleaning the Filters F and R

**NOTICE**

- Please clean the filters F and R periodically about once a week. If dust and dirt build up, ventilation may not be sufficiently performed and an error may occur with the projector.

1. Remove the filters F and R. (Refer to “8B-5-5 (5) Replacing the Filter F (projector)” on page 208.)

2. Remove the dust and dirt on the surface of the filters F and R.
   Wash them with water and dry them thoroughly. Alternatively, clean with a vacuum cleaner while paying attention to avoid suction of the filter itself.
   If a filter is damaged and has a tear or a prominent hole, please replace with a new filter.

3. After cleaning, perform the procedure in reverse to reattach.

(4) Cleaning the lens cover and camera cover

1. Remove the projector cover of the projector assembly. (Refer to “8A-5 Mounting the Projector Assembly” on page 111.)

2. Wipe off dirt and dust on both sides of the lens cover and the gun camera cover with a dry soft cloth.
   If they are extremely dirty, please wipe off the dirt with a damp cloth and then wipe with a dry soft cloth.

3. After cleaning, perform the procedure in reverse to reattach.

(5) Cleaning the Projector Lens

1. Remove the projector cover of the projector assembly. (Refer to “8A-5 Mounting the Projector Assembly” on page 111.)
7. Operation

2. Remove the dirt on the projector lens using a commercially available wiping cloth for glasses, glasses cleaner or other cleaning kits exclusively for lenses.

3. After cleaning, perform the procedure in reverse to reattach.

NOTICE • Do not use neutral detergent, etc. on the lens surface. Please be sure to use a cleaner specifically for lenses (commercially available wiping cloth for glasses, glasses cleaner, etc.).
7-9 Service Life of the Projector Lamp (Lamp Unit)

Early replacement of the projector lamp (lamp unit) is recommended to avoid inconvenience to customers who play the game.
As the projector lamp (lamp unit) are consumable parts, they do not light up or the brightness is reduced before the end of the service life. The lamp service life described below is for reference and is not guaranteed.

● Projector model number: NP-PE401H (V1)
Lamp service life: 3,300 hours
After using for approximately 100 hours after the service life, the projector will stop and the screen will be turned off. After that, operation is not possible until the projector lamp (lamp unit) have been replaced. Prior to the occurrence of this situation, be sure to replace the projector lamp (lamp unit) during the “replacement time” described below.
*When the end of the service life is reached, the machine will stop even if a customer is playing the game.

If the remaining time before the start of the lamp alarm (the lamp use time is up to approximately 3,300 hours on the ECO mode) is zero at startup, the warning voice message, “It is time to replace the lamp soon.”, sounds continuously.
During the warning state, playing of the game is possible by setting the test mode once and ending the mode. Turn on the test switch to shift to the test mode.

Behaviors when turning on the power switch

<table>
<thead>
<tr>
<th>Status</th>
<th>Hours of lamp used</th>
<th>Behavior after starting the game</th>
<th>Sound guidance after starting the game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement time</td>
<td>Approximately 100 hours passed to max. 3,300 hours</td>
<td>“09-01 PROJECTOR LAMP WARNING” is displayed on the screen.</td>
<td>WARNING voice, “It is time to replace the lamp soon.”, keeps sounding.</td>
</tr>
<tr>
<td>Operation disabled</td>
<td>Max. approximately 3,400 hours or over</td>
<td>The screen is not displayed and the 1P switch and the 2P switch flash in turn. (See “8B-3 (3) Projector Errors” on page 153.)</td>
<td>WARNING voice, “Please call the shop staff. Please replace the lamp, and reset the usage time.”, and buzzer sound keeps sounding.</td>
</tr>
</tbody>
</table>

* During the replacement time, playing of the game is possible by setting the test mode once and ending the mode. While operation is disabled, a starting error will occur and starting of the game is not possible.
Please refer to “8B-5-5 (3) Replacing the Projector Lamp (Lamp Unit)” on page 202 for the replacement method.
* In the case that multiple errors have occurred simultaneously on the projector, the voice guidance will be played for the error whose priority is the highest.

** NOTICE**

● Use only lamps designated by us. If lamps other than those designated are used, the projector main unit may be broken.
8A. Installation and Assembly

8A-1 Preparation for Assembly

8A-1-1 Number of Workers and Work Time
The standard work time to complete working is four hours following delivery and unpacking. (The standard work time is estimated when two technicians are assigned.)

8A-1-2 Workflow
The following shows the flow of assembly and installation:
• Assembling the front assembly
• Assembling the center and side tower assemblies
• Mounting the roof frame
• Mounting the projector assembly
• Mounting the face assembly
• Mounting the LEDBOX unit for signs
• Mounting the roof panel
• Mounting the curtain
• Mounting the front and center assemblies
• Adjusting the level adjusters
• Mounting the POP
• Connecting and adjusting the power supply, etc.

8A-1-3 Space Required for Installation
Secure the work space consisting of a level area of 5 m x 5 m or larger and a ceiling height of 2.5 m or higher during assembly and installation:

8A-1-4 Necessary Tools
The tools necessary for assembly and installation are:
• Phillips screwdriver (No. 2)
• Hexagon wrench (opposite side: 4)
• Torx wrench (T25)
• Box wrenches (7 mm and 10 mm)
• Spanner (opposite side: 24 mm)
• Stepladder
• Gloves (e.g. work gloves)
8A-2 Assembling the Front Assembly

1 While the oval dome is placed on the floor as illustrated below, mount the dome base (L) to the oval dome with four button head bolts (M6 x 35) and four flat washers (ø6.5 x 22 x t1.6). This is referred to as dome (L).

- Refer to the figure below to prevent incorrect assembly as the dome bases (L) and (R) are similar in shape.
2. Mount the other oval dome to the dome base (R) following the same procedure as 1. This is referred to as dome (R).

3. Connect the domes (L) and (R) with the dome bracket, and temporarily fix them with four hexagon nuts (M6) and four flat washers (ø6.5 x 22 x t1.6).
4. Place the oval dome between the domes (L) and (R), and temporarily fix it to the dome bases (L) and (R) with four button head bolts (M6 x 35) and four flat washers (ø6.5 x 22 x t1.6).

5. Temporarily fix the three oval domes with 16 button head bolts (M6 x 30), 32 flat washers (ø6.5 x 22 x t1.6) and 16 hexagon nuts.

6. Fully tighten the screws temporarily tightened in 3 to 5 while positioning the oval domes such that the difference in the interface level of the oval domes is within around 3 mm.

7. Mount 16 box nuts (M6) to the threaded portions of the button head bolts (M6 x 30) tightened in 6.
8 Raise the assembled dome (front assembly).

 NOTICE ● The front assembly will be fixed in “8A-11 Mounting the Front and Center Assemblies” on page 129. Keep it in a place that does not affect assembly work until then.
8A-3 Assembling the Center, Side Tower (L) and Side Tower (R) Assemblies

8A-3-1 Removing the Rope Hooks (F) from the Center Assembly

The rope hooks (F) are mounted to the center assembly when delivered.

1. Remove the two rope hooks (F) by removing the two torx bolts (M5 x 8) each from the hooks.
2. Mount the torx bolts removed in 1 back to the original threaded holes.

NOTICE
- The removed rope hooks (F) are required when repacking the case for transferring or repairing. Therefore, be sure to keep them in a safe place.
8A-3-2 Removing the Shipping Brackets from the Side Tower (L) and Side Tower (R) Assemblies

**WARNING**

- Do not remove the support caster bracket A (L) or the support caster bracket A (R), as the side tower (L) and side tower (R) assemblies could fall over, resulting in injury or machine damage.

The side tower (L) and side tower (R) assemblies are fixed with the shipping brackets A, B and C when delivered.

1. Loosen the eight button head bolts (M6 x 16) to remove the two shipping brackets A. Retighten the loosened screws after the shipping brackets A have been removed.
2  Remove the two button head bolts (M6 x 16), two button head bolts (M6 x 30) and four flat washers (ø6.5 x 22 x t1.6) to remove the shipping bracket B. Do not put the four screws and two flat washers removed back into the cabinet.

3  Loosen the two button head bolts (M6 x 16) to remove the shipping bracket C. Retighten the loosened screws after the shipping brackets C have been removed.

4  Remove the two button head bolts (M6 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the support caster bracket B (L). Similarly, remove the support caster bracket B (R). Do not put the four screws and four flat washers removed back into the cabinet.

**NOTICE**

- The removed shipping brackets are required when repacking the case for transferring or repairing. Therefore, be sure to keep them in a safe place.
8A-3-3 Assembling the Center, Side Tower (L) and Side Tower (R) Assemblies

1 Temporarily place the center, side tower (L) and side tower (R) assemblies.

2 Temporarily fix the center and side tower (L) assemblies with the tower joint base (L), four button head bolts (M6 x 40) and four flat washers (ø6.5 x 22 x t1.6).
3 Similarly to Step 2, temporarily fix the center and side tower (R) assemblies with the tower joint base (R), four button head bolts (M6 x 40) and four flat washers (ø6.5 x 22 x t1.6).

**NOTICE**

- The screws temporarily tightened in 2 and 3 will be fully tightened while adjusting level adjusters after the front and center assemblies are mounted (see “8A-12 Level Adjuster Adjustment” on page 133). Take care not to tighten them too firmly.

4 Remove the door board (R) by removing the four flat washers (ø5.5 x 20 x t1.0) and four torx bolts (M5 x 40).
5 Pass the connector (3-pin) harness of the tower joint base (R) through the left rectangular hole of the side tower (R) assembly and connect it to the transformer harness. In so doing, loosen the three clamps used for fixing the connector (3-pin) harness.

6 Pass the connector (6-pin) harness through the rectangular hole of the side tower (R) assembly and connect the connector. In so doing, remove the three clamps used for fixing the connector (6P) harness. When connected, push the connector (6-pin) into the rectangular hole.
7 Pull out the LAN cable placed inside the side tower (R) through the rectangular hole, and connect it to the center assembly.

8 Connect the two connectors (3-pin and 6-pin) at the tower joint base (R) to the center assembly.

9 Mount the door board (R) removed in 4 to the case. Harnesses will be fixed later.
8A-4 Assembling the Roof Assembly

**WARNING**

Mounting the roof assembly requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.

1. Insert the roof frame A (R) into the roof frame A (L), and fix them with four button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6). This is referred to as roof frame A.
Insert the roof frame A into the side tower (L) and side tower (R) assemblies, and fix them with four button head bolts (M6 x 25) and four flat washers (Ø6.5 x 22 x t1.6).
3 Place the roof frame B (L) and the roof frame B (R) on the center, side tower (L) and side tower (R) assemblies.

- When placing the roof frame B (L) and the roof frame B (R), be careful not to pinch harnesses.

4 Connect the roof frame B (L) and the roof frame B (R) with two button head bolts (M6 x 16), two flat washers (ø6.5 x 22 x t1.6) and two countersunk washer nuts (M6).
After connecting, fix them to the center assembly with two button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6).

If the threaded holes on the right and left frames are misaligned, adjust them by lifting either side tower with level adjusters.
6 Mount the roof frame B (L) to the side tower (L) assembly with a button head bolt (M6 x 16) and a flat washer (ø6.5 x 22 x t1.6).

7 Similarly to Step 6, mount the roof frame B (R) to the side tower (R) assembly.

8 Place the roof frame D (L) on the side tower (L) assembly, and fix them with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).
9 Pass the connector of the roof frame D (L) through the rectangular hole of the roof frame B (L) for connection.

10 Connect the internal connector.

11 Following the same steps as those in 8 to 10, mount the roof frame D (R) to the side tower (R) assembly and connect two connectors.
**12** Place the roof frame E (L) on the side tower (L) assembly, and fix them with three button head bolts (M6 x 16) and three flat washers (Ø6.5 x 22 x t1.6).

**13** Similarly to Step 12, mount the roof frame E (R) to the side tower (R) assembly.

**14** Hook the corner cover (L) on the roof frame A, and fix them with three button head bolts (M6 x 16) and three flat washers (Ø6.5 x 22 x t1.6).

**15** Similarly to Step 14, mount the corner cover (R).
16 Place the roof frame C on the roof frames A and B, and fix them with four button head bolts (M6 x 16) and four flat washers (ø6.5 x 22 x t1.6).

17 Pull out the center assembly harness (four connectors), HDMI cable and RS232C cable through the rectangular hole of the roof frame B (L).
18 Connect the three connectors of the harness passed through in 17.

19 (1) Fix the HDMI and RS232C cables with the three clamps of the roof frame B (L), (2) pass them through the rectangular hole shown below to the roof frame C, and (3) put the cables into the right round hole of the roof frame C.

In so doing, (4) fix the bundle of white cables attached to the HDMI and RS232C cables with the clamps.

(5) Store any remaining cable slack in the roof frame B (L).
20 Pass the harness through the rectangular hole of the roof frame B (L) illustrated below from the roof frame C side, and connect the two connectors.

21 Put the harness connected in 20 into the left round hole of the roof frame C illustrated below.
22 Pass the two harnesses of the center assembly through the rectangular hole of the roof frame B (R).

23 Connect the connector of one of the two harnesses passed through in 22, and fix the other harness with the two clamps of the roof frame B (R).
24 Pass the harness through the rectangular hole of the roof frame B (R) illustrated below from the roof frame C side, and connect the connector.

25 Put the harness connected in 24 into the right round hole of the roof frame C illustrated below.
Mount the harness cover (R) inside the roof frame B (R) with two torx bolts (M5 x 8).
8A-5 Mounting the Projector Assembly

**WARNING**

- The projector base weighs 20 kg. Be sure to assign two or more workers to mounting the projector base to prevent accidents.
- Mounting the projector assembly requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.

1. Lift the projector base, and place it by sliding it onto the four hooks of the roof frame C from the right side.

2. Fix the projector base with four button head bolts (M6 x 16) and four flat washers (ø6.5 x 22 x t1.6).
8A. Installation and Assembly

-Must be performed by a technician-

3 (1) Fix the harness passed through the left round hole of the roof frame C in the previous section (see “8A-4 Assembling the Roof Assembly” on page 98) with the three clamps of the projector base, (2) connect the faston terminal, and (3) put the connector into the right rectangular hole of the projector base.

4 Connect the connector to the center speaker, hook it on the projector base, and fix with three torx bolts (M5 x 8).
**5** Fix the HDMI and RS232C cables and power cable with the clamp attached to the roof frame C.

![Diagram of cable setup]

**6** Remove the projector unit from the packing box, and mount the gun camera bracket with four cap screws (M) (M4 x 8).

![Diagram of projector and gun camera bracket installation]
7 Hold the handle with the lens facing downward, and hook the assembly on the metal fittings on both sides of the projector base.

- NOTICE - Take extra care not to hit the lens part.

8 Connect the HDMI and RS232C cables and power cable to the projector.
9. (1) Raise the projector unit, (2) push it into the back while preventing cables from being trapped, and (3) hook the front side of the handle on the hook to fix the projector unit.

10. Fix the projector unit to the metal fittings on both sides of the projector case, using two button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6).

11. Temporarily fasten the four cap screws (M) (M4 x 8) to the gun camera bracket.

12. Hook the hook slot of the gun camera PC board base on the four cap screws (M) (M4 x 8) temporarily fastened in 11, and fasten them to fix.

**NOTICE**
- Do not touch the camera lens directly. Fingerprints or dust on the lens will disable proper sensing.
Connect the two connectors of the gun camera PC board.

Remove the lens cap, and fix it at the illustrated position to prevent it from being lost. (The hook and loop fastener is attached to the lens cap.)

Do not touch the camera lens directly. Fingerprints or dust on the lens will disable proper sensing.
**8A. Installation and Assembly**

-Must be performed by a technician-

15. Hook the upper hooks of the projector cover on the square holes of the projector base, and lock the projector cover with the service key.

16. Temporarily fix the projector cover with four torx bolts (M5 x 16). At this stage, leave the top two screws slightly loosened, and only fully tighten the bottom two screws.

17. Hook the projector mask support(EXP) on the two torx bolts (M5 x 16) left slightly loosened in 16, and fully tighten the screws.
8A. Installation and Assembly

- Must be performed by a technician -

8A-6 Mounting the Face Assembly

**WARNING**

- Mounting the face assembly requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.

(1) Mounting the Face

1. Put the face on the face base (L), and fix them with five torx bolts (M5 x 8) to assemble the face assembly (L).

2. Hook the reverse upper part of the face assembly (L) on the roof frame B (L).
3. Fix the face assembly (L) with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).

4. Similarly, mount the face assembly (R) to the roof frame B (R).
5. Fix the face assembly (R) with five button head bolts (M6 x 16) and five flat washers (ø6.5 x 22 x t1.6).

6. Connect each connector (3-pin) coming out from the right side of the face assembly (L) and the left side of the face assembly (R).
8A-7 Mounting the LEDBOX Unit for Signs

**WARNING**

- Mounting the LEDBOX unit for signs requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.

1. Mount the block panel to the LEDBOX unit for signs with five torx bolts (M5 x 8). Refer to the figure below and take care not to mount it in the wrong direction.

   - Block panel
   - LEDBOX unit for sign
   - Torx bolt (M5 x 8)

2. Hook the upper parts of the LEDBOX unit for signs on the roof frame C for temporary placement.
3. Fix them with five button head bolts (M6 x 16) and five flat washers (Ø6.5 x 22 x t1.6).

4. Connect the connector (4-pin) from the inside of the case.

5. Mount the harness cover (L) to the back of the roof frame B (L) with two torx bolts (M5 x 8).
8A-8 Mounting the Roof Panel

WARNING

Mounting the roof panel requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.

1. Place the roof panel (L) on the top of the roof assembly, and slide the panel outward to insert it into the gap.

![Diagram of roof panel installation](image)

2. Fix the panel with two button head bolts (M6 x 16) and two flat washers (ø6.5 x 22 x t1.6) from the inside of the case.

![Diagram of screw installation](image)

3. Similarly, mount the roof panel (R).
4 Place the roof frame C cover on the roof frame C, and slide the cover to insert into the gap.

5 Fix the cover with two countersunk washer nuts (M4) and two torx bolts (M5 x 8).
6. Insert the sign panel (EXP) into the sign panel base.

7. Fix the panel with two torx bolts (M5 x 8) and two flat washers (ø5.5 x 20 x t1).
8A-9 Mounting the Curtain

1. Loosen the three torx bolts (M5 x 8) inside the roof frame B (L), and remove the curtain support.

2. Face the printing surface of the curtain outward, and hook the three round holes on the top on the torx bolts.

3. Place the curtain support on the top of the curtain as if the curtain is inserted into the curtain support, and refasten the three torx bolts (M5 x 8).

4. Similarly to Steps 1 to 3, mount the curtain inside the roof frame B (R).
8A-10 Mounting the Inside Curtain

1 Loosen the four torx bolts (M5 x 8) inside the center assembly, and remove the inside curtain support.

Loosen the four torx bolts (M5 x 8)  
Inside curtain support

2 Hook the four round holes on the top of the inside curtain on the torx bolts.

Torx bolt (M5 x 8)  
Inside curtain
8A. Installation and Assembly

-Must be performed by a technician-

3. Place the inside curtain support on the top of the inside curtain as if the inside curtain is inserted into the inside curtain support, and refasten the four torx bolts (M5 x 8).
8A-11 Mounting the Front and Center Assemblies

1. Align the front assembly with the center assembly.
2. Enter the dome, and loosen the two button head bolts (M6 x 16) of the roof frame A. Insert the notches of the dome bracket, and refasten the two button head bolts loosened.
3. Align the dome with the flanges, and fix the six dome holders with two torx bolts (M5 x 16) and two flat washers (ø5.5 x 20 x t1) each.

4. Remove the support caster bracket A of the side tower (R) assembly by removing the two button head bolts (M6 x 30) and two flat washers (ø6.5 x 22 x t1.6). Place the removed button head bolts and flat washers back into the case.
Similarly to Step 4, remove the support caster bracket A of the side tower (L) assembly by removing the two button head bolts (M6 x 30) and two flat washers (ø6.5 x 22 x t1.6). Place the removed button head bolts and flat washers back into the case.
8A-12 Level Adjuster Adjustment

**WARNING**

- Install the machine securely by using the level adjusters. Unstable machine installation may result in an accident or injury.

There are 12 level adjusters as illustrated.

1. When machine assembly is complete, lower the 12 level adjusters such that the casters of each assembly come off the floor by around 5 mm.

   ![Diagram of level adjusters](image)

   - Front assembly: two places
   - Center assembly: four places
   - Side tower (L) assembly: three places
   - Side tower (R) assembly: three places

   After being adjusted, make sure the machine does not rattle.

2. Make sure the tower joint base (R) on the right of the center assembly has contact with the floor, and fasten the four button head bolts (M6 x 40).

   ![Diagram of button head bolts and tower joint base](image)
3. Place the LAN cable of the tower joint base (R) and connector (6-pin) harness in the groove in front of the entrance, and fix them with three clamps. Similarly, place the connector (3-pin) harness in the back groove, and fix it with three clamps. * Fix the harness with clamps in the order of the center assembly, tower joint base (R) and side tower (R) assembly along the metal plates.

- NOTICE -
- Be careful not to pinch the connector or the harness during attachment.
- Be sure to fix harnesses with clamps along the metal plates.
4. Place the tower joint plate (R) on the tower joint base (R), and mount the two tower joint covers with four button head bolts (M6 x 16) each.

5. Similarly to Step 2, make sure the tower joint base (L) on the left of the center assembly has contact with the floor, and fasten the four button head bolts (M6 x 40).

6. Similarly to Step 4, place the tower joint plate (L) on the tower joint base (L), and mount the two tower joint covers (S) with four button head bolts (M6 x 16) each.
**8A-13 Attaching the POP**

- **NOTICE**
  - Wipe off dirt and dust on the areas where the POP will be attached with a soft cloth beforehand.

1. Peel off the paper liner of the double-sided tape and stick the POP (B)(EXP) on the block panel as shown in the figure on the next page.

2. Stick POP (C)(EXP) and POP(D)(EXP) on the smoke panel (EXP) following the same procedure.
8A-14 Connecting the Power Cord and Ground Wire

**WARNING**

- Be sure to install the ground wire. Failure to install the ground wire may result in electric shock in the event of electrical leakage.
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

**CAUTION**

- Arrange the LAN cable and power cord in a manner that protects players, viewers and passers-by from tripping over them.
(1) Connecting the Machine

Plug the power cord into the machine, and hold the cord with the AC cord clamp as illustrated below to prevent the cord from coming out.

1. Connect the power cord.
2. Insert the AC cord clamp into the hole to secure the cord.
3. Lift up the lever and slide the clamp towards the power cord.
4. Secure the connector holder around the power cord.
8A-15 Connecting the LAN Cable

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.
- Arrange the LAN cable in a manner that protects players, viewers and passers-by from tripping over it.

1. Remove a cap screw (M) (M4 x 8), and remove the LAN cable cover.
2. Insert the supplied LAN cable.
3. To attach the LAN cable cover, perform Step 1 in reverse.

**NOTICE**

- Be sure to turn off the main power switch prior to connecting the LAN cable to protect the electric circuit from damage (see “8A-18 Turning on the Main Power Switch” on page 142).
- In case the LAN cable needs to be laid on the floor, a commercially available cable protector should be used for protecting the cable.
- Failure to observe the following instructions could cause communication problems, and the game might not play properly. Be sure to connect the LAN cable as instructed.
  - Communication problems could occur if the LAN cable is not properly connected. In case the LAN cable needs to be laid on the floor, arrange the LAN cable in a manner that protects passers-by from tripping over it.
  - Do not bundle the LAN cable with the power cord or put them in the same cable protector.
  - Do not forcibly bend the cable when installing or stretch it when connecting.
8A-16 Inserting the USB Dongle

**WARNING**
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

**NOTICE**
- Be sure to turn off the power supply before inserting the USB dongle (see “8A-18 Turning on the Main Power Switch” on page 149).

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. After removing the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6), unlock with the service key and remove the seat (L).

![Diagram showing seat removal](image)

3. Insert the USB dongle until it is securely fixed in the USB port 1 of the game PC board.

![Diagram showing USB dongle insertion](image)

4. To reattach the seat (L), perform Steps 1 and 2 in reverse.
8A-17 Checks before Turning on the Power Switch

- Does the installation conform to the specified installation conditions? (See “5-1 Installation conditions” on page 30.)
- Does the voltage source capacity conform to the specified level?
- Is the machine properly grounded?
- Is the power cord installed with a protector, etc. to prevent players or other customers from tripping over it?

8A-18 Turning on the Main Power Switch

**NOTICE**

- After turning off the main power switch, it takes time to restart the projector and nothing may be displayed on the screen for around 10 minutes. Use the system power switch to restart the game PC board.
- Be sure to turn on the system power switch 30 or more seconds after turning off the switch.

Unlock the service door using the service key, and check that the internal system power switch is on.
2 Turn on the main power switch.
8A-19 Checks after Turning on the Power Switch

- Is the center of the image on the spherical screen consistent with the screen center? (see “8B-5-6 Positioning the Projector” on page 212).
- Is communication with the network normal? (see “7-4-9 Network Setting (NETWORK OPTIONS)” on page 73).

8A-20 Adjustment

8A-20-1 Adjusting the Projector

1. Turn on the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Adjust the projector base such that the center of the image on the display screen is consistent with the screen center (see “8B-5-6 Positioning the Projector” on page 212).

8A-20-2 Adjusting the Gun Assembly

1. Turn on the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Adjust the gun assembly (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).

Installation is now complete.
8B. Maintenance

**WARNING**
- To avoid electric shock, accidents or injuries to yourself or other people, be sure to turn off the main power switch before performing service work (such as repairs or correcting malfunctions).
- Sections of the projector remain at a high temperature and high voltage even after the main power switch is turned off. To avoid electric shock or burns, be very careful not to accidentally touch these sections.

8B-1 Inspection and Maintenance

**WARNING**
- Perform periodic service. Failure to perform service may result in an accident.
- Perform the inspections every day before starting operations. These are required to prevent accidents (see “7-1 Pre-operation Inspection” on page 39).

8B-1-1 Inspection Items

Regularly check if there are any abnormalities with the following inspection items.

1) Inspection of the level adjuster
   - Confirm whether it is fixed securely (see “8A-12 Level Adjuster Adjustment” on page 133).

2) Inspection of the projector
   - Confirm that the image is normally projected from the projector.
   - Confirm that the projected area of the projector is positioned properly on the screen (see “8B-5-6 Positioning the Projector” on page 212).
   - Confirm that the mounting screws and adjustment screws of the projector base are not loose.

3) Inspection of the plug for power supply
   - Confirm that the cord box unit of the machine and the plug are inserted firmly.
   - If dust, etc. adheres at the joint, clean it.
   - Confirm that there are no cracks in the power cord or dirt on the coating. If there are any abnormalities with the power cord, replace it.

4) Inspection of loose screws on each part
   - Confirm that the following screws are not loose. If there are any loose screws, screw them down firmly again.
     - Gun assembly
     - Seat (L), (R)
     - Tower joint base (L), (R)

5) Gun tube
   - Check whether there is any damage or abnormality on the tube.
### 8B-2 Troubleshooting

#### 8B-2-1 Overall

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>It does not start.</td>
<td>The USB dongle is not inserted.</td>
<td>Insert the USB dongle.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>The system power switch is turned off.</td>
<td>Turn on the system power switch.</td>
<td>Page 50</td>
</tr>
<tr>
<td></td>
<td>Failure of the game PC board.</td>
<td>Contact your distributor.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure of the USB dongle.</td>
<td>Replace with a fuse of the specified capacity. If the fuse blows often, there is a problem with the machine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The fuse has blown.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The operation is not stabilized.</td>
<td>The power supply voltage is not within the range of AC90V - 110V.</td>
<td>Remove large-capacity devices in the same line (air conditioners, large vehicles, etc.), and secure the specified power supply voltage.</td>
<td></td>
</tr>
<tr>
<td>It becomes impossible to play the game.</td>
<td>The projector and the game PC board are not connected.</td>
<td>Check the connection of the RS232C cable.</td>
<td>Page 155</td>
</tr>
<tr>
<td>The sound does not come out from each speaker.</td>
<td>Failure of the AMP PC board.</td>
<td>Replace the AMP PC board.</td>
<td>Page 162</td>
</tr>
<tr>
<td></td>
<td>The sound volume setting is small.</td>
<td>Reset the sound volume.</td>
<td>Page 66</td>
</tr>
<tr>
<td></td>
<td>The connector is disconnected.</td>
<td>Connect the connector firmly.</td>
<td>Page 155</td>
</tr>
</tbody>
</table>

#### 8B-2-2 Center Assembly

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN pad does not react.</td>
<td>The connector is disconnected.</td>
<td>Securely connect the connector.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>Failure of the PIN pad.</td>
<td>Replace the PIN pad.</td>
<td>Page 174</td>
</tr>
<tr>
<td>1P/2P switch does not react.</td>
<td>The connector is disconnected.</td>
<td>Securely connect the connector.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>Failure of the illuminated switch.</td>
<td>Replace the illuminated switch.</td>
<td>Page 176</td>
</tr>
<tr>
<td></td>
<td>Failure of the NA-JV(S) PC board.</td>
<td>Replace the NA-JV(S) PC board.</td>
<td>Page 158</td>
</tr>
</tbody>
</table>
### 8B-2-3 Gun Assembly

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The gun assembly does not work.</td>
<td>• Incomplete calibration of the gun assembly.</td>
<td>• Calibrate the gun assembly on the test mode.</td>
<td>Page 57</td>
</tr>
<tr>
<td></td>
<td>• The connector is disconnected.</td>
<td>• Securely insert the connector.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>• Failure of the LED unit.</td>
<td>• Replace the LED unit.</td>
<td>Page 186</td>
</tr>
<tr>
<td></td>
<td>• Failure of the NA-JV(S) PC board.</td>
<td>• Replace the NA-JV(S) PC board.</td>
<td>Page 158</td>
</tr>
<tr>
<td>• The gun assembly does not work both for 1P and 2P.</td>
<td>• Failure of the gun camera PC board.</td>
<td>• Replace the gun camera PC board.</td>
<td>Page 200</td>
</tr>
<tr>
<td></td>
<td>• Failure of the NA-JV(S) PC board.</td>
<td>• Replace the NA-JV(S) PC board.</td>
<td>Page 158</td>
</tr>
<tr>
<td>• The gun trigger does not work.</td>
<td>• The connector is disconnected.</td>
<td>• Securely insert the connector.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>• Failure of the micro switch.</td>
<td>• Replace the micro switch.</td>
<td>Page 191</td>
</tr>
<tr>
<td></td>
<td>• Failure of the gun camera PC board.</td>
<td>• Replace the gun camera PC board.</td>
<td>Page 200</td>
</tr>
<tr>
<td></td>
<td>• Failure of the NA-JV(S) PC board.</td>
<td>• Replace the NA-JV(S) PC board.</td>
<td>Page 158</td>
</tr>
<tr>
<td>• The gun assembly does not vibrate.</td>
<td>• The connector is disconnected.</td>
<td>• Securely insert the connector.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>• Failure of the vibration motor.</td>
<td>• Replace the vibration motor.</td>
<td>Page 188</td>
</tr>
<tr>
<td></td>
<td>• Failure of the NA-JV(S) PC board.</td>
<td>• Replace the NA-JV(S) PC board.</td>
<td>Page 158</td>
</tr>
</tbody>
</table>

### 8B-2-4 Roof Assembly

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The face tape LED is not lit.</td>
<td>• Failure of the face tape LED.</td>
<td>• Replace the face tape LED.</td>
<td>Page 198</td>
</tr>
<tr>
<td></td>
<td>• The connector is disconnected.</td>
<td>• Insert the connector firmly.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>• Failure of the NA-JV (S) PC board.</td>
<td>• Replace the NA-JV (S) PC board.</td>
<td>Page 158</td>
</tr>
<tr>
<td>• The sign tape LED is not lit.</td>
<td>• Failure of the sign tape LED.</td>
<td>• Replace the sign tape LED.</td>
<td>Page 196</td>
</tr>
<tr>
<td></td>
<td>• The connector is disconnected.</td>
<td>• Insert the connector firmly.</td>
<td>Page 155</td>
</tr>
<tr>
<td></td>
<td>• Failure of the NA-JV (S) PC board.</td>
<td>• Replace the NA-JV (S) PC board.</td>
<td>Page 158</td>
</tr>
</tbody>
</table>
### 8B-2-5 Projector Assembly

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The image is not displayed.</td>
<td>• The connector of the projector unit is disconnected.</td>
<td>• Insert the connector firmly.</td>
<td>Page 155</td>
</tr>
<tr>
<td>• The main power of the projector unit is turned off.</td>
<td></td>
<td>• Turn on the main power of the projector unit.</td>
<td>Page 215</td>
</tr>
<tr>
<td>• The lamp outer cover is removed.</td>
<td></td>
<td>• Attach the lamp outer cover correctly.</td>
<td>Page 202</td>
</tr>
<tr>
<td>• The lamp of the projector unit is burned out.</td>
<td></td>
<td>• Replace the lamp of the projector unit.</td>
<td>Page 202</td>
</tr>
<tr>
<td>• The lamp use time is over the predetermined time, and the operation was stopped.</td>
<td>• The life of the projector lamp will soon expire.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The image is not displayed normally.</td>
<td>• Some part of the projector settings is incorrect.</td>
<td>• Return the projector to the default settings in the test mode.</td>
<td>Page 59</td>
</tr>
<tr>
<td>• The image blurs.</td>
<td>• The lens or the lens cover of the projector unit is dirty.</td>
<td>• Clean the lens and the lens cover of the projector unit.</td>
<td>Page 83</td>
</tr>
<tr>
<td>• The image is dark.</td>
<td>• The brightness and the contrast are not adjusted properly.</td>
<td>• Adjust the brightness and the contrast.</td>
<td>Page 220</td>
</tr>
<tr>
<td></td>
<td>• The projector lamp is close to the end of its service life.</td>
<td>• Replace the lamp of the projector unit.</td>
<td>Page 202</td>
</tr>
<tr>
<td>• The color is light. The color tone is bad.</td>
<td>• The red level, green level and blue level are not adjusted properly.</td>
<td>• Adjust the red level, green level and blue level.</td>
<td>Page 220</td>
</tr>
<tr>
<td></td>
<td>• The spherical screen is dirty.</td>
<td>• Clean the spherical screen.</td>
<td>Page 82</td>
</tr>
<tr>
<td></td>
<td>• The projector lamp is close to the end of its service life.</td>
<td>• Replace the lamp of the projector unit.</td>
<td>Page 202</td>
</tr>
<tr>
<td>• The remote controller does not work.</td>
<td>• The battery of the remote controller is depleted.</td>
<td>• Replace the battery of the remote controller.</td>
<td>Page 215</td>
</tr>
<tr>
<td></td>
<td>• The battery of the remote controller is not attached properly.</td>
<td>• Attach the battery of the remote controller properly.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The remote controller is not pointed at the remote control receiver.</td>
<td>• Operate the remote controller by pointing it at the remote control receiver of the projector unit.</td>
<td>Page 216</td>
</tr>
</tbody>
</table>
### 8B. Maintenance

**Must be performed by a technician**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• &quot;09-01 PROJECTOR LAMP WARNING&quot; is indicated on the spherical screen. * When the lamp operating time exceeds approx. 3,300 hours at maximum, the message is displayed for 30 seconds after turning on the power.</td>
<td>• The projector lamp is close to the end of its service life.</td>
<td>• When the lamp use time exceeds approx. 3,400 hours at maximum, the lamp will not be turned on. Prepare a spare lamp when this message is displayed, and replace the projector lamp.</td>
<td>Page 85</td>
</tr>
</tbody>
</table>
## 8B-3 Error Display

When an error is detected at startup or during game play, an error screen appears and machine operation stops. Refer to the error code tables below to identify and resolve the cause of the error.

When a screen not described in the error code tables appears or the error occurs again despite taking the appropriate action, something else may be causing the error. In these cases contact your distributor.

### (1) Network Errors

<table>
<thead>
<tr>
<th>Error code</th>
<th>Error message</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>05-20</td>
<td>ERROR DEVICE</td>
<td>• Error in connection to or authentication of the game server.</td>
<td>Contact your distributor.</td>
<td></td>
</tr>
<tr>
<td>05-21</td>
<td>ERROR AUTH NG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-22</td>
<td>ERROR DNS TIMEOUT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-23</td>
<td>ERROR DNS HOST NOT FOUND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-24</td>
<td>ERROR SERVER NG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-30</td>
<td>ERROR TIP TIMEOUT</td>
<td>• Error in connection to or authentication of the authentication server of the game PC board.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-31</td>
<td>ERROR TIP HOST NOT FOUND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-32</td>
<td>ERROR DNS TIMEOUT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-33</td>
<td>ERROR DNS HOST NOT FOUND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-34</td>
<td>ERROR AUTH NG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-35</td>
<td>ERROR AUTH TIMEOUT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-38</td>
<td>NBLINE POINT BALANCE ERROR</td>
<td>• The balance of NBLINE points fell below the amount required for one play.</td>
<td>Charge NBLINE points.</td>
<td></td>
</tr>
<tr>
<td>05-50</td>
<td>REVISION ERROR</td>
<td>• Different revision from that of the game server.</td>
<td>Update the software.</td>
<td>Page 81</td>
</tr>
<tr>
<td>05-51</td>
<td>SERVER CONNECTION ERROR</td>
<td>• The game server is down due to maintenance or failure.</td>
<td>Check communication later.</td>
<td></td>
</tr>
<tr>
<td>05-52</td>
<td>SERVER UNDER MAINTENANCE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05-53</td>
<td>INCONSISTENT SERVER ERROR</td>
<td>• Error in communication with the game server.</td>
<td>Check the network connection.</td>
<td>Page 73</td>
</tr>
<tr>
<td>05-55</td>
<td>NETWORK CONNECTION UNSTABLE</td>
<td>• Update necessary for operation not performed.</td>
<td>Perform necessary update for operation.</td>
<td>Page 81</td>
</tr>
<tr>
<td>05-56</td>
<td>INITIAL NETWORK AUTH ERROR</td>
<td>• Error in communication with the game server at the time of the first activation after installing the machine.</td>
<td>Check the network connection.</td>
<td>Page 73</td>
</tr>
<tr>
<td>05-57</td>
<td>NETWORK DISCONNECTION ERROR</td>
<td>• Error in connection of the LAN cable.</td>
<td>Check the LAN cable connection.</td>
<td>Page 140</td>
</tr>
</tbody>
</table>
## 8B. Maintenance

- Must be performed by a technician -

### (2) Hardware Errors

<table>
<thead>
<tr>
<th>Error code</th>
<th>Error message</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-01</td>
<td>COIN ERROR 1</td>
<td>• Failure of the coin microswitch. • Failure of the NA-JV (S) PC board.</td>
<td>• Replace the coin microswitch. • Replace the NA-JV (S) PC board.</td>
<td>Page 169 Page 158</td>
</tr>
<tr>
<td>01-02</td>
<td>COIN ERROR 2</td>
<td>• Error in the service switch. • Failure of the NA-JV (S) PC board.</td>
<td>• Contact your distributor. • Replace the NA-JV (S) PC board.</td>
<td>Page 158</td>
</tr>
<tr>
<td>01-03</td>
<td>COIN ERROR 3</td>
<td>• Failure of the coin counter. • Failure of the NA-JV (S) PC board.</td>
<td>• Contact your distributor. • Replace the NA-JV (S) PC board.</td>
<td>Page 158</td>
</tr>
<tr>
<td>03-01</td>
<td>I/O PCB ERROR</td>
<td>• The connector is not connected. • Failure of the NA-JV (S) PC board.</td>
<td>• Check the connection of the NA-JV (S) PC board. • Replace the NA-JV (S) PC board.</td>
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</tr>
<tr>
<td>03-02</td>
<td>FIRMWARE ERROR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06-01</td>
<td>GUN CONTROLLER ERROR</td>
<td>• The connector is not connected. • Failure of the gun controller.</td>
<td>• Check the gun controller connection. • Replace the gun controller.</td>
<td>Page 182</td>
</tr>
<tr>
<td>06-02</td>
<td>GUN CAMERA ERROR</td>
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<td></td>
</tr>
<tr>
<td>08-01</td>
<td>AUTH CAMERA ERROR</td>
<td>• The connector is not connected. • Failure of the authentication camera.</td>
<td>• Check the authentication camera connection. • Replace the authentication camera.</td>
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</tr>
<tr>
<td>09-01</td>
<td>PROJECTOR LAMP WARNING</td>
<td>The lamp use time exceeded the specified time.</td>
<td>• Replace the lamp with a new one. • Voice guidance will be provided.</td>
<td>Page 202</td>
</tr>
<tr>
<td>09-02</td>
<td>PROJECTOR ERROR</td>
<td>• Operation stopped as the lamp use time exceeded the specified time.</td>
<td>• Replace the lamp with a new one and reset the lamp use time. • The screen will be hidden to provide voice guidance.</td>
<td>Page 202</td>
</tr>
<tr>
<td>09-03</td>
<td>PROJECTOR ERROR</td>
<td>• Failure of the projector.</td>
<td>• Contact your distributor if the same error occurs again. • The screen will be hidden to provide voice guidance.</td>
<td></td>
</tr>
<tr>
<td>09-04</td>
<td>PROJECTOR ERROR</td>
<td>• Failure of the internal projector fan.</td>
<td>• Contact your distributor if the same error occurs again. • The screen will be hidden to provide voice guidance.</td>
<td></td>
</tr>
<tr>
<td>09-05</td>
<td>PROJECTOR ERROR</td>
<td>• Only the cooling fan rotated and the lamp was not lit as the machine was powered on immediately after the lamp had been turned off.</td>
<td>• Power ON the machine again later. • Contact your distributor if the same error occurs again. • The screen will be hidden to provide voice guidance.</td>
<td></td>
</tr>
<tr>
<td>09-07</td>
<td>PROJECTOR ERROR</td>
<td>• The temperature inside the projector is high. • Failure of the projector.</td>
<td>• Clean the filter. • Contact your distributor if the same error occurs again. • Voice guidance will be provided.</td>
<td></td>
</tr>
<tr>
<td>Error code</td>
<td>Error message</td>
<td>Cause</td>
<td>Action</td>
<td>Reference page</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>09-08</td>
<td>SERIAL COMMUNICATION WARNING</td>
<td>• Error in serial communication of the projector.</td>
<td>• Check the projector connection. * Voice guidance will be provided.</td>
<td>Page 155</td>
</tr>
<tr>
<td>09-09</td>
<td>SERIAL COMMUNICATION ERROR</td>
<td>• Operation stopped as the specified time elapsed after activation while there was an error in serial communication of the projector.</td>
<td>• Check the projector connection. * Power ON the machine again later. * The screen will be hidden to provide voice guidance.</td>
<td>Page 155</td>
</tr>
<tr>
<td>09-10</td>
<td>PROJECTOR ERROR</td>
<td>• The projector is not connected.</td>
<td>• Check the projector connection. * Voice guidance will be provided.</td>
<td>Page 155</td>
</tr>
<tr>
<td>19-21</td>
<td>USB DONGLE ERROR 1</td>
<td>• The USB dongle for another model is inserted.</td>
<td></td>
<td>Page 141</td>
</tr>
<tr>
<td>19-22</td>
<td>USB DONGLE ERROR 2</td>
<td>• No USB dongle is inserted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-23</td>
<td>USB DONGLE ERROR 3</td>
<td>• Two or more USB dongles are inserted.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-24</td>
<td>USB DONGLE ERROR 4</td>
<td>• Failed to read or write NBLINE points.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-02</td>
<td>VERSION UP ERROR 2</td>
<td>• No media for updating is inserted.</td>
<td>• Turn off the machine, and then perform updating again.</td>
<td>—</td>
</tr>
<tr>
<td>21-01</td>
<td>CLOCK ERROR</td>
<td>• Wrong time setting.</td>
<td>• Configure the time setting properly.</td>
<td>Page 70</td>
</tr>
<tr>
<td>22-01</td>
<td>ERROR</td>
<td>• Operation stopped as the specified time elapsed while the network remained disconnected. * Operation stopped as the number of unsent notifications on billing information exceeded the specified number.</td>
<td>• Check the network connection.</td>
<td>Page 73</td>
</tr>
<tr>
<td>22-02</td>
<td>ERROR</td>
<td>• Improper billing information.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22-03</td>
<td>ERROR</td>
<td>• The billing process failed.</td>
<td>• Contact your distributor if the same error occurs again.</td>
<td>—</td>
</tr>
<tr>
<td>23-01</td>
<td>AUTH DATA INCONSISTENT ERROR</td>
<td>• Authentication data is damaged.</td>
<td>• Check the network connection.</td>
<td>Page 73</td>
</tr>
</tbody>
</table>
## 8B. Maintenance

- **Must be performed by a technician**

### (3) Projector Errors

If an error occurs, the screen may not be displayed. Upon occurrence of an error, voice guidance starts.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Action</th>
<th>Reference page</th>
</tr>
</thead>
</table>
| • The screen is not displayed and the 1P switch and the 2P switch are flashing alternately. | • Operation stopped because the lamp use time exceeded the specified time.  
• Service life of the projector lamp. | • If the lamp use time exceeds the maximum of 3,400 hours, the lamp will not light up. Prepare the lamp for replacement and replace the projector lamp. | Page 202        |
| • The screen is not displayed and the 1P switch and the 2P switch are not flashing alternately. | • Difficulty in lighting up the lamp due to high temperature of the lamp. | • After turning off the projector power supply and waiting for a while, turn on the power supply again. If the lamp does not recover after cooling, replace it. | Page 202        |
| • The temperature inside the projector is high.              |                                                                      | • After turning off the power supply and cleaning the filter of the projector, turn on the power supply again.                                                                                       | Page 82         |
| • Projector lamp outer cover open.                           |                                                                      | • After turning off the power supply, attach the projector lamp outer cover again.                                                                                                                   | Page 202        |
| • Projector main power supply turned off.                    |                                                                      | • Turn on the projector unit main power supply.                                                                                                                                                         | Page 216        |
| • The cable connectors connecting the projector and the game PC board are disconnected. |                                                                      | • Securely insert the projector connector and connectors for the video on the game PC board side and for the projector.                                                                            | Page 155        |
| • Failure of the projector.                                  |                                                                      | • Contact your distributor.                                                                                                                                                                           | —               |
| • Failure of the projector cooling fan.                     |                                                                      | • Contact your distributor.                                                                                                                                                                           | —               |
8B-4 Problems Concerning the Network

It is necessary to connect to the network (NBLINE) for operation of this machine. (*1)

If there are any issues with the network connection due to communication problems, etc., “22-01 ERROR” is displayed on the screen, and the game enters the “off-line operation state”. If 336 hours or more pass after entering the “off-line operation state”, it becomes impossible to start a new game. (*2)

(If 336 hours pass while playing a game, it is possible to play until the current game is finished.)

In order to play the game again, correct the network problem, and connect to NBLINE. (*3)

*1 The state of the network connection can be checked in the test mode.
(See “7-4-9 Network Setting (NETWORK OPTIONS)” on page 73.)

*2 The remaining time to operate in the “off-line operation state” can be checked in the test mode.
(See “7-4-9 Network Setting (NETWORK OPTIONS)” on page 73.)

*3 Refer to the error display for taking measures against problems with the network.
(See “8B-3 Error Display” on page 150.)

The network icon displayed at the top left of the screen becomes the off-line indication in the following cases.

• There is a problem with the network connection.
• The network service is down.
8B-5 Removal, Installation and Replacement

8B-5-1 Center Assembly

(1) Replacing the Game PC Board

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6), unlock with the service key, and remove the seat (L).

3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), and loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16) to remove the seat support.
- Must be performed by a technician -

4 Disconnect all of the power cords, faston terminals, USB dongles and cables connected to the game PC board.

- Connect each connector to the appropriate slot.
- If the sound connector is disconnected during operation of the unit, no sound will be output until it is restarted even if the sound connector is connected again. Insert it fully, and confirm that it is locked when attaching.

* As the color of the port does not match that of the connector, align the port number with the tag number of the connector.
5. Remove the two Phillips pan head screws (with flat and spring washers) (M5 x 8), and remove the game PC board.

6. Remove the six cap screws (M) (M4 x 8), and remove the rack base A and the rack base B.

7. To install, perform the procedure in reverse.

**NOTICE**

- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Be careful not to pinch the connector or the harness during attachment.
- The test mode settings are cleared when the game PC board is replaced. Make sure to adjust the gun and set the volume after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
(2) Replacing the NA-JV (S) PC Board

**WARNING**
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

**NOTICE**
- The PC board is vulnerable to static electricity. If a worker handles the PC board while statically charged, the parts on the PC board may be damaged. Touch a grounded metal surface, etc. before handling the PC board to remove static electricity on your body.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).
3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), and loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16) to remove the seat support.
4 Disconnect the four connectors.

5 Remove the four cap screws (M) (M3 x 8), and remove the NA-JV (S) PC board.

6 To install, perform the procedure in reverse.

**NOTICE**
- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- After replacing the NA-JV (S) PC board, perform an I/O check in the test mode to confirm that there are no problems (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
(3) Replacing the AMP PC Board

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

**NOTICE**

- The PC board is vulnerable to static electricity. If a worker handles the PC board while statically charged, the parts on the PC board may be damaged. Touch a grounded metal surface, etc. before handling the PC board to remove static electricity on your body.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).
3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.
4. Disconnect the four connectors.

5. Remove the five cap screws (M) (M3 x 8), and remove the AMP PC board.

6. To install, perform the procedure in reverse.

**NOTICE**
- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Connect the connector aligning the indication on the tag of the harness and the connector indication (Orange/Green) on the board.
- Be careful not to pinch the connector or the harness during attachment.
- After replacing the AMP PC board, check the sound volume with the sound test in the test mode (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
(4) Replacing the Switching Regulator (24V)

**WARNING**

To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).

3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.
4 Disconnect the two connectors.

5 Remove the four cap screws (M (M3 x 8)), and remove the switching regulator (24V).

6 To install, perform the procedure in reverse.

**NOTICE**
- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
(5) Replacing the Switching Regulator (5V)

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the two torx bolts (M5 x 40) and two flat washers (ø6.5 x 22 x t1.6) to remove the seat (R).
3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.
4. Disconnect the two connectors.

5. Remove the four cap screws (M) (M3 x 8), and remove the switching regulator (5V).

6. To install, perform the procedure in reverse.

- **NOTICE**
  - Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
6B. Maintenance

-Must be performed by a technician-

(6) Replacing the Switching Regulator (12V)

**WARNING**

- Make sure to turn off the main power switch in order to prevent electric shocks, accidents or injury of the workers and other people and the damage to the electric circuits.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the two torx bolts (M5 x 40) and two flat washers (Ø6.5 x 22 x t1.6) to remove the seat (R).

3. Remove one Phillips pan head screw (with flat and spring washer) (M5 x 8), loosen two Phillips pan head screws (with flat and spring washers) (M5 x 16), and remove the seat support.
4 Disconnect the three connectors.

5 Remove the four cap screws (M) (M3 x 8), and remove the switching regulator (12V).

6 To install, perform the procedure in reverse.

- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
(7) Replacing the Coin Selectors (US Specification)

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

* The coin selectors are to be provided yourself.

1. Turn off the main power switch (see “8A-18 Turning on of the Main Power Switch” on page 142).

2. Open the service door using the service key supplied with the machine.

3. Loosen the screw and pull the stopper toward you to unlock. Then, remove the coin selector.

4. To install, perform the procedure in reverse.
(8) Replacing the Coin Micro Switch (US Specification)

⚠️ WARNING

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the coin selector (see “8B-5-1 (7) Replacing the Coin Selectors” on page 168).
3. Disconnect the two faston terminals.
4. Remove the four Phillips pan head screws (M3 x 8), and remove the coin selector base (under).

5. Remove one tapping screw (3 x 8), one Phillips pan head screw (M3 x 24) and one nut (M3) from the coin selector base (under).
6 Slide the switch cover to remove it.

7 Remove the micro switch.

8 To install, perform the procedure in reverse.

**NOTICE**
- Insert the faston terminal fully when attaching.
- Be careful not to pinch the connector or the harness during attachment.
- There are two faston terminals. Refer to the above figure when connecting the faston terminal.
(9) Replacing the Bill Validator (US Specification)

**WARNING**
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

* The bill validator is to the provided yourself.
* The fit and function of the bill validator have been confirmed with MEI AE2454U3.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Open the coin door using the supplied coin door key.
3. Remove the magazine from the bill validator.

4. Disconnect the connector and four countersunk washer nuts (M4), and remove the bill validator.

5. To install, perform the procedure in reverse.

**NOTICE**
- Be careful not to pinch the connector or the harness during attachment.
(10) Replacing the CASHFLOW (EU Specification)

**WARNING**

To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

* The CASHFLOW is to the provided yourself.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Open the service door using the supplied service key.

3. Disconnect the connector.
4 Loosen the screw and pull the coin selector base toward you to unlock. Then, remove the CASHFLOW.

5 To install, perform the procedure in reverse.

**NOTICE**
- Be careful not to pinch the connector or the harness during attachment.
(11) Replacing the PIN Pad

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

**NOTICE**

- The PC board is vulnerable to static electricity. If a worker whose body is statically charged handles the PC board, the PC board parts may be damaged. Touch a grounded metal surface before handling the PC board to remove the static electricity on the body.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the four torx bolts (M5 x 8). Then, disconnect the three reverse side connectors and one faston terminal and remove the control panel plate.
**NOTICE**  
- Be careful not to wrongly insert the connectors for 1P switch and 2P switch when mounting.

3. Remove the four countersunk washer nuts (M4) and remove the PIN pad bracket from the control panel plate.

![Diagram of PIN pad bracket and control panel plate with countersunk washer nut (M4) highlighted.]

4. Remove the four Phillips pan head screws (M2 × 6) and remove the PIN pad from the PIN pad bracket to replace.

![Diagram of PIN pad and Phillips pan head screw (M2 × 6).]

5. To install, perform the procedure in reverse.

**NOTICE**  
- Securely lock the connector when attaching.  
- Be careful not to pinch the connector or the harness during attachment.  
- After replacing the PIN pad, check that it operates properly (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).  
- Be careful not to wrongly insert the illuminated switch connectors when mounting (see “8B-5-1 (12) Replacing the Illuminated Switches and LED Lamps” on page 176).
(12) Replacing the Illuminated Switches and LED Lamps

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

**NOTICE**

- The PC board is vulnerable to static electricity. If a worker whose body is statically charged handles the PC board, the PC board parts may be damaged. Touch a grounded metal surface before handling the PC board to remove the static electricity on the body.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the control panel plate (see “8B-5-1 (11) Replacing the PIN Pad” on page 174).
3. Turn the illuminated switch part 90 degrees and pull it out toward you.

4. Pull the LED lamp out from the illuminated switch.

5. Replace the illuminated switch or LED lamp.
To install, perform the procedure in reverse.
Pay attention to the direction of LED lamp when mounting the LED lamp.

**NOTICE**

- Securely turn the illuminated switch part until it makes a clicking sound when mounting.
- Set the direction of the illuminated switch part as shown in the figure when mounting.

- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Be careful not to pinch the connector or the harness during attachment.
- After replacement, check the operation of the illuminated switch and lighting of the LED lamp (see “7-4-4 (7) LED TEST” on page 61).
- Pay attention to the LED lamp polarity when mounting the LED lamp.
(13) Replacing the Authentication Camera

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see "8A-18 Turning on the Main Power Switch" on page 142).

2. Remove the four torx bolts (M5 x 8), and remove the camera case.

3. Remove the two torx bolts (M5 x 8), pull the camera bracket toward you, and disconnect the connector of the authentication camera.
4 Remove the three Phillips pan head screws (M2 x 3), and remove the authentication camera.

```
+----------+
|          |
|          |
+----------+
```

**NOTICE**
- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Be careful not to pinch the connector or the harness during attachment.

5 To install, perform the procedure in reverse.
(14) Replacing the Camera Tape LED

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the four torx bolts (M5 x 8), and remove the camera case (see “8B-5-1 (13) Replacing the Authentication Camera” on page 178).

3. Remove the two torx bolts (M5 x 8) of the camera bracket, pull the camera bracket toward you, and disconnect the connector of the camera tape LED to be replaced.
4 Unlock the two locks of the reusable clamp, and remove the camera LED.

5 To install, perform the procedure in reverse.

**NOTICE**
- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Be careful not to pinch the connector or the harness during attachment.
8B-5-2  Gun Assembly

The replacement procedure of the gun assembly of the 1P side is explained in this section. Replace the gun assembly of the 2P side following the same procedure.

(1) Replacing the Gun Assembly

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Open the service door with the supplied service key.
3. Remove the two countersunk washer nuts (M5), and remove the wire bracket.

4. Remove the clamp, and disconnect the faston terminal and connector.
5. Remove the two countersunk washer nuts (M6), and remove the gun assembly from the coin tower.

6. Remove the two cap bolts (M3 x 8), and remove the cable cover (B).
7 Remove the countersunk washer nut (M4), and remove the gun tube bracket B2P2.

To install, perform the procedure in reverse.

- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Be careful not to pinch the connector or the harness during attachment.
- Make sure to perform an operation check of the gun assembly after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
(2) Replacing the LED Unit

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).
3. Remove the four button head bolts (M4 x 8) and four flat washers (ø4.5 x 9 x t0.5), and remove the rubber cover.
4. Remove the 10 button head bolts (M4 x 8).
5 Remove the gun cover (R) (EXP).

6 Disconnect the connector.

7 Remove the LED unit.

8 To install, perform the procedure in reverse.

**NOTICE**
- Insert the connector fully in the correct direction, and confirm that the connector is locked when attaching the unit.
- Be careful not to pinch the connector or the harness during attachment.
- Make sure to perform an operation check of the gun assembly after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
(3) Replacing the Vibration Motor

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).
3. Remove the two button head bolts (M4 x 8).
4. Remove the gun cover (R) (see 3 to 5 of “8B-5-2 (2) Replacing the LED Unit” on page 186).
5. Remove the faston terminal.
6. Remove the two Phillips pan head screws (with flat and spring washers) (M3 x 8) and remove the motor bracket cover from the vibration unit. Then, disconnect the motor connector.

7. Remove motor harness wound in a ferrite core.
8B. Maintenance

-Must be performed by a technician-

8 Remove the two Phillips pan head screws (with flat and spring washers) (M3 x 8) and remove the motor bracket B.

9 Remove the two Phillips pan head screws (M2.3 x 2.5) and remove the vibration motor.

10 To install, perform the procedure in reverse.

**NOTICE**

- Securely lock the connector when mounting.
- Be careful not to pinch the connector or the harness during attachment.
- Mount the winding harness material inside the cover when putting the harness in the vibration unit.
- Wind the excessive wire attached to the motor to store in the cover.
- After replacement, be sure to check the operation of the gun assembly (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
(4) Replacing the Micro Switch

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).

3. Remove the gun cover (R) (EXP) (see 3 to 5 of “8B-5-2 (2) Replacing the LED Unit” on page 186).

4. Disconnect the two faston terminals, and remove the micro switch.

![Diagram of faston terminals and micro switch](image)

5. To install, perform the procedure in reverse.

**NOTICE**

- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
- Make sure to perform an operation check of the gun assembly after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
- Take care to ensure correct connection of the micro switch connectors.
(5) Replacing the Gun Tube

**WARNING**

To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the gun assembly (see “8B-5-2 (1) Replacing the Gun Assembly” on page 182).

3. Remove the button head bolt (M4 x 8) of the grip of the gun cover (L) (EXP).

4. Remove the gun cover (R) (EXP) (see 3 to 5 of “8B-5-2 (2) Replacing the LED Unit” on page 186).

5. Disconnect the connector of the LED unit (see 6 of “8B-5-2 (2) Replacing the LED Unit” on page 187).

6. Remove the faston terminal and the connector of the vibration unit (see 5 to 7 of “(3) Replacing the Vibration Motor” on page 188).

7. Remove the two faston terminals of the micro switch (see “8B-5-2 (4) Replacing the Micro Switch” on page 191).

8. Remove the faston terminal at the base of the gun.
9 Remove the gun tube.

10 To install, perform the procedure in reverse.

**NOTICE**
- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
- Make sure to perform an operation check of the gun assembly after replacement (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).
- Take care to ensure correct connection of the micro switch connectors.
- When installing a harness, assemble as shown in the figure below.
(1) Replacing the Speaker

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove one torx bolt (M5 x 16), loosen two torx bolts (M5 x 16), and remove along with the tower speaker bracket (R).

3. Disconnect the connector.
4. Remove the two torx bolts (M5 x 8), and remove the speaker main unit from the tower speaker bracket (R).

5. To install, perform the procedure in reverse.

- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
8B-5-4 Roof Assembly

(1) Replacing the Sign Tape LED

**WARNING**

- Replacing the sign tape LED requires standing at an elevated height. Use a stepladder or footstool and be careful when working. Working in an unnatural body posture may result in injury or machine damage.
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Refer to “8A-7 Mounting the LEDBOX Unit for Signs” on page 121, and follow the procedure in reverse to remove the sign LEDBOX Unit.

3. Remove the four countersunk washer nuts (M4), and remove the sign panel LED bracket along with the sign tape LED.
4. Disconnect the connector, and remove the sign tape LED (red) or the sign tape LED (white) from the clamp.

5. Assemble the sign tape LED (red) or the sign tape LED (white) following the procedure in the reverse order.

*Connect the harness according to the following procedure.

- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
- Take care to install the sign tape LED (red) / (white) in the correct place and connect the connector correctly.
(2) Replacing the Face Tape LED

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Refer to “8A-6 (1) Mounting the Face” on page 118, follow the procedure in reverse, and remove the face assembly on the side the LED is replaced.

3. Remove the five torx bolts (M5 x 8), and remove the face.
4. Remove the harness from the clamp, disconnect the connector, and remove the face tape LED to be replaced.

5. To install, perform the procedure in reverse.

**NOTICE**
- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
8B-5-5 Projector Assembly

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.
- Do not look into the lens while the projector assembly is lit. The strong light emitted from the lens may result in vision impairment or other problems.
- Be sure to use the dedicated lamp for this machine when replacing the lamp. Using other lamp than the dedicated lamp may result in malfunction, damage or injury. Also, do not reuse an old lamp. For inquiries regarding the dedicated lamp, contact your distributor.
- Contact your distributor for regular cleaning of the inside of the projector. Continued operation with dust accumulated inside the projector may result in fire or malfunction. Cleaning of the inside of the projector before humid or rainy seasons begin is particularly effective. Contact your distributor regarding the internal cleaning cost.

**NOTICE**

- For transportation, use the package box in which the projector unit was contained when you purchased the product.

(1) Replacing the Gun Camera PC Board

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Refer to “8A-5 Mounting the Projector Assembly” on page 111, and remove the gun camera PC board following the procedure in reverse.
3. To install, perform the procedure in reverse.
4. Adjust the gun after attachment (see “7-4-4 Input / Output Test (I/O TEST)” on page 53).

**NOTICE**

- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
(2) Replacing the Projector Unit

⚠️ WARNING ⚠️

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Refer to “8A-5 Mounting the Projector Assembly” on page 111, and remove the projector unit following the procedure in reverse.

3. To install, perform the procedure in reverse.

4. After attachment, perform positioning of the projector (see “8B-5-6 Positioning the Projector” on page 212).
(3) Replacing the Projector Lamp (Lamp Unit)

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.
- Be sure to turn off the main power switch and wait one hour or more to allow the lamp unit to cool sufficiently before replacing the lamp unit. The lamp unit is very hot immediately after the main power switch is turned off, and may cause burns.
- Never insert metal objects, flammable foreign matter, hands or other objects into the lamp enclosure after removing the lamp unit. Doing so may result in fire or electric shock.
- Be careful not to drop the lamp unit fixing screws inside of the machine. Also do not allow pieces of metal or flammable matter to enter the inside of the machine. Operation with foreign matter inside the machine may result in electric shock or fire.
- Install the replacement lamp unit securely. Improper installation may result in dark images or fire.
- **Never use other than a new dedicated lamp for this machine.** Also do not reuse an old lamp. Doing so may result in malfunction, damage or injury. To order a lamp unit, contact your distributor.
- Do not place the removed lamp unit on or near flammable matter. Doing so may result in fire.
- Do not leave the removed lamp unit where other people may touch it. It may cause burns or if it dropped, it may be damaged and the glass pieces may cause injury.
- The lamp unit of this machine uses a tiny amount of inorganic mercury, which is an environmentally hazardous substance. Handle the used lamp unit carefully to avoid damaging it, and dispose of it properly as hazardous waste such as fluorescent lights. In addition, follow any applicable local municipal regulations or other ordinances when disposing of the lamp unit.
- If the lamp unit is damaged, a tiny amount of white gas (inorganic mercury) may be discharged. If you breathe in this gas or if it gets in your eyes or mouth, consult a doctor immediately.

**CAUTION**

- In the case of breakage of the lamp, be sure to contact your distributor for cleaning the inside of the projector, replacement of lamp, and other necessary repairs.
- Depending on the lamp unit damage status, glass shards may have scattered inside the projector unit. Handle with particular care when removing the projector unit from the machine or when replacing the lamp unit, as glass shards may fall out. Should any glass shards fall onto the floor or seat, carefully and completely remove the glass shards using a vacuum cleaner, etc.
- Do not remove any screws other than necessary when replacing the lamp unit. Doing so may result in machine damage or malfunction.
- Must be performed by a technician-

- After confirming the projector unit model, be sure to specify the corresponding replacement lamp that is specified by BANDAI NAMCO Games Inc.. If a replacement lamp other than the specified one is used, the projector may malfunction. Also, when asking for repair, be sure to specify the projector unit type.

<table>
<thead>
<tr>
<th>Projector unit</th>
<th>Replacement lamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP-PE401H (V1)</td>
<td>Part number: 307-923</td>
</tr>
</tbody>
</table>

- Mount the lamp cover securely without looseness. If it is not mounted correctly, the power supply may not be turned on, the lamp may not light, or other malfunctions may occur.
- When replacing lamp, be sure to use a new lamp.
- The lamp is made from glass. Do not touch the glass surface with bare hands. Do not apply strong impact or scratch it. (The lamp may be broken due to dirt, impact, scratch, etc.)
- Before replacing the lamp unit, be sure to remove the projector unit from the machine and place the lamp unit on a flat surface.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Secure a place close to the machine cabinet to put the projector unit after it is removed. Prepare a flat and sufficiently large space (approximately 1m²) and cover the space with a plastic sheet, etc.
3. Remove the projector unit and put it on the place prepared in the step 2 above (see “8A-5 Mounting the Projector Assembly” on page 111).
4. Loosen the screw and remove the lamp cover by sliding it.
5 Loosen the two lamp unit fixing screws sufficiently and grasp the lamp unit knob. Then, slowly lift the lamp unit straight up and remove.

- Do not loosen any screws other than the lamp unit fixing screws.

! WARNING

- Remove the lamp unit gently from the projector unit.
- Do not expose the removed lamp unit to water or other substances or place it where other people may touch it or near flammable objects. Doing so may result in burns or injury.

6 Set a new lamp unit in the direction shown in the following figure and push in to the direction of the arrow to fit it into the lamp compartment. Securely insert the terminal part and secure it with the two fixing screws.
7 To reattach the lamp cover with the screws, perform Steps 3 and 4 in reverse.

**NOTICE**
- If the lamp cover is not mounted correctly, the power supply will not be turned on. Mount the lamp cover securely.

8 To reattach the projector unit, perform the procedure in reverse (see "8A-5 Mounting the Projector Assembly" on page 111).

9 Turn on the main power switch to enter to the test mode. In the case that the projector power supply is not turned on and the machine remains in standby mode, point the remote controller at the projector and press and hold the (HELP) button on the remote controller for 10 seconds or more. The power supply will be temporarily turned on. After confirming that the lamp indicator on the projector main body, which was lit in red, is turned off, turn on the projector power supply using the power button on the projector main unit operation part or the power (ON) button on the remote controller.
8B. Maintenance

- Must be performed by a technician -

10 Select “PROJECTOR TEST” on the “I/O TEST” screen and perform “LAMP TIME RESET”. Check whether “LAMP TIME (H)” is 0 (zero).

![PROJECTOR TEST screen]

"PROJECTOR TEST" screen

11 Turn off the test switch and end the test mode.
(4) Cleaning the Filter of the Projector Main Body

If dust piles up on the filter, air ventilation will be reduced and the inside temperature will rise. As this may cause malfunction, clean the filter frequently.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. To remove the projector unit, refer to “8A-5 Mounting the Projector Assembly” on page 111 and perform the procedure in reverse.

3. Clean the filter through the intake duct with a vacuum cleaner. (It is not necessary to remove the filter.)

4. After cleaning the filter, perform the procedure in reverse to reattach the projector unit (see “8A-5 Mounting the Projector Assembly” on page 111).
(5) Replacing the Filter F (projector)

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the projector cover (see “8A-5 Mounting the Projector Assembly” on page 111).
3. Loosen the knurled screw (M4 x 16).
4. Slide the filter tray F aside, and remove the filter F.
5. To install, perform the procedure in reverse.
(6) Replacing the Filter R (projector)

**WARNING**

- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Loosen the two knurled screws (M4 x 16) at the rear part of the projector cover, and remove the filter tray R.
3. Replace the filter R.
4. To install, perform the procedure in reverse.
8B. Maintenance

(7) Replacing the Lens Cover

WARNING

● To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. Remove the projector cover (see “8A-5 Mounting the Projector Assembly” on page 111).

3. Remove the four Phillips pan head screws (with flat and spring washers) (M4 x 6), and remove and replace the lens cover.

4. To install, perform the procedure in reverse.
(8) Replacing the Center Speaker

**WARNING**
- To avoid electric shock, accidents or injuries to yourself or other people, or damage to the electronic circuits, be sure to turn off the main power switch before starting work.

1. Turn off the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).
2. Remove the three torx bolts (M5 x 16) and the connector, and remove the center speaker along with the center speaker bracket.

![Diagram of center speaker removal](image)

3. Remove the two torx bolts (M5x16), and remove the main unit of the speaker.

![Diagram of speaker main unit and center speaker bracket](image)

4. To install, perform the procedure in reverse.

**NOTICE**
- Securely lock the connector when attaching.
- Be careful not to pinch the connector or the harness during attachment.
**8B-5-6 Positioning the Projector**

1. Turn on the main power switch (see “8A-18 Turning on the Main Power Switch” on page 142).

2. After the title screen is displayed, enter “VIEW ANGLE AND FOCUS ADJUST PATTERN” of “MONITOR TEST” from the test mode (see “7-4-5 Monitor Test (MONITOR TEST)” on page 63).

3. Adjust the horizontal angle of view of the projector to align the center line (vertical white line) of the display screen of “VIEW ANGLE AND FOCUS ADJUST PATTERN” to the dome center (see “8B-5-6 (1) Horizontal Adjustment” on page 213).
   *For adjustment, use the joint between the dome bases (L), (R) as the guideline of the center of the dome.*

4. Adjust the vertical angle of view of the projector aligning the top end of the center line of the display screen (vertical white line) to the ridge line of the dome ceiling (see “8B-5-6 (2) Vertical Adjustment” on page 214).
(1) Horizontal Adjustment

1. Loosen the four button head bolts (M6 x 16) on the right and left of the projector assembly. Loosen the bolts to the degree that the projector assembly can be moved.

   ![Projector assembly diagram](image)

   Button head bolts (M6 x 16) (same on opposite side)

2. When the rear part of the projector assembly is swung from side to side, the image on the screen also moves side to side.

   ![Projector assembly diagram](image)

3. Adjust the horizontal angle of view of the projector to align the center line (white) of the display screen of “VIEW ANGLE AND FOCUS ADJUST PATTERN” to the dome center.

4. After the adjustment, fasten the bolts and screws in the reverse order.
(2) **Vertical Adjustment**

1. Loosen the four flange sockets (M6 x 8) on the right and left of the projector assembly.

2. Loosen the countersunk washer nut (M6) and turn the button head bolt (M6 x 55) to move the screen vertically. Turn clockwise to move the screen downward, and turn counterclockwise to move the screen upward.

3. Adjust the vertical angle of view of the projector aligning the top end of the center line of the display screen of “VIEW ANGLE AND FOCUS ADJUST PATTERN” (vertical white line) to the ridge line of the dome ceiling.

4. After the adjustment, fasten the bolts and screws in the reverse order.
8B-5-7 Settings of the Projector

(1) Preparation of the Remote Controller

WARNING

Be sure to observe the following regarding the dry cell batteries of the remote controller. Failure to do so may cause the batteries to leak fluid or burst, possibly resulting in burns or injury.

- Do not use other than the specified batteries.
- Do not mix up the polarity indications (+ and –).
- Do not charge, heat, disassemble, or short-circuit the dry cell batteries or put them into fire.
- Do not leave dry cell batteries that have run out or are past the recommended use date indicated on the batteries in the remote controller.
- Do not mix different types of dry cell batteries or use new and old batteries together.
- If the fluid of the dry cell batteries adheres to appliances, do not touch the fluid directly. If you have touched the fluid, wash it off with water, and consult a doctor.

Inserting batteries into the remote controller

1. Remove the battery cover.
   Pull the battery cover toward you while pressing it, and pull up to remove the cover.

2. Insert batteries.
   Confirm the indication of + and – inside the case, and insert the batteries matching + and –.

3. Close the battery cover.
   Slide the tab at the rear part of the battery cover to close it.
(2) How to Operate the Remote Controller

- NOTICE -

- If the remote control receiver is exposed to strong light such as sunlight or the light from a fluorescent lamp, the remote controller may not operate.
- Do not drop or apply an impact.
- Do not place in an environment which will be subjected to high temperature or high humidity.
- Do not pour water on the unit or place the unit on a wet surface.
- Do not disassemble the remote controller.
- The remote controller may not work well depending on the place of use or the surrounding environment. In such a case, point the remote controller at the projector unit, and operate again.

Remove the projector cover of the projector assembly (see “8A-5 Mounting the Projector Assembly” on page 111), and operate the remote controller while pointing at the remote control photosensor on the projector unit.

Remote controller valid operating range
Angle: Within approx. 30° vertically and horizontally
Range: Within approx. 6 m
(3) Projector Unit Control Panel and Remote Controller Part Names

See the provided Projector User’s Manual for details.

**Projector Unit Control Panel**

1. **Power button**
   - This is used for turning on/off (standby) the power of the main unit.
   - When turning off the power (standby), a confirmation message is displayed on the screen when the button is pressed once. Press the button once again.

2. **Power indicator**
   - This is the indicator which notifies the state of the power of the projector.
   - **Off:** The main power is off.
   - **Flash blue light (short):** Preparing for turning on the power.
   - **Flash blue light (long):** Off timer (valid).
   - **Blue light:** The power is on.
   - **Orange light:** Standby ("Standard" standby mode).
   - **Red light:** Standby ("Power-saving" standby mode).

3. **Status indicator**
   - This is the indicator which notifies the internal state of the projector.
   - **Off:** There is no error or it is on standby ("Power-saving" standby mode).
   - **Flash red light:** There is an error, and indicates the error type with the flashing frequency.
   - **Flash green light:** Preparing for lighting the lamp again after failing.
   - **Green light:** Standby ("Standard" standby mode).
   - **Orange light:** The key-lock of the main unit is “On”.

4. **Lamp indicator**
   - This is the indicator which notifies the state of the projector lamp.
   - **Off:** There is no error.
   - **Flash red light:** During the grade period for replacement of the lamp.
   - **Red light:** The lamp service time is over.
   - **Green light:** ECO mode.
(5) (ECO) button
Press this button to display the ECO mode selection window.

(6) (SOURCE) button
Every time the (SOURCE) button is pressed, Computer→HDMI1→HDMI2→Video→S-video are checked in this order, and if an input signal is detected, the signal is projected.

(7) (AUTO ADJ.) button
When the PC screen is projected, it is automatically adjusted to the optimal state.

(8) (MENU) button
On-screen menus for each setting and adjustment are displayed.

(9) ▲,▼,◄,► buttons
These buttons are used for selection of an item and adjustment in the button menu (see “8B-5-8 Settings of the Projector Menu” on page 220).
When the menu is not displayed,◄ and ► buttons are used for adjustment of the volume, ▲ and ▼ buttons are used for adjustment of trapezoidal distortion in the vertical direction.

(10) (ENTER) button
When the menu is displayed, the menu of the next level is displayed by pressing this button (see “8B-5-8 Settings of the Projector Menu” on page 220). When the confirmation message is displayed, the item is determined.

(11) (EXIT) button
When the menu is displayed, the menu of the previous level is displayed by pressing this button.
When the cursor is at the main menu tab, the menu is closed.
When the confirmation message is displayed, the operation is canceled.

Remote controller

(1) Remote control transmitter
Remote control signals are transmitted by infrared rays.
Point it at the remote control receiver on the projector main unit.

(2) Power (ON) button
The power of the machine is turned on during standby (The power indicator lights in red.*).
("When the standby mode is set to "power saving")

(3) Power (OFF) button
Press once to display the power off confirmation message, and press again to power off the machine (standby state).

(4) (COMPUTER 1) button
Computer input (or component) is selected.

(5) (COMPUTER 2) button
(This button is not used on this machine.)

(6) (COMPUTER 3) button
(This button is not used on this machine.)

(7) (AUTO ADJ.) button
When the computer screen is projected, it is automatically adjusted to the optimal state.

(8) (VIDEO) button
Video input is selected.

(9) (S-VIDEO) button
S-video input is selected.

(10) (HDMI) button
HDMI1 or HDMI2 input is selected. HDMI1 input and HDMI2 input are switched every time this button is pressed.

(11) (NUM) button, number (0 - 9) input buttons, is (CLEAR) button
These buttons are used when setting the security keyword for the projector.

(12) (FREEZE) button
The displayed image is frozen. Press again to return.
(13) (AV-MUTE) button
The image and sound are temporarily turned off. Press again to return.

(14) (MENU) button
On-screen menus for each setting and adjustment are displayed (see “8B-5-8 Settings of the Projector Menu” on page 220).

(15) (EXIT) button
When the on-screen menu is displayed, the menu of the previous level is displayed by pressing this button. When the cursor is at the main menu tab, the menu is closed.
When the confirmation message is displayed, the operation is canceled.

(16) ▲, ▼, ◄, ► buttons
These buttons are used for adjusting the display position when the window is enlarged by operation of the on-screen menu or using the (D-ZOOM +/-) button.
When the optional mouse receiver is connected to the computer, they operate as the mouse of the computer.

(17) (ENTER) button
When the on-screen menu is displayed, the menu of the next level is displayed by pressing this button.
When the confirmation message is displayed, the item is determined.

(18) (D-ZOOM +/-) button
The window is zoomed in/out.

(19) (MOUSE L-CLICK) button
This is used when the optional mouse receiver is connected to the computer. This is used for operating the left button of the mouse.

(20) (MOUSE R-CLICK) button
This is used when the optional mouse receiver is connected to the computer. This is used for operating the right button of the mouse.

(21) (PAGE) button
This is used when the optional mouse receiver is connected to the computer. This is used for scrolling the screen or switching the slides of a PowerPoint presentation.

(22) (ECO) button
Press this button to display the ECO mode selection window.

(23) (KEYSTONE) button
Press this button to display the keystone correction adjustment window.

(24) (PICTURE) button
Press this button to display the picture mode selection window in the image adjustment of the on-screen menu.

(25) (VOL. +/-) button
(This button is not used on this machine.)

(26) (ASPECT) button
Press this button to display the aspect adjustment items.

(27) (HELP) button
Press this button to display the information screen.
8B-5-8 Settings of the Projector Menu

- Please note that in some rare cases, the brightness changes slightly depending on the characteristics of the lamp.
- The lamp is a consumable. If it is used for a long period, the image may become dark or the lamp may be used up and will not light up. This is a characteristic of lamps, and is not a malfunction.
- The pixel engine used on this machine is created by high-precision technology. However, some non-lighting or continuously lighting points may exist. This is not a malfunction.
- When you want to return to the default state, execute PROJECTOR TEST to return to the initial state (see “7-4-4 (5) PROJECTOR TEST” on page 59).

It is possible to make various adjustments and settings by displaying the menu on the screen from the operation section of the main unit or the operation buttons of the remote controller (see “8B-5-7 (3) Projector Unit Control Panel and Remote Controller Part Names” on page 217).

* Changing the values is limited with some of the items in the setting menu of this machine. Settings of some of the items which are not listed here are automatically changed.

■ How to set the on-screen menu

1. Press the (MENU) button.
   The on-screen menu is displayed.

2. Press ▲ and ▼ buttons to select the sub menu. To enter the selected menu, press the (ENTER) button.

3. When a horizontal adjustment bar such as “Volume (volume)” is displayed, press ◄ and ► button to make adjustments.

■ How to close the on-screen menu

1. When the cursor is at the main menu tab, press the (EXIT) button.
   • There are some cases where it is not possible to operate the menu screen by pressing the buttons. There is a possibility of malfunction in such a case. Unplug the power plug from the outlet, wait for at least 10 minutes, and connect the power plug to the outlet again.
   • It is possible to make adjustments to the on-screen menu when the input signals are input from an external source.
### Configuration of the on-screen menu

See the provided Projector User’s Manual for details of the setting values, etc.

<table>
<thead>
<tr>
<th>Main menu</th>
<th>Sub menu</th>
<th>Configurable item</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAGE</td>
<td>GENERAL (general)</td>
<td>PICTURE MODE (picture mode)</td>
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<tr>
<td></td>
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<td>WALL COLOR (wall color correction)</td>
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<td></td>
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<td>BRIGHTNESS (brightness)</td>
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<tr>
<td></td>
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<td>CONTRAST (contrast)</td>
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<td>SHARPNESS (sharpness)</td>
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<td>SATURATION (saturation)</td>
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<td>HUE (hue)</td>
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<td>ADVANCED (advanced)</td>
<td>GAMMA (gamma correction)</td>
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<td>BrilliantColor™</td>
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<td>COLOR (color)</td>
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<td>GENERAL (general)</td>
<td>ASPECT RATIO (aspect)</td>
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<td>OVERSCAN (overscan)</td>
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<td>V KEYSTONE (vertical keystone correction)</td>
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<td>3DSETTING</td>
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<td>3D INVERT (3D inversion)</td>
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<td>3D STRUCTURE (3D format)</td>
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<td>SETTING</td>
<td>GENERAL (general)</td>
<td>LANGUAGE (language)</td>
</tr>
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<td>ORIENTATION (projection method)</td>
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<td>REMOTE SENSOR (setting of the remote control receiver)</td>
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<td>HDMI SETTINGS (HDMI settings)</td>
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<td>MUTE (mute)</td>
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<td>VOLUME (volume)</td>
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<tr>
<td>SIGNAL</td>
<td>SIGNAL (signal)</td>
<td>PHASE (phase)</td>
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<td>CLOCK (clock frequency)</td>
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<td>H. POSITION (horizontal position)</td>
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<td>V. POSITION (vertical position)</td>
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<td>ADVANCED (advanced)</td>
<td>LOGO (logo)</td>
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<td>PC CONTROL MODE (PC control mode)</td>
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<td>NETWORK (network)</td>
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<td>CLOSED CAPTION (closed caption)</td>
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<tr>
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<td>SECURITY (security)</td>
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### 8B. Maintenance

**-Must be performed by a technician-**

<table>
<thead>
<tr>
<th>Main menu</th>
<th>Sub menu</th>
<th>Configurable item</th>
</tr>
</thead>
</table>
| OPTIONS (options) | GENERAL (general) | INPUT SEARCH (automatic input switching)  
INPUT (terminal)  
FAN MODE (fan mode)  
INFORMATION HIDE (On-screen display is off.)  
BACKGROUND COLOR (background color)  
RESET (reset) |
|  | LAMP/FILTERSETTINGS (lamp/filter settings) | LAMP LIFE REMAINING (remaining lamp life)*  
LAMP HOURS USED (used hours of the lamp)*  
FILTER HOURS USED (used hours of the filter)*  
ECO MODE (ECO mode)  
FILTER LIFE REMINDER (lamp message)  
FILTER USAGE HOURS (filter cleaning hours)  
CLEAR LAMP HOURS (Clears the lamp usage time.)  
CLEAR FILTER HOURS (Clears the filter usage time.) |
|  | INFORMATION (information) | MODEL NO.*  
SERIAL NUMBER*  
SOURCE (input terminal)*  
RESOLUTION (resolution)*  
SOFTWARE VERSION (software version)* |
|  | ADVANCED (advanced) | STANDBY MODE (standby mode)  
DIRECT POWER ON (direct power on)  
AUTO POWER OFF (MIN.) (auto power off (minute))  
OFF TIMER (MIN.) (off timer (minute))  
CONTROL PANEL LOCK (key lock of the main unit) |

*: Display only (unchangeable) items
9. Disposal

**WARNING**

- When disposing of the machine, follow the applicable regulations for collection, transportation and disposal.
- When outsourcing the collection, transportation and disposal of the machine, be sure to delegate to specialists in each field.
- The projector lamp used in this machine contains inorganic mercury, which is hazardous to the human body and the environment. When disposing of the used lamp, follow the applicable regulations for collection, transportation and disposal.

* The software used in this machine is protected by copyright laws. It is prohibited to copy, adapt, distribute publicly, or use the software for purposes other than the operation of this machine. Infringement of the copyright laws may be subject to criminal penalties. In addition, do not use the recording media containing the software in a machine other than the specified machine. Doing so may result in equipment malfunction.
# 10. Parts List

## 10-1 Overall

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Qty</th>
<th>Type and rating</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operation Manual (English)</td>
<td>1</td>
<td>This manual</td>
<td>736-961</td>
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<td>2</td>
<td>POP (B)(EXP)</td>
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<td>736-963</td>
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<td>3</td>
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<td>POP (D)(EXP)</td>
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<td>LAN cable</td>
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<td>20 m</td>
<td>011-091</td>
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<tr>
<td>6a</td>
<td>Power cord</td>
<td>1</td>
<td>UL (US specifications)</td>
<td>011-164</td>
</tr>
<tr>
<td>6b</td>
<td>Power cord</td>
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<td>BSI (EU specifications)</td>
<td>011-165</td>
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<td>7</td>
<td>Projector lamp</td>
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<td>NP24LP(V1)</td>
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10-2 Front Assembly

<table>
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<tr>
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<td>Oval dome (BNAA)</td>
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<td>(US specifications)</td>
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<td>1b</td>
<td>Oval dome</td>
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<td>(EU specifications)</td>
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<td>2</td>
<td>Dome base (L)</td>
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<td>736-406</td>
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<td>Dome base (R)</td>
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<td>736-407</td>
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<td>Dome bracket</td>
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<td>5</td>
<td>Adjusting bolt bracket</td>
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<td>731-158</td>
</tr>
<tr>
<td>6</td>
<td>Adjusting bolt</td>
<td>2</td>
<td>M16LEG ADJUSTER L50</td>
<td>102-280</td>
</tr>
<tr>
<td>7</td>
<td>Caster (swivel type)</td>
<td>4</td>
<td>LG-50N</td>
<td>102-279</td>
</tr>
<tr>
<td>8</td>
<td>Eptsealer (Attached to No. 1 oval dome)</td>
<td>3</td>
<td>EE-1010 W10 x t3 x L2750</td>
<td>106-241</td>
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</table>
10-3 Seat Assembly

Diagram showing the parts and components of the seat assembly, labeled from 1 to 65, with annotations for cables and NA-JV(S) PC board.
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Qty.</th>
<th>Type and rating</th>
<th>Part No.</th>
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<td>Seat base (R)</td>
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<td>5662-RJ45COUPLER-0</td>
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10-4 Coin Box Assembly (US Specifications)
<table>
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<th>Qty.</th>
<th>Type and rating</th>
<th>Part No.</th>
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<td>736-973</td>
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## 10-7 Service panel Assembly

![Service panel Assembly Diagram]

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## 10-8 Control Panel Assembly

![Diagram of Control Panel Assembly]

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## 10-9 Camera Assembly

![Diagram of Camera Assembly](image)

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10-10 Side Tower (L) Assembly
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10-13 Projector Assembly

Projector unit

Gun camera PC board

On opposite side
Same on opposite side

A-A

Z
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## 10-14 Cord Box Assembly

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11. Wiring Diagram
11. Wiring Diagram

EU Specifications, AC 230V (2/6)
11. Wiring Diagram

EU Specifications, AC 230V (3/6)
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   Computer Information. The following features use Internet protocols, which send to the appropriate systems computer information, such as your Internet protocol address, the type of operating system and browser, the name and version of the software you are using, and the language code of the device where you installed the software. Microsoft uses this information to make the Internet-based services available to you. BNGI has elected to turn on the following features on the device.
   • Plug and Play and Plug and Play Extensions. You may connect new hardware to your device. Your device may not have the drivers needed to communicate with that hardware. If so, the update feature of the software can obtain
the correct driver from Microsoft and install it on your device.

- **Web Content Features.** Features in the software can retrieve related content from Microsoft and provide it to you. Examples of these features are clip art, templates, online training, online assistance and Appshelp. You may choose to switch them off or not use them.

- **Digital Certificates.** The software uses x.509 version 3 digital certificates. These digital certificates confirm the identity of user sending information to each other and allow you to encrypt the information. The software retrieves certificates and updates certificate revocation lists over the Internet.

- **Auto Root Update.** The Auto Root Update feature updates the list of trusted certificate authorities. You can switch off this feature.

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- **Windows Media Player.** When you use Windows Media Player, it checks with Microsoft for:
  - compatible online music services in your region;
  - new versions of the player; and
  - codecs if your device does not have the correct ones for playing content.

You can switch off this feature. For more information, go to: go.microsoft.com/fwlink/?LinkId=51331.

- **Malicious Software Removal/Clean On Upgrade.** Before installation of the software, the software will check and remove certain malicious software listed at www.support.microsoft.com/?kbid=890830 ("Malware") from your device. When the software checks your device for Malware, a report will be sent to Microsoft about any Malware detected or errors that occurred while the software was checking for Malware. No information that can be used to identify you is included in the report. You may disable the software’s Malware reporting functionality by following the instructions found at www.support.microsoft.com/?kbid=890830.

- **Network Awareness.** This feature determines whether a system is connected to a network by either passive monitoring of network traffic or active DNS or HTTP queries. The query only transfers standard TCP/IP or DNS information for routing purposes. You can switch off the active query feature through a registry setting.

- **Windows Time Service.** This service synchronizes with www.time.windows.com once a week to provide your device with the correct time. The connection uses standard NTP protocol.

- **Search Suggestions Service.** In Internet Explorer, when you type a search query in the Instant Search box or type a question mark (?) before your search term in the Address bar, you will see search suggestions as you type (if supported by your search provider). Everything you type in the Instant Search box or in the Address bar when preceded by a question mark (?) is sent to your search provider as you type. Also, when you press Enter or click the Search button, the text in the Instant Search box or Address bar is sent to the search provider. If you use a Microsoft search provider, use of the information sent is subject to the Microsoft Online Privacy Statement. This statement is available at go.microsoft.com/fwlink/?linkid=31493. If you use a third-party search provider, use of the information sent will be subject to the third party’s privacy practices. You can turn search suggestions off at any time. To do so, use Manage Add-ons under the Tools button in Internet Explorer. For more information about the search suggestions service, see go.microsoft.com/fwlink/?linkid=128106.

- **Consent to Update Infrared Emitter/Receiver.** The software may contain technology to ensure the proper functioning of the infrared emitter/receiver device shipped with certain Media Center-based products. You agree that the software may update the firmware of this device.

- **Media Center Online Promotions.** If you use Media Center features of the software to access Internet-based content or other Internet-based services, such services may obtain the following information from the software to enable you to receive, accept and use certain promotional offers:
  - certain device information, such as your Internet protocol address, the type of operating system and browser you are using, and the name and version of the software you are using,
  - the requested content, and
  - the language code of the device where you installed the software.
Your use of the Media Center features to connect to those services serves as your consent to the collection and use of such information.

- **Media Playback Updates.** The software on the device may include media playback features which receives updates directly from the MSCORP Media Playback Update servers. If activated by your manufacturer, these updates will be downloaded and installed without further notice to you. The manufacturer is responsible for ensuring these updates work on your device.

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