

## TABLE OF CONTENTS

INTRODUCTION ..... iii
1 HANDLING PRECAUTIONS ..... 1
2 PRECUATIONS REGARDING INSTALLATION ..... 6
3 PRECAUTIONS REGARDING OPERATION ..... 9
4 PARTS DESCRIPTION ..... 13
5 ACCESSORIES ..... 15
6 ASSEMBLY AND INSTALLATION ..... 17
7 PRECAUTIONS WHEN MOVING ..... 56
8 GAME DESCRIPTION ..... 58
9 TEST AND SERVICE DATA ..... 65
10 MONITOR ..... 85
11 CONTROLLER UNIT ..... 87
12 COIN HANDLING ..... 101
13 PERIODIC INSPECTION ..... 107
14 TROUBLESHOOTING ..... 109
15 GAME BOARD ..... 111
16 DESIGN RELATED PARTS ..... 114
17 PARTS LIST ..... 115
18 COLOUR CODE ..... 158
19 SCHEMATIC DIAGRAMS ..... 159

## BEFORE USING THE PRODUCT, be sure to read the followng:

## To maintain safety:

To ensure the safe operation of this product, be sure to read the following before usage: The following instructions are intended for the users, operators and the personnel in charge of the operation of the product. After carefully reading and sufficiently understanding the warning displays and cautions, handle the product appropriately. Be sure to keep this manual close to the product or in a convenient place for future reference.
Herein, explanations which require special attention are enclosed with dual lines. Depending on the potentially hazardous degrees, the terms of DANGER, WARNING, CAUTION, etc. are used. Be sure to understand the contents of the displays before reading the text.

Indicates that mishandling the product by disregarding this pictograph will cause severe injury or death.

Indicates that mishandling the product by disregarding this warning will cause a potentially hazardous situation which can result in death or serious injury.

Indicates that mishandling the product by disregarding this caution will cause a slight hazardous situation which can result in personal injury and/or material damage.

For the safe usage of the product, the following pictographs are used:


Indicates "HANDLE WITH CARE." In order to protect the human body and equipment, this display is attached to places where the instruction manual should be referred to.


Indicates a "protective earth terminal." Before operating the equipment, be sure to connect it to the ground (this step may be omitted for products in which a power cable with earth is used).

## - Perform work in accordance with the instructions herein stated.

Instructions for work are explained by paying attention to the aspect of accident prevention. Failing to perform work as per the instructions can cause accidents. In the case where only those who have technical expertise should perform the work to avoid hazardous situation, the instructions herein state that the site maintenance personnel should perform such work.

- Be sure to turn off the power before working on the machine.

To prevent an electric shock, be sure to turn off the power and unplug the power cable before carrying out any work that requires direct contact with the interior of the product. If the work is to be performed in the power-on status, the instruction manual herein always states to that effect.

- Be sure to ground the earth terminal (this is not required in the case where a power cable with earth is used).
This product is equipped with the earth terminal. When installing the product, connect the earth terminal to the "accurately grounded indoor earth terminal" by using an earth wire. Unless the product is grounded appropriately, the user can be subject to an electric shock. After performing repair, etc. for the control equipment, ensure that the earth wire is firmly connected to the control equipment.
- Ensure that the power supply used is equipped with an earth leakage breaker. Using a power supply which is not equipped with the earth leakage breaker can cause a fire when earth leakage occurs.
- Be sure to use fuses which meet the specified rating (only for the machines which use fuses).
Using fuses exceeding the specified rating can cause a fire and an electric shock.
- Specification changes (removal of equipment, conversions and additions) not designated by SEGA are not allowed.
The parts of the product include warning labels for safety, covers for personal protection, etc. It is very hazardous to operate the product by removing parts and/or modifying the circuits. Should doors, lids and protective parts be damaged or lost, refrain from operating the product, and contact where the product was purchased from or the office herein stated.
SEGA shall not be held responsible for any accidents or compensation for damage to a third party resulting from the specifications not designated by SEGA.
- Ensure that the product meets the requirements of appropriate electrical specifications.
Before installing the product, check for electrical specifications. SEGA products have a nameplate on which the electrical specifications are described. Ensure that the product is compatible with the power supply voltage and frequency requirements of the location. Using any electrical specifications different from the designated specifications can cause a fire and an electric shock.
- Install and operate the product in places where appropriate lighting is available, allowing warning labels to be clearly read.
To ensure safety for the customers, labels and printed instructions describing potentially hazardous situations are applied to places where accidents can be caused. Ensure that where the product is operated has sufficient lighting allowing the warnings to be read. If any label is peeled off, apply it again immediately. Please place an order with where the product was purchased from or the office herein stated.
- When handling the monitor, be very careful (applies only to products with monitors).
Some of the monitor parts are subject to high tension voltage. Even after turning off the power, some portions are still subject to high tension voltage. Monitor repair and replacement should be performed only by those technical personnel who have knowledge of electricity and technical expertise.
- Be sure to adjust the monitor properly (applies only to products with monitors). Do not operate the product leaving on-screen flickering or blurring as it is. Using the product with the monitor not properly adjusted may cause dizziness or a headache to an operator, a player, or customer.
- When transporting or reselling this product, be sure to attach this manual to the product.
* In the case where commercially available monitors and printers are used in this product, only the contents relating to this product are explained herein. Some commercially available equipment has functions and reactions not stated in this manual. Read this manual together with the specific instruction manual of such equipment.
* Descriptions herein contained may be subject to improvement changes without notice.
* The contents described herein are fully prepared with due care. However, should any question arise or errors be found, please contact SEGA.


## INSPECTIONS IMMEDIATELY AFTER TRANSPORTING THE PRODUCT TO THE LOCATION

Normally, at the time of shipment, SEGA products are in a status allowing for usage immediately after transporting to the location. Nevertheless, an irregular situation may occur during transportation. Before turning on the power, check the following points to ensure that the product has been transported in a satisfactory status:
$\square$ Are there any dented portions or defects (cuts, etc.) on the external surfaces of the cabinet?Are casters and adjusters damaged?Do the power supply voltage and frequency requirements meet with those of the location?
$\square$ Are all wiring connectors correctly and securely connected? Unless connected in the correct way, connector connections can not be made accurately. Do not insert connectors forcibly.Do power cables have cuts and dents?Are all accessories available?Can all doors and lids be opened with the accessory keys? Can doors and lids be firmly closed?

## INTRODUCTION

This manual is intended to provide detailed descriptions together with all necessary information covering the general operation of electronic assemblies, electromechanical, servicing control, spare parts, etc. for the product:
"HOUSE OF THE DEAD SCARLET DAWN"
This manual is intended for the owners, personnel managers in charge of operation of this product. Operate the product after carefully reading and sufficiently understanding the instructions.

In the unlikely event that the product does not function correctly, DO NOT allow anyone other than a technician to touch the internal system. Turn off the power to the machine, making sure to unplug the electrical cord from the outlet, and contact the office listed below or the point-of-purchase for this product.

Use of this product is unlikely to cause physical injuries or damage to property. However, points that require special attention are indicated by bold text, the words "STOP, IMPORTANT or CAUTION" and the symbols below.

Indicates important information that, if ignored, may result in the mishandling of the product and cause faulty operation or damage to the product.

## $\triangle$ WARNING $\triangle$ CAUTION

Indicates a warning or caution that, if ignored, may result in the mishandling of the product and cause faulty operation or damage to the product.

## Sega Amusements Europe Limited.

42 Barwell Business Park, Leatherhead Road, Chessington, Surrey, KT9 2NY. United Kingdom.

| European Sales: | $+44(0) 2083918090$ | Facsimile: | $+44(0) 2083918099$ |
| :--- | :--- | :--- | :--- |
| USA Sales: | $+00(1) 2242654287$ |  |  |
| STS (Spares): | $+44(0) 2083918060$ | Facsimile: | $+44(0) 2083918096$ |
| email: | mailbox@sega.co.uk | Web: | http://www.segaarcade.com |

## SPECIFICATIONS

Standard Cabinet Machine Dimensions:
Machine Height:
Machine Weight:
Power, maximum current:
Rating:
$1.44 \mathrm{~m}(56.6 \mathrm{in})$ [Width] x 2.12 m (83.4in) [Depth]
2.29 m (90.1in) (Installed)

510kg Approx (Installed)
-466w-
6.3A@115vac


Procedures not described in this manual or marked as 'to be carried out by site maintenance personnel or other qualified professionals' should not be carried out by personnel without the necessary skill or technological experience. Work carried out by unqualified persons may cause serious accidents, including electrocution.

Parts replacement, maintenance inspections and troubleshooting should be carried out by site maintenance personnel or other qualified professionals. This manual includes directions for potentially dangerous procedures which should only be carried out by professionals with the appropriate specialised knowledge.

The site maintenance personnel or other qualified professionals mentioned in this manual are defined as follows:

Site maintenance personnel:
Individuals with experience in maintaining amusement equipment, vending machines, etc., working under the supervision of the owner/operator of this product to maintain machines within amusement facilities or similar premises by carrying out everyday procedures such as assembly, maintenance inspections, and replacement of units/expendable parts.

Activities to be carried out by site maintenance personnel:
Amusement equipment/vending machine assembly, maintenance inspection and replacement of units/expendable parts.

Other qualified professionals:
Persons employed by amusement equipment manufacturers, or involved in design, production, testing or maintenance of amusement equipment. The individual should have either graduated from technical school or hold similar qualifications in electrical/electronics/mechanical engineering.

Activities to be carried out by other qualified professionals:
Amusement equipment/vending machine assembly, repair/adjustment of electrical/electronic/mechanical parts.

## Waste of Electrical and Electronic Equipment (WEEE) Statement.

The WEEE (Waste of Electrical and Electronic Equipment) directive places an obligation on all EU based manufacturers and importers of Electrical and Electronic Equipment (EEE) to ensure waste equipment is disposed of in accordance with the directive at the end of their useful life.

The symbol shown below will be placed on all products manufactured from 13th August 2005, which indicates this product must NOT be disposed of with other normal waste. Upon purchasing any EEE from SEGA Amusements International Ltd. The user accepts responsibility to dispose of their waste equipment by arranging to return it to a designated UK collection point (AATF) or an Approved Exporter (AE) for the correct recycling of waste electrical and electronic equipment.

For more information on Approved Authorised Treatment Facilities (AATF) within the UK please consult the government website www.gov.uk

For users outside of the UK EEE should be disposed of in accordance with the local policy on the recycling of Waste Electrical and Electronic Equipment.

## Battery Recycling Statement.

The EC Directive on Batteries and Accumulators (2006/66/EC) aims to minimise the impact of batteries on the environment and encourage the recovery of the materials they contain. To achieve increased collection and recycling of waste batteries, the Directive places 'producer responsibility' obligations on manufacturers and importers of portable, industrial and automotive batteries.

The symbol shown below will be on all equipment fitted with batteries from 26th September 2008 and indicates they must NOT be disposed of with other normal waste. Instead, it is the user's responsibility to dispose of used batteries by arranging to return them to a designated collection point for the correct recycling.

For more information about where you can send your waste batteries for recycling contact your local authority office.


## 1 HANDLING PRECAUTIONS

When installing or inspecting the machine, be mindful of the following points and pay attention to ensure that the player can enjoy the game safely.
Noncompliance with the following points or inappropriate handling running counter to the cautionary matters herein stated can cause personal injury or damage to the machine.

## WARNING

- Before performing work, be sure to turn the power off. Performing the work without turning the power off can cause an electric shock or short circuit. In cases where work should be performed in the status of power on, this manual always states to that effect.
- To avoid an electric shock or short circuit, do not plug in or unplug quickly.
- To avoid an electric shock, do not plug in or unplug with a wet hand.
- Do not expose power cords or earth wires on the surface, (floor, passage, etc). If exposed, the power cords and earth wires are susceptible to damage. Damaged cords and wires can cause an electric shock or short circuit.
- To avoid causing a fire or an electric shock, do not put things on or damage the power cords.
- During or after installing the product, do not unnecessarily pull the power cord. If damaged, the power cord can cause a fire or an electric shock.
- In the case that the power cord is damaged, ask for a replacement through where the product was purchased from or the office herein stated. Using the cord as is damaged can cause fire, an electric shock or leakage.
- Be sure to perform grounding appropriately. Inappropriate grounding can cause an electric shock.
- Be sure to use fuses meeting the specified rating. Using fuses exceeding the specified rating can cause a fire or an electric shock.
- Be sure that connections such as IC BD are made properly. Insufficient insertion can cause an electric shock.
- Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted.
- Failure to observe this may cause a fire or an electric shock. Noncompliance with this instruction can have a bad influence upon the physical conditions of players or onlookers, or result in injury during play.
- SEGA shall not be held responsible for damage or compensation for damage to a third party caused by specification changes not designated by SEGA.
- Do not perform any work or change parts not listed in this manual. Doing so may lead to an accident.
- If you need to perform any work not listed in this manual, request work from the office indicated in this manual or the point of purchase, or inquires for details. Be sure to perform periodic maintenance inspections herein stated.
- Do not touch undesignated places. Touching places not designated can cause electric shock or short circuit.
- Whenever any fasteners (e.g. screws, nuts) have been lost, be sure to use replacement fasteners with proper dimensions as specified in this manual. If fasteners of any other dimensions are used, it could cause damage and/or separation of parts that result in secondary accidents.
- Specification changes, removal of equipment, conversion and/or addition, not designated by SEGA are not permitted.
- Failure to observe this may cause a fire or an electric shock. Noncompliance with this instruction can have a bad influence upon the physical conditions of players and onlookers, or result in injury during play.
- SEGA shall not be held responsible for damage or compensation for damage to a third party caused by specification changes not designated by SEGA.
- Performing work or parts replacements not described in this manual could result in accidents. If you need to perform any work not listed in this manual, request work from the office indicated in this manual or the point-of-purchase, or inquires for details.
- Be sure to perform periodic maintenance inspections herein stated.


## stop IMPORTANT

- For the IC board circuit inspections, only the use of a logic tester is recommended. Using a Multi-Tester or General Purpose Tester may result in damage to IC Circuits.
- Static electricity from your body may damage some electronic devices on the IC board. Before handling the IC board, touch a grounded metallic surface so that the static electricity can be discharged.
- Some parts are not designed or manufactured specifically for this game machine. The manufacturers may discontinue or change the specifications of such general-purpose parts. If this is the case, SEGA cannot repair or replace a failed game machine whether or not a warranty period has expired.


## CONCERNING THE STICKER DISPLAY

This SEGA product has stickers attached describing the product manufacture No. (Serial No.) and Electrical Specifications. It also has a Sticker describing where to contact for repair and for purchasing parts.
When inquiring about or asking for repairs, mention the Serial No. and Name of Machine indicated on the Sticker. The Serial Number indicates the product register. Identical machines could have different parts depending on the date of production. Also, improvements and modifications might have been made after the publication of this manual. In order to ensure you order the correct parts, mention the Serial No. when contacting the applicable places.

## CONCERNING WARNING DISPLAYS

This SEGA product has warning displays on stickers, labels and/or printed instructions adhered/attached to or incorporated in the places where a potentially hazardous situation could arise. The warning displays are intended for accident prevention for customers and for avoiding hazardous situations relating to maintenance and servicing work. Some portions of the cabinet contain high voltage and may cause accidents if touched. When performing maintenance, be very careful of the warning displays. It is especially important that any complex repair and replacement work not mentioned herein should be performed by those technical personnel who have knowledge of electricity and has technical expertise.
In order to prevent accidents, caution any customer ignoring the warnings to cease and desist immediately.



- HANDLING PRECAUTIONS


## 2 PRECAUTIONS REGARDING INSTALLATION

## WARNING

- This product is an indoor game machine. Do not install it outside. Even indoors, avoid installing in places mentioned below so as not to cause fire, electric shock, injury and/or malfunction:
- Places subject to rain/water leakage or places subject to high humidity, in the proximity of an indoor swimming pool and/or shower, etc
- Places subject to direct sunlight or places subject to high temperatures, in the proximity of heating units, etc
- Places filled with inflammable gas or vicinity of highly inflammable/volatile chemicals or hazardous matter
- Dusty places
- Sloped surfaces
- Places subject to any type of violent impact
- Vicinity of anti-disaster facilities such as fire exits and fire extinguishers
- Areas where the temperature exceeds the applicable temperature (ambient temperature) range of 5 to 30 degrees centigrade


## LIMITATIONS OF USAGE

## WARNING

- Be sure to check the Electrical Specifications. Ensure that this product is compatible with the location's power supply, voltage, and frequency requirements. A plate describing Electrical Specifications is attached to the product. Noncompliance with the Electrical Specifications can cause a fire and electric shock.
- This product requires a breaker and earth mechanism as part of the location facilities. Using the product without these can cause a fire and electric shock.
- Ensure that the indoor wiring for the power supply is rated at 15 A or higher (AC single phase $100 \mathrm{~V} \sim 120 \mathrm{~V}$ area), and 7 A or higher (AC $220 \mathrm{~V} \sim 240 \mathrm{~V}$ area). Noncompliance with the Electrical Specifications can cause a fire and electric shock.
- Be sure to use an independent power supply equipped with an earth leakage breaker. Using a power supply without an earth leakage breaker can cause an outbreak of fire if a power surge occurs.
- Putting many loads on one electrical outlet can cause generation of heat and a fire resulting from overload.
- When using an extension cord, ensure that the cord is rated at 15 A or higher (AC $100 \mathrm{~V} \sim 120 \mathrm{~V}$ area) and 7 A or higher (AC $220 \mathrm{~V} \sim 240 \mathrm{~V}$ area). Using a cord rated lower than the specified rating can cause a fire and electric shock.


## stop IMPORTANT

Securing a safe area for operation as described in this manual will ensure safe operation for players and observers.

SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.

- For safe operation, use and operate this product in an area measuring at least 2.84 m (112.2 in) in width and 2.82 m ( 111 in ) in depth when the cabinet is installed. SEGA shall not be held responsible for damage or compensation for damage to a third party, resulting from the failure to observe this instruction.
- The ceiling where this product is installed must be at least 2.3 m ( 90.5 in ) high. If the ceiling is too low, the heat emitted from the product may cause it to catch on fire.
- Be sure to provide the sufficient space specified in this manual. Do not allow objects to block the ventilation ports. This can cause generation of heat and a fire.
- Put the cabinets close together so that people cannot get through or provide enough space between them that people can go both ways without difficulty. If the cabinets are installed carelessly, people may bump into each other or the cabinets when passing between them or fall down. To prevent people from walking between them, place them 0.15 m ( 5.9 in ) apart.
- If the machine does not fit through the entryway to the installation location, do not disassemble it without first consulting the instructions. Specific tools and adjustment procedures are required to assemble and disassemble the mechanical parts. Attempting to assemble or disassemble the machine without consulting the instructions may result in accidents during assembly/ disassembly, electric shock, short circuits, and/or personal injury during operation. If the machine still does not fit through the entryway after following the procedures in this manual, contact your retailer or the office listed in this manual.
- If the machine is still too large to fit through the entryway after following the procedures listed in this manual, do not tip the machine on its side. Attempting to transport the machine while it is tipped on its side may cause accidents. It may also damage or warp parts of the machine, resulting in accidents during operation.


## $\triangle$ WARNING

- To install this product, the entrance must be at least 0.75 m ( 29.5 in ) in width and 1.9 m ( 74.8 in ) in height (without Assy Billboard) and 2.3 m (90.5 in) (with Assy Billboard). If the entrance is too narrow, do not tilt the product carelessly. If all the product weight is put on the casters at one side only, there could be damage or deformation, causing serious accidents such as workers getting caught underneath.



## 3 PRECAUTIONS REGARDING OPERATION

To avoid injury and trouble, be sure to pay attention to the behaviour of visitors and players

## 3-1 BEFORE OPERATION

## WARNING

- In order to avoid accidents, check the following before starting the operation:
- To ensure maximum safety for the players and the customers, ensure that where the product is operated has sufficient lighting to allow any warnings to be read. Operation under insufficient lighting can cause bodily contact with each other, hitting accident, and/or trouble between customers.
- Be sure to perform appropriate adjustment of the display (LCD, Plasma, CRT or Projector). For operation of this machine, do not leave monitor's flickering or deviation as is. Failure to observe this can have a bad influence upon the players' or customers' physical conditions.
- It is suggested to ensure a space allowing the players who feel sick while playing the game to take a rest.
- Check if all of the adjusters are in contact with the surface. If they are not, the Cabinet can move and cause an accident.
- Do not put any heavy item on this product. Placing any heavy item on the product can cause a falling down accident or parts damage.
- Do not climb on the product. Climbing on the product can cause falling down accidents. To check the top portion of the product, use a step/stepladder.
- To avoid electric shock, check to see if door and cover parts are damaged or omitted.
- Do not place the following items on top of or near the product or hang them from the ceiling. Doing so could result in electric shock, short circuits and/or damage to the parts:
- Flower vases, flowerpots, cups, water tanks, cosmetics, and receptacles/ containers/vessels containing chemicals and water.


Each leg adjuster MUST be lowered so that the casters are raised approximately 5 mm off the floor

## CAUTION

- To avoid injury, be sure to provide sufficient space by considering the potentially crowded situation at the installation location. Insufficient installation space can cause contact, collisions, and/or trouble between customers.
- During daily cleaning, be sure to check the surface of the control unit and other parts that the player touches with his/her hands for damage, cracks, or loose screws. If a player uses the machine while it is damaged, cracked, or has a loose screw, the player may become injured.

- Check carefully to make sure there are no gaps in the cabinet joints and that they are not loose. If there are gaps or looseness, players may get their hands or fingers caught, resulting in an injury.
- Make sure all the doors are locked securely and they do not rattle. If the doors are not locked properly or there are gaps or rattling, players could get their fingers or hands caught.
- Be sure to perform appropriate adjustment of the LCD. For operation of this machine, do not leave monitor's flickering or deviation as is. Failure to observe this can have a bad influence upon the players' or customers' physical conditions.
- Inspect for the following items during a trial run. If there is any type of error, use the Test Mode, etc. to resolve the problem. If you continue use with an error, it can cause an accident or irreparable parts damage:
- Is there any strangeness in the operability of the control unit?
- Is there any improper adjustment of the LCD screen?
- Prepare a place where players can rest if they feel sick.


## 3-2 PAYING ATTENTION TO CUSTOMERS

To avoid injury and trouble, be sure to constantly give careful attention to the behaviour and manner of the visitors and players.

DURING OPERATION (PAYING ATTENTION TO CUSTOMERS)

## WARNING

- For safety reasons, do not allow any of the following people to play the game:
- Those who have high blood pressure or a heart problem.
- Those who have experienced muscle convulsion or loss of consciousness when playing video games, etc.
- Those who have neck or spinal cord problems.
- Those who are intoxicated or under the influence of drugs.
- Pregnant women.
- Those who are not in good health.
- Those who do not follow the attendant's instructions.
- Those who cannot grasp the Control Unit securely because of immobility in fingers, hands or arms.
- Persons who disregard the product's warning displays.
- Even players who have never been adversely affected by light stimulus might experience dizziness or headache depending on their physical condition when playing the game.

Small children are especially likely to experience these symptoms. Caution guardians of small children to keep watch over them during play.

- Instruct those who feel sick during play to have a medical examination.
- To avoid injury from falls and electric shocks due to spilled drinks, instruct the player not to place heavy items or drinks on the product.
- To avoid electric shocks and short circuits, do not allow customers to put hands, fingers or extraneous matter in the openings of the product or small openings in and around the doors.
- To avoid falls and resulting injury, immediately stop the customer from leaning against or climbing on the product, etc.
- To avoid electric shock and short circuit, do not allow customers to unplug the power plug without a justifiable reason.
- Instruct the guardians of small children to keep watch over their children.

Children cannot sense danger. Allowing small children to get near a player who is playing the game could result in the children being bumped, struck or knocked down.

## STOP <br> IMPORTANT

- Players directly hold the control unit with their bare hands, so it is recommended that wet towels (paper towels) be provided.
- Diligently clean the parts that players touch directly to ensure a pleasant game playing experience.
- Inspect the coin insertion slots to make sure no foreign objects have been inserted and that they have not otherwise been tampered with as this will prevent play.


## CAUTION

- Immediately stop such violent acts as hitting and kicking the product. Such violent acts can cause parts damage or falling down, resulting in injury due to fragments and falling down.
- Persons other than the player should not be allowed to touch the controls during play. They may brush against or collide with the controls or the player, possibly resulting in accidents.
- Instruct those who feel sick during play to have a medical examination.
- Immediately stop users from leaning or sitting on the control panel. Such acts can lead to injury or damage to parts or the shape of the cabinet.
- Immediately stop users from swinging or reloading the control unit in a violent manner. Such acts may hurt the user or other people around them.
- Playing too close to the cabinet may cause the control unit to hit the cabinet and cause damage. Make sure that players understand to play at a safe distance from the cabinet.
- Make sure that players understand not to stand too close together when playing a 2 player game. Swinging the control unit could lead to a player getting hit and may cause injury.
- Instruct players to hold the control unit securely while playing. If the control unit is dropped, it could cause injury to the player.
- Items such as large finger rings can cause injury to the fingers while playing. Instruct players to remove all accessories that could cause an accident before playing.
- Instruct players that a single control unit is never to be held by 2 or more people during play. Otherwise there could be dangerous contact or a collision.

The control units for use on 1P side (left side) and 2P side (right side) are different. Ensure that players do not confuse the right and left side control units when starting play.

## 4 PART DESCRIPTIONS



|  | 1 | MONITOR CAB |
| :---: | :---: | :---: |
|  | 2 | BILLBOARD |
|  | 3 | ROOF BOX |
|  | 4 | AIR BOX |
|  | 5 | CURTAIN |
| 4 | 6 | REAR MOULDING |
| \% | 7 | REAR CABINET |
|  | 8 | REAR SPEAKER |
| \% | 9 | BACKREST |
| $\bigcirc$ | 10 | SEAT |
| O | 11 | FLOOR |
| $\stackrel{-1}{0}$ | 12 | STEP |
| $\mathbf{Z}$ | 13 | AC UNIT |
|  | 14 | MONITOR |
|  | 15 | CONTROL PANEL |
|  | 16 | CONTROL UNIT |
|  | 17 | SW UNIT |
|  | 18 | CONTROL CAB |
|  | 19 | MONITOR SPEAKER |

## 5 ACCESSORIES

Confirm that the accessories listed in the table below are present when setting up the product．
Accessories marked＂Spare＂are consumable items but included as spares．
$\left.\begin{array}{|c|c|c|}\hline \text { Part name／number } & \text { Qwner＇s Manual } \\ \text {（Part \＃：420－0032－01UK）}\end{array}\right)$ Quantity

| Part name / number | Quantity |
| :---: | :---: | :---: | :---: |
| DVD Software Kit <br> 610-0945-0005 |  |
| Software Install Cable |  |

## A WARNING

- Perform assembly work by following the procedure herein stated. Failure to comply with the instructions can cause electric shock.
- Perform assembling as per this manual. Since this is a complex machine, incorrect assembling can cause an electric shock, machine damage and/or improper functioning as per specified performance.
- When assembling, more than one person is required. Depending on the assembly work, there are some cases in which working by one person alone can cause personal injury or parts damage.
- Ensure that connectors are properly connected. Improper connections can cause electric shock.
- Be careful not to damage the wires. Damaged wires may cause electric shock or short circuit or present a risk of fire.
- This work should be carried out by site maintenance personnel or other qualified professionals. Work performed by non-technical personnel can cause a severe accident such as electric shock. Failing to comply with this instruction can cause a severe accident such as electric shock to the player during operation. If no one with proper technological expertise is available, request service from the office indicated in this document or the point of purchase so as to ensure safety.
- Provide sufficient space so that assembling can be performed. Performing work in places with narrow space or low ceiling may cause an accident and assembly work to be difficult.
- To perform work safely and avoid serious accident such as the cabinet falling down, do not perform work in places where step-like grade differences, a ditch, or slope exist.
- Do not leave power cords or Ground Wires exposed in areas of heavy foot traffic. Doing so may cause them to become damaged, possibly resulting in electric shock and/or short circuits. When laying wiring across the floor, always use safety covers to protect the wires. (Wiring diameter: power cable - approx. $\varphi$ 8)
- Have a flashlight or another supplementary lighting unit available while working. With indoor lighting alone, the cabinet interior may be too dark. Working without proper lighting can lead to accidents. It also hinders proper work performance.
- The cabinet has ventilation ports. Be sure not to block them. If they are blocked, heat can build up, leading to fire. This can also accelerate wearing of parts and malfunctions.
- Secure ample ventilation space around the cabinet. If heat builds up, there could be accidents associated with heat or smoke generation.
- Do not unnecessarily push the projector. This could cause the unit to tip over.
- This product does not use any connectors other than those connected to and used by the game board when it leaves the factory. Do not needlessly connect wires to unused connectors. This could lead to overheating, generation of smoke and burn related injuries.


## A CAUTION

- Handle molded parts with care. Excessive weight or pressure may cause them to break and the broken pieces may cause injury.
- To perform the operation safely and accurately you must use a safe, steady footstool or stepladder. Working without this may lead to a fall and possible injury.
- When connecting the connectors on the DVD wire, you must carefully check the tags on the wire to find the correct connector. Even when you have the correct connector, you must pay careful attention to the direction and angle of insertion. Attempting to forcefully connect the incorrect connector or connecting a connector at the wrong angle or facing may damage the connector and could lead to overheating and burn related injuries.
- When attaching or removing doors or lids, be careful that your hand or finger does not get caught in anything.


## stop IMPORTANT

- Be very careful when handling the LED display screen. The screen can be damaged easily and cannot be repaired once damaged. Such damage can only be repaired by completely replacing the screen.
- Be careful not to damage parts surfaces. In some cases, if such surfaces are damaged, the part must be replaced; it cannot be reinforced or repaired.


## 6-1 CONTROL CAB INSTALLATION

Carry out this operation with 2 or more people.
1
Ensure the four adjusters on the bottom of the Monitor Cabinet are touching the floor.


Have 2 people hold the handles of the Control Cabinet and place it on the guide of the Monitor Cabinet.


3 Fix the Control Cabinet with 4 hex bolts.


4
Remove the 2 screws and remove the Side Lid.


5 Connect five connectors.


6
Attach the Side Lid with 2 screws.


7
Remove the 2 screws and remove the Back Lid.


## A CAUTION

After installing the cabinet, please remove the support bracket.
When dividing and moving the cabinet, attach the support bracket. Failure to do so may cause the case the cabinet to fall or topple over causing injury.

Q Remove 2 hex bolts and remove Support Bracket.


9
Attach the Support Bracket inside the Cabinet with 2 hex bolts.


10
Attach the Back Lid with 2 screws.


## 6-2 STEP INSTALLATION

Carry out this operation with 2 or more people.
1 Ensure the four adjusters on the bottom of the Seat Cabinet are touching the floor.


Remove 10 truss screws and remove the Floorboard from the Step.



4 At least two people support the Step and plug into the Seat Cabinet.
Align and position so that the joint bridge of the Step enters the socket of the Seat Cabinet.


5 Fix the Step with 4 hex bolts.


6 Fix the Step with 4 hex bolts.


7
Attach two Joint Brackets with 4 hex bolts.


8
Attach two Seat Doors with 8 tamper proof screws.


## 6－3 MOUNTING THE SEAT CABINET

Carry out this operation with 2 or more people．
1 Raise the four adjusters on the bottom of the Seat Cabinet and ensure casters touch the floor．


Support the Seat Cabinet with two or more people and insert it into the Control Cabinet．
Place the Step on the leg of the Control Cabinet at this time．


3 Fix the Step with 2 hex bolts.


4
Fix the Step with 2 hex bolts.


Place the Floorboard on the Step. One person should continue supporting the Floorboard until step 8.


Connect one connector.


Support and close the Floorboard with two or more people. Take care not to damage the Controller Holder and Controller Cable at this time.



With ten tamper proof screws, attach the Sash Center, Sash Side (x2), and Rear Sash.


## 6-4 ATTACHMENT OF JOINT FRAMES

Carry out this operation with 2 or more people.
1 Ensure the four adjusters on the bottom of the Seat Cabinet are touching the floor.


2
At least two people support the Joint Frame $L$ and place it on both the Monitor Cabinet and Seat Cabinet in the orientation shown.


Monitor Cab


4
Temporarily fix the Joint Frame L to the Monitor Cabinet with 4 hex bolts.
If the hole positions do not match, adjust the height with the adjusters on the Seat Cabinet.


Bottom View fixings of both brackets once both are in place.

## 6-5 ASSEMBLING THE ROOF

in most cases, the Roof Assembly will come fitted to the cab and will not require assembly or fitting. However, in the case it does not, please follow the proceeding instructions.

Remove the 10 screws and remove the Roof Box Lid from the Roof Box.

Parts Used



Attach the Roof Box to the Roof Base with 2 screws. The Roof Box must be in the orientation shown. Attach the Roof Box to the Roof Base with 2 screws. At this time, ensure that the rectangular hole is on the board side.


Attach two Roof Box Brackets with 8 screws.


Roof Box Bracket (x2)



5 Fix the Ground Wire.


Place the Air Gimmick Box on the Roof Base.



Connect one of the roof box connectors.


Refer to steps 6 to 8 and install the Air Gimmick Box on the opposite side.

10 Attach the Roof Box Lid with 10 screws.


## 6-6 ATTACHING THE ROOF

Carry out this operation with 4 or more people.
1 Support the Roof assembled in "6-5" with 4 or more people and place it on Joint Frame L \& R. Pay attention to the following items:
(1) Please confirm the position so that the Roof Box is on the side of the Seat Cabinet.
(2) Please put it from the side against the cabinet.
(3) Place the roof once on the Joint Frame.
(4) Two people move on top of the step. Please place it while sending the roof.
(5) Please put the guide of the roof between the Joint Frame.
(6) Please move so that the guide of the Roof hits the Seat Cabinet.


2 Fix the Roof with 10 truss screws.


3 Connect the wiring from the Roof Beam using the three connectors.


4
Attach the Connector Lid Seat with 3 screws.


5 Connect the wiring from the Roof Beam using three connectors.


6 Attach the Connector Lid Monitor with 5 screws.


## 6-7 INSTALLATION OF BILLBOARD

Carry out this operation with 2 or more people.
1 Remove 4 truss screws and remove 2 Billboard Lid.


2 Insert the Billboard Plate into the Billboard Box and secure with two truss screws.




Billboard Box Side

At least two people support the Billboard Box and place it on the Seat Cabinet.
Place from the top so that it enters the guide of the Seat Cabinet. Take care not to scratch the Rear Cover and Billboard Plate at this time.


5 Secure the Billboard Box with 2 hex bolts.


7 Attach 2 Billboard Lids with 4 truss screws.


## 6-8 POP PANEL INSTALLATION

Carry out this operation with 2 or more people.
1 Support Pop Panel with two or more people and plug it into the screw temporarily fixed to the Billboard Box.


2
Fully tighten the four screws used in step 1.

## 6-9 APPLYING CURTAIN

Carry out this operation with 2 or more people.


2 Hook the Side Curtain to the temporarily fixed truss screw.


3
Hook the Sub Curtain L to the temporarily fixed truss screw.



Hook the two Curtain Sashes onto the temporarily fixed truss screw and fully tighten 6 truss screws. At this time, please make sure cutout of Curtain Sash faces outward.


5 Secure the Sub Curtain L with one truss screw.


6 Refer to steps 1 to 5 and attach remaining Curtain on the opposite side.

## 6-10 FIXATION TO INSTALLATION PLACE

This product has 13 casters and 10 adjusters.


Raise all the adjusters and let the casters contact the floor.

2 Move the cabinet to the installation location

3
Make sure all adjusters contact the floor and adjust the height of the adjuster so that the cabinet is level. Please adjust to keep level by leaving about 5 mm gap between the floor and the caster.


After adjustment, tighten the nut of the adjuster upward and fix the height of the adjuster.


## 6-11 INSERTING KEY CHIP

## STOP IMPORTANT

Key Chips are precision parts. It may be damaged by heat, shock, or static electricity. Please handle with care

Remove 2 screws. Unlock with the Master Key and remove the Front Door R.


2
Insert the Key Chip into Game Bd.


Key Chip


## 6-12 CONNECT DVD DRIVE

Please prepare the supplied software installation cable, software installation USB cable, and separately sold DVD Drive kit.
Connect the DVD Drive to install the software. For safety and prevention of erroneous operation, connect an optional DVD Drive before connecting the power cord of the cabinet.

Connect the two connectors of the included soft installation cable and the soft installation USB cable.


Connect two connectors to the rear of the drive.


## 6-13 POWER SUPPLY \& GROUND CONNECTION

## A CAUTION

- Check the power cord for breaks or dents. If the cord is damaged, it may cause electric shock, electric leakage, or fire.
- Please use the power supply equipped with earth leakage circuit breaker. Using a power source without an earth leakage circuit breaker may cause a fire when leakage occurs.
- Please prepare the "indoor grounding terminal that is reliably grounded". This product has a Ground Terminal. Please connect the Ground Terminal to the indoor Grounding Terminal with a Grounding Wire. Failure to properly ground may result in electric shock or malfunction.
- Do not expose the power cord or the Grounding Wire. In an exposed state, the wire prone to damage such as stumble. Failure to do so may cause electric shock, short circuit, or fire. Please place it in a position that does not interfere with customer's passage or attach a cover.
- When using the grounding screw and Grounding Terminal of the AC unit, do not ground the Ground Wire while it is exposed. It may cause electric shock, short circuit, fire. Please use a round terminal for M4 with a rating of 15 A or more for the cabinet and ground it securely.


## STOP IMPORTANT

Do not perform a grounding operation on the earth terminal of the AC unit if the Ground Wire is grounded with the built-in power cord Ground Wire.

When grounding using the earth terminal of the AC unit, do not ground with the Ground Wire with built-in power cord. It may cause malfunction or malfunction.

The AC unit has a power switch, a circuit protector, a grounding screw, and an inlet for connecting the power cord.


## 2 <br> Insert the connector of the power cord firmly into the inlet of the AC unit and the plug of the power cord firmly into the outlet.



When connecting to a Power Outlet that has a Grounding Terminal
The included power cord has a Ground Wire built-in. Connect the power cord to the AC unit and connect the plug of the power cord to the "power outlet provided with a Ground Terminal".


## Example of a Power Outlet with a Grounding Terminal

When using a separately prepared Ground Wire
If you do not have a "Power Outlet with Ground Terminal", connect the grounding screw or Ground Terminal of the AC unit and the grounding mechanism with a separately prepared Grounding Wire and be sure to ground it.
Please remove the earth screw of the $A C$ unit once and tighten it by passing it through the round terminal of the Ground Wire.


## When using a Commercially Available Conversion Adapter

When supplying power using a commercially available conversion adapter, connect the Ground Terminal of the adapter to the "earth terminal that is securely grounded"


3 Perform the indoor wiring of the power cord. Attach the wiring cover and protect the power cord.


## 6-14 SOFTWARE INSTALLATION

## CAUTION

- Turn off the power immediately if there is any operation or abnormality other than the explanation in this manual. Failure to turn off the power may cause electric shock or fire.
- Software installation is performed with the live part of the cabinet exposed. Do not touch the exposed part of the cabinet while live. It may cause electric shock, short circuit, fire
- Direct vision of the laser beam inside the DVD Drive may cause visual disturbance. Do not look inside the DVD Drive.


## stop IMPORTANT

Do not carry out any other work until the soft installation finishes.

- If the software fails to install correctly, please contact SEGA.


## STOP IMPORTANT

Do not turn off the power while the DVD Drive access lamp is lit or blinking. This will cause failure of the drive

- Do not let foreign objects such as liquid, metal, or cigarette smoke get inside the DVD Drive
- Do not touch the lens inside the DVD Drive. As this may cause failure to read data
- The static electricity of the human body may damage the electronic parts. Take measures such as touching a grounded metal surface before work and discharge static electricity
- The disc tray is inoperable for 30 seconds when powered on and will only operate when power to the drive is ON
- Please keep DVD soft kit, DVD Drive kit, software installation cable and software installation USB cable in a secure place after software installation
- If software installation is not possible, an error will be displayed


## STOP IMPORTANT

Do not use damaged DVD as It may cause abnormal operation
Place the DVD in the DVD Drive with the printed side facing up

- Do not put fingerprints or dust on the DVD

Do not use solvents such as benzine and thinner, record spray, antistatic agent etc. for caring for the DVD.

Do not use the DVD as shown below, as it may cause malfunctions:

- Those with damage such as cracks, warping
- Those with paper or a seal affixed
- Seals, tapes and others with traces
- If the dirt is bad, please include water in a soft cloth, wipe it dirty firmly


Software installation takes around 50 minutes.
This will take longer if a system update is required.
1 Remove one thumbscrew and remove the Case Lid of the DVD Drive.


Turn on the power switch.
3 A start screen of Game BD is displayed on the LCD monitor.
4 Approximately one minute later, "Please Insert Disc 1" will be displayed on the screen.
5 Eject the disc tray and insert DVD (Disc 1) of the DVD. Be sure to set the print side up.


Push the switch on the DVD Drive and return the tray. Software installation from the DVD will start automatically and "Program image loading" will be displayed.
Do not turn off the power of the cabinet during soft installation.

Push the switch on the DVD Drive and return the tray. Software installation from DVD will start automatically. When the soft installation is completed, the game starts automatically.

Perform the system update. If update is not required, proceed to step 12.

## stop IMPORTANT

Do not turn off the power while updating the system. Turning off the power may cause Game Board to break down.

10
After "Disc change, please see Disc 1.", Press switch on the DVD Drive and pull out the tray. Set the first DVD of the DVD software kit (Disc 1) on the tray. Be sure to set the print side up.

11
Push the switch on the DVD Drive and return the tray.
12
When "ERROR 0919 DVD Drive is connected" is displayed, press the DVD Drive switch, take out the tray and take out the DVD.

13
Push the switch on the DVD Drive and return the tray. The tray will not move when the power is turned off.

## 14

Turn off the power switch.
15
Insert the Case Lid into the DVD Drive and secure with a single thumbscrew.


16
Refer to "6-13" and remove the DVD Drive in reverse order.

17 Install Front Door R and lock with Master Key. Secure with 2 screws.


Please save the DVD Drive kit and soft installation cable, soft installation USB cable, DVD soft kit in a place free from dust and cigarette smoke.

## 7 PRECAUTIONS WHEN MOVING

## 7-1 MOVING THE MACHINE

## WARNING

- Always disconnect the power cable before moving the product. If it is moved with the power cable connected, the cable could be damaged, causing fire or electric shock.
- To move the unit over the floor, pull in the adjustors and have the casters contact the floor. While moving the unit, be careful that the casters do not roll over the power cord or the ground wire. If cord or wire is damaged, there could be electrical shocks and/or short circuits.
- When crossing a sloped or stepped area, disconnect the Monitor Cabinet, Control Cabinet and Rear Cabinet. If you tilt them while connected together, the connection points may be damaged and personnel could be injured.
- When lifting the cabinet up steps, you must hold it by the designated handles or by the bottom surface. Lifting it by any other area may lead to damage or disfiguration to that part or surrounding parts due to the weight of the cabinet and could also lead to injury of personnel.
- When tilting the cabinet to move it across a sloped or stepped area, always use at least two people. Attempting such an operation alone can lead to accident or injury.
- When moving the components separately, take care concerning the direction you push the Monitor and Rear Cabinet in. These elements may fall over, causing damage or an accident.


## A CAUTION

- When moving the components, do not push any of the plastic elements or shaped parts and do not use them to pull the components along. This may damage the parts or the surrounding parts and this could lead to accidents or injury.
- After dividing the components to move them, do not use the Control Units in the Monitor Cabinet to push or pull the cabinet. This may damage or disfigure these parts and lead to malfunctions or injury.
- When moving the separated components, be sure to push/pull each cabinet lengthways. Trying to move the cabinet any other way may cause the cabinet to topple over.


## stop IMPORTANT

- When moving the cabinet, do not hold, push, or pull the Control Units. This may disfigure or damage them.
- If you need to move components through a narrow or low door and the only way to get the separated components through is to turn them on their side, or if a separation method other than those described in this manual is required, either make a request to the office listed in this document or the place of purchase to perform the operation or contact them regarding how to perform it. Carelessly turning the components onto their side or separating them in ways other than those depicted in this manual may lead to irreparable damage.
- Do not press the monitor screen. The screen can be easily damaged and cannot be repaired if it is, meaning complete replacement will be necessary.


FIG. 7-1a


FIG. 7-1b

## 8 GAME DESCRIPTION

## 1-1 GAME OUTLINE

After the coins are inserted, available Credits will display at the bottom of the screen. After required coins are inserted, the text will change from "PLEASE INSERT COINS" into "PRESS START BUTTON" . The start button on the Cabinet will then be flashing.
Coin system can accumulate up to 24 Credits. Credits beyond 24 will not be counted and returned to Player, but will be recorded by system internal counter.
Based on the difference of test mode settings, "INSERT COIN(S)" /" INSERT MORE COIN(S)" may change to "SWIPE CARD TO PLAY" .

The Players role is based on which side the "START" button is pressed. Press "START" button once to start the game. If you choose the left side, you will be Player 1 , and the right side will be Player 2.

## 1-2 METHOD OF OPERATION




Item Description

| Controller | Aims crosshair during Game and moves cursor on screen in menus |
| :--- | :--- |
| Main Trigger | Fires bullets to defeat enemies and confirms selection in menus |
| Sub Trigger/Select <br> Lever | When the Player has items available, this switches between multiple <br> available items |
| P1 START Button | Left Seat (P1) confirms the Credit on Game start and Continue |
| P2 START Button | Right Seat (P2) confirms the Credit on Game start and Continue |
| XTREME AUDIO Button | This button controls the extra audio features of the Cabinet. It is ON <br> by default. If the Player feels the Cabinet is too loud, they can press <br> this button to turn the audio features OFF. Pressing the button again <br> will turn the features back ON |
| Rear Cover Button | Activates Cabinet visual and audio effects |
| Motion Sensor | Activates Cabinet visual and audio effects |

## 1-3 HOW TO PLAY

## Credit Input

When a Credit is inserted, the Credit display on the attract screen will show the amount of Credits available.
When the Credit requirements have been met, the message "INSERT COIN(S)" will change to "PRESS START BUTTON" and both START buttons will begin to flash.
Up to 24 Credits can be counted at a time.


Attract Screen

## Player Entry

This will detail the Player Entry Screen.
Player 1 will be on the left hand side of the screen and Player 2 will be on the right hand side of the screen. The Player \# is determined by which side START button the Player presses.


Entry Screen

## Mode Select

Select a Game Mode by shooting the desired option.


Mode Select Screen

## Modes

| NORMAL MODE | Recommended for first time Players |
| :--- | :--- |
| MASTER MODE | Recommended for expert or veteran Players |

There are two kinds of game modes: "NORMAL MODE" and "MASTER MODE".
"NORMAL MODE" is the standard gameplay mode and there are assistance events for Players. This mode is recommended for Players who are playing for the first time.
"MASTER MODE" is a mode for advanced Players where enemies are stronger and faster.

## Item Selection

The Player can choose two items they wish to use during their game. Each item has it's own abilities, number of uses, bullets etc. which are limited. The Player(s) selects their 2 items by shooting them with the controller.


[^0]The Player can select "Reset" to clear their item selections.


Item Selection Confirmation Screen

## Gameplay

When the game begins, a video demonstration will follow giving the Player information on how to play the game. After this, it will transition to game play


Video Demo Screen


A second Player can join a game in progress by inserting a Credit and pressing START. When a Credit has been entered, the Player not in the game will have their START button flash until it is pressed.

## Continue

When a Player is out of life, the Game is over and the Continue Screen will be displayed. The Player can enter a Credit to continue their Game before the time on screen expires. Once a Player has entered a Credit, they can press START to resume their game.


Continue Screen

## Ranking

Upon completing all stages of the Game，the Player can enter their name if their score was within the Top Rankings．

Rankings are split into different categories：

| NORMAL MODE 1Player AGENT RANKING | $1-20$ Rank |
| :--- | :--- |
| MASTER MODE 1Player AGENT RANKING | $1-20$ Rank |
| NORMAL MODE 2PlayerS AGENT RANKING | $1-20$ Rank |
| MASTER MODE 2PlayerS AGENT RANKING | $1-20$ Rank |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 | Bryant | ［40\％ | 0370000 |
| 2 | ebitan | 4885 | 0365000 |
| 3 | JANISH | （4）\％\％ | 0360000 |
| 4 | SIMON | \％\％\％ | 0355000 |
| 5 | bruce | cose | 0350000 |
| 6 | Drak | crise | 0345000 |
| 7 | SAMson | Cume | 0340000 |
| 8 | CYY！ |  | 0335000 |

NORMAL MODE 1Player AGENT RANKING


MASTER MODE 2PlayerS AGENT RANKING

9 EXPLANATION OF TEST AND DATA DISPLAY

## WARNING

Do not touch any parts that are not specified in these directions. Touching unspecified locations may lead to electric shock or cause short circuits.

## CAUTION

- Be careful that your finger or hand does not get caught when opening/closing the coin chute door.
- Operating the TEST Button and SERVICE Button during Test Mode may be slightly uncomfortable, due to the position of the buttons in relation to the cabinet seats. Take care not to hurt your shoulder or back, or scratch yourself on any parts of the cabinet.
- When you enter the Test Mode, Fractional Coin and Bonus Adder data is erased.
- Adjust the sound to the optimum volume, taking into consideration the environmental requirements of the installation location.
- Removing the Coin Meter circuitry renders the game inoperable.
- Have a flashlight on hand and operate in Test Mode very carefully. The cabinet interior is dark and narrow and you could easily make mistakes in operation.

Perform tests and data checks periodically by manipulating the TEST Button and SERVICE Button in the cabinet. Follow the instructions in this chapter to conduct checks when the game machine is first installed, when money is being collected, or when the game machine does not operate properly.

Shown below are the tests and screens to be used for different problems.

## 9-1 SWITCH UNIT AND COIN METER

The SWITCH UNIT and COUNTERS are housed within the COINTOWER. To access these controls you will need to open the COIN door. The switches and counters can be found directly on the rear face of the Tower.


FIG. 9-1a Switch Unit
\(\left.\begin{array}{|c|c|}\hline DEVICE \& FUNCTION <br>
\hline TEST BUTTON \& Press to enter TEST MODE - Also Used to enter choices selected <br>

within TEST MODE\end{array}\right]\)| SERVICE BUTTON | Press for SERVICE CREDIT - Also used to scroll through TEST MENUS |
| :---: | :---: |
| COIN IN COUNTER | Counts inserted coins (£0.10 or \$0.10 $=1$ count) |
| VOLUME CONTROL | Adjusts audio level |

## 9-2 GAME TEST MODE

This is the main Test Mode menu. Here you can access a number of different sub menus to test different aspects of the Cabinet to ensure they are all working correctly.

| GAME TEST MENU |
| :--- |
| BOOKKEEPING |
| INPUT TEST |
| OUTPUT TEST |
| GAME ASSIGNMENTS |
| Control Ier ADJUSTMENT |
| OUTPUT ADJUSTMENT |
| BACKUP DATA CLEAR |$\quad$| -> EXIT |
| :--- |
| SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON |

Test Mode menu
Use Service to cycle through items. Use Test to select an item and view that item's sub-menu. Select EXIT to return to Game.

| BOOKKEEPING | Displays Game and Cabinet statistics |
| :--- | :--- |
| INPUT TEST | Used to check all Input devices are working correctly |
| OUTPUT TEST | Used to check all Output devices are working correctly |
| GAME ASSIGNMENTS | Used to change Game related settings |
| Controller ADJUSTMENT | Used to calibrate Control Unit |
| OUTPUT ADJUSTMENT | Used to change levels of Output devices |
| BACKUP DATA CLEAR | Clears all data on Cabinet |
| EXIT | Exit Test Mode and return to Game |

## 9-3 BOOKKEEPING

This menu displays statistics for credits, gameplay, and the Cabinet overall.

| BOOKKEEPING | PAGE $1 / 3$ |  |
| :---: | :---: | :---: |
| COIN 1 |  | $*$ |
| COIN 2 |  | $*$ |
| TOTAL COINS | $*$ |  |
| COIN CREDITS | $*$ |  |
| SERVICE CREDITS |  | $*$ |
| TOTAL CREDITS |  |  |
| PRESS TEST TO CONTINUE |  |  |

Bookkeeping Menu (1/3)
Use the Test button to proceed to Bookkeeping Menu \#2

| COIN 1 | Number of coins put into Coin Chute \#1 |
| :--- | :--- |
| COIN 2 | Number of coins put into Coin Chute \#2 |
| TOTAL COINS | Total number of coins put into Coin Chutes |
| COIN CREDITS | Number of standard Credits |
| SERVICE CREDITS | Number of Service Credits |
| TOTAL CREDITS | Total number of Credits |


| BOOKKEEPING PAGE 2/3 |  |
| :---: | :---: |
| NUMBER OF GAMES | $*$ |
| FIRST PLAY | $*$ |
| CONTINUE PLAY | $*$ |
| FIRST PLAY ENTRY | $*$ |
| 1P ENTRY | $*$ |
| 2P ENTRIES | $*$ |
| 2P START BONUS LIFE ENTRIES | $*$ |
| PLAYMODE SELECT | $*$ |
| NORMAL MODE | $*$ |
| MASTER MODE |  |
| PRESS TEST TO CONTINUE |  |

Bookkeeping Menu (2/3)
Use the Test button to proceed to Bookkeeping Menu \#3

| NUMBER OF GAMES | Total number of Games played |
| :--- | :--- |
| FIRST PLAY | Total number of Games played from the start of the Game |
| CONTINUE PLAY | Total number of Continues played |
| FIRST PLAY ENTRY | Total number of Solo/2P Games have been played |
| 1P ENTRY | Total number of Single Player Games |
| 2P ENTRIES | Total number of 2P Games |
| 2P START BONUS LIFE <br> ENTRIES | Total number of Games entered with BONUS LIFE at the start of <br> the Game |
| PLAYMODE SELECT | Total number of times a play mode has been selected |
| NORMAL MODE | Total number of Games NORMAL MODE was selected |
| MASTER MODE | Total number of Games MASTER MODE was selected |


| BOOKKEEPING | PAGE 3/3 |
| :---: | :---: |
| TOTAL TIME | ****D **H **M **S |
| PLAY Time | ****D **H **M **S |
| AVERAGE PLAY TIME | **M **S |
| NORMAL MODE | **M **S |
| MASTER MODE | **M **S |
| LONGEST PLAY TIME |  |
| NORMAL MODE | **M **S |
| MASTER MODE | **\| 1 **S |
| SHORTEST PLAY TIME |  |
| NORMAL MODE | **M **S |
| MASTER MODE | **W **S |
| PRESS TEST TO EXIT |  |

Bookkeeping Menu (3/3)
Use the Test button to return to the Test Mode menu.

| TOTAL TIME | Total time the Cabinet has been powered on |
| :--- | :--- |
| PLAY TIME | Total time the Cabinet has been in Game |
| AVERAGE PLAY TIME | Average play time for a Game |
| NORMAL MODE | Average play time for a NORMAL MODE Game |
| MASTER MODE | Average play time for a MASTER MODE Game |
| LONGEST PLAY TIME | Longest recorded play time for a Game |
| NORMAL MODE | Longest recorded play time for a NORMAL MODE Game |
| MASTER MODE | Longest recorded play time for a MASTER MODE Game |
| SHORTEST PLAY TIME | Shortest recorded play time for a Game |
| NORMAL MODE | Shortest recorded play time for a NORMAL MODE Game |
| MASTER MODE | Shortest recorded play time for a MASTER MODE Game |

## 9-4 INPUT TEST

Use this menu to check the operation of the Input devices.


Input Test Menu

To exit this menu, press the Test and Service buttons together at the same time.

| Controller TRIGGER | It is normal if "OFF" indication turns "ON" when the main trigger of the <br> Controller is pulled |
| :--- | :--- |
| Controller SELECT | It is normal if the "OFF" indication turns "ON" when the Controller's <br> select lever is operated |
| Controller WEAPON | It is normal if the "OFF" indication turns "ON" when the sub trigger of <br> the Controller is pulled |
| Controller X | Check the X coordinate value of the Controller's aim <br> It is normal if the numerical value fluctuates when moving the aim of <br> the Controller toward the screen to the left or right |
| Controller Y | Check the Y coordinate value of the Controller's aim <br> It is normal if the numerical value fluctuates when moving the aim of <br> the Controller toward the screen to the left or right |
| Controller SCREEN IN | It is normal if it is "IN" when the Controller's aim is on the screen and <br> "OUT" when it is outside the screen |


| P1 START | It is normal if "OFF" indication turns "ON" when the START Button is <br> pressed |
| :--- | :--- |
| P2 START | It is normal if "OFF" indication turns "ON" when the START Button is <br> pressed |
| BLAST | It is normal if "OFF" indication turns "ON" when the START Button is <br> pressed |
| REAR COVER EYE | It is normal if "OFF" indication turns "ON" when the START Button is <br> pressed |
| REAR COVER MOTION <br> SENSOR | Approaching to the back of the cabinet, if the "OFF" display turns "ON" <br> it is normal |
| SERVICE | It is normal if the "OFF" display turns "ON" when the service button is <br> pushed |
| TEST | It is normal if the "OFF" display turns "ON" when the test button is <br> pushed |

## 9-5 OUTPUT TEST

Use this menu to check the operation of the Output devices.o

| OUTPUT TEST |  |
| :---: | :---: |
| P1 START LAMP |  |
| P2 START LAMP | OFF |
| BLAST LAMP | OFF |
| P1 Control Ier HOLDER LAMP | OFF |
| P2 Control Ier HOLDER LAMP | OFF |
| P1 CEILING LAMP | OFF |
| P2 CEILING LAMP | OFF |
| REAR COVER LAMP | OFF |
| REAR COVER EYE LAMP | OFF |
| FIGURE LAMP | OFF |
| COIN BLOCKER | OFF |
|  | ON(REJECT) |
| -> EXIT |  |
|  |  |
| SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON |  |
|  |  |

Output Test Menu
Use Service to cycle through items and Test to turn a device ON or OFF.

| P1 START LAMP | Lights when the lamp of the START Button is "ON", and goes <br> out when it is "OFF". |
| :--- | :--- |
| P2 START LAMP | Lights when the lamp of P2 START Button is "ON", and goes <br> out when it is "OFF". |
| BLAST LAMP | Lights when the XTREME Audio Button's lamp is "ON" and <br> turns off when it is "OFF". |
| P1 Controller HOLDER LAMP | OFF (turn off) $\rightarrow$ RED (lights up in red) $\rightarrow$ GREEN (lights green) <br> $\rightarrow$ BLUE (lights up in blue) $\rightarrow$ WHITE (lights up in white) $\rightarrow$ <br> RED FADE (blinks in red) $\rightarrow$ GREEN FADE (blinks green) $\rightarrow$ <br> BLUE. You can check FADE (flashing blue) $\rightarrow$ WHITE FADE <br> (blinking white). |
| P2 Controller HOLDER LAMP | OFF (turn off) $\rightarrow$ RED (lights up in red) $\rightarrow$ GREEN (lights green) <br> $\rightarrow$ BLUE (lights up in blue) $\rightarrow$ WHITE (lights up in white) $\rightarrow$ <br> RED FADE (blinks in red) $\rightarrow$ GREEN FADE (blinks green) $\rightarrow$ <br> BLUE. You can check FADE (flashing blue) $\rightarrow$ WHITE FADE <br> (blinking white) |
| P1 CEILING LAMP | OFF (turn off) $\rightarrow$ RED (lights up in red) $\rightarrow$ GREEN (lights green) <br> $\rightarrow$ BLUE (lights up in blue) $\rightarrow$ WHITE (lights up in white) $\rightarrow$ <br> RED FADE (blinks in red) $\rightarrow$ GREEN FADE (blinks green) $\rightarrow$ <br> BLUE. You can check FADE (flashing blue) $\rightarrow$ WHITE FADE <br> (blinking white). |
| P2 CEILING LAMP | OFF (turn off) $\rightarrow$ RED (lights up in red) $\rightarrow$ GREEN (lights green) <br> $\rightarrow$ BLUE (lights up in blue) $\rightarrow$ WHITE (lights up in white) $\rightarrow$ <br> RED FADE (blinks in red) $\rightarrow$ GREEN FADE (blinks green) $\rightarrow$ <br> BLUE. You can check FADE (flashing blue) $\rightarrow$ WHITE FADE <br> (blinking white). |
| REAR COVER EYE LAMP | OFF (turn off) $\rightarrow$ RED (lights up in red) $\rightarrow$ GREEN (lights green) <br> $\rightarrow$ BLUE (lights up in blue) $\rightarrow$ WHITE (lights up in white) $\rightarrow$ |
| COIN BLOCKER | RED FADE (blinks in red) $\rightarrow$ GREEN FADE (blinks green) $\rightarrow$ <br> BLUE. You can check FADE (flashing blue) $\rightarrow$ WHITE FADE <br> (blinking white). |
| Lights when the lamp on the Rear Cover Button is "ON", and |  |
| goes out when it is "OFF". |  |

## 9-6 GAME ASSIGNMENTS

Use this menu to change Game settings such as difficulty and starting Player life.

| GAME ASSIGNMENTS |  |
| :---: | :---: |
| GAME DIFFICULTY |  |
| LIFE | NORMAL |
| MAX LIFE | 6 |
| INITIAL LIFE | 3 |
| 2P START BONUS LIFE | $\times 2$ |
| BLAST BUTTON | DEFAULT |
| REAR COVER LAMP | AUTO |
| REAR COVER MOTION SENSOR | ON |
| COntroller SENSOR ID | F1 |
| $->$ EXIT |  |
| SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON |  |

Game Assignments Menu
Use Service to cycle through items. Use Test to select an item and change values/options of selected item. Use EXIT to return to Test Main Menu.

| GAME DIFFICULTY | Choose from: VERY EASY $\rightarrow$ EASY $\rightarrow$ NORMAL $\rightarrow$ HARD $\rightarrow$ VERY HARD. (Default Difficulty = NORMAL) |  |
| :---: | :---: | :---: |
| LIFE | Determines Player life options |  |
| MAX LIFE | Determines the limit on how much life the Player can accure (Default $=6$. Value Range $=1-36$ ) |  |
| INITIAL LIFE | Determines how much life the Player starts with (Default $=3$ Value Range $=1$-12) |  |
| 2P START BONUS LIFE | Determines Bonus Life gained (only when 2 Players start the game at the same time does the Bonus Life apply). <br> The amount of Bonus Life is multiplied by the Initial Life value. (Default $=$ Initial Life : X2. Value Range = OFF, X2, X2.5, X3) |  |
| BLAST BUTTON | Determines whether the XTREME Audio is active at the start of play (Default = ON) |  |
|  | DEFAULT | XTREME Audio is active from the Game start |
|  | REVERSE | XTREME Audio is not active until pressed by Player |


| REAR COVER LAMP | Select pattern of Rear Cover Lamp. <br> When set to AUTO the pattern of the RCL changes every month: (Default $=$ AUTO. Value Range $=$ AUTO, SCARLET DAWN 01, SCARLET DAWN 02, HORROR 01, HORROR 02, NEW YEAR, VALENTINE, SPRING, SUMMER, HALLOWEEN, CHRISTMAS, RED, BLUE, YELLOW, WHITE, PURPLE, OFF) |  |
| :---: | :---: | :---: |
| REAR COVER MOTION SENSOR | Select function of motion sensor. (Default = ON) |  |
|  | ON | Sensor activates effects when tripped |
|  | AUTO | Sensor will activate at set intervals without being tripped |
|  | OFF | Sensor activates visual effects only |
| Controller SENSOR ID | When using two or more units side by side, please set to different value to avoid crosstalk of motion sensor <br> ( Default $=$ F1. Value Range $=$ F1, F2, F3, F4) |  |

## 9-7 CONTROLLER ADJUSTMENT

Use this menu to calibrate and correct Controller alignments.


Controller Adjustment Menu

- P1 / P2 - Select the item with the START Button
- Press the test button to end the setting and return to the game test menu screen. At that time, the adjusted value is retained

| PLAYER1 | Configure P1 Controller |
| :--- | :--- |
| PLAYER2 | Configure P1 Controller |
| TOP | Sets the correction value (analog value) at the upper end in the vertical <br> direction. <br> Target the top mark with the Controller and subtract the main trigger to <br> determine the analog value. At this time, the aimed left / right direction <br> does not matter. |
| LEFT | Set the correction value (analog value) at the left end in the left-right <br> direction. <br> Target the left-most mark with the Controller, and subtract the main trigger <br> to determine the analog value. |
| CENTER | Set the correction value (analog value) of the center. <br> Target the center mark with the Controller, and subtract the main trigger to <br> determine the analog value. |
| RIGHT | Set the correction value (analog value) at the right end in the left-right <br> direction. <br> Target the right-most mark with the Controller, and subtract the main <br> trigger to determine the analog value. |
| BOTTOM | Set the correction value (analog value) at the bottom. <br> Target the bottom mark with the Controller, and subtract the main trigger <br> to determine the analog value |
| DEFAULT | Set the initial setting value (factory shipped) as the correction value (analog <br> value) |
| CANCEL | Cancel this setting change and return to the previous value (the value <br> displayed in parentheses) |
| CHECK | Aiming check can be performed from the set correction value (analog <br> value). <br> Pointing the Controller to the screen, a cursor indicating the landing <br> position is displayed on the screen。The cursor is displayed at the landing <br> position calculated using the current correction value (value displayed <br> outside parentheses). |
| OUT OFREEN] | When it recognizes that the Controller's aim is out of the screen, [OUT OF <br> SCREEN] is displayed |

## Setting Controller Aim

This section will detail how to calibrate Controllers. The method is the same for both Controllers.


1
Sit in the seat and hold P1 Controller
Sit in front of the sticker backrest and sit deep into the seat.


2
Please check that "TOP" on the PLAYER 1 side of the Controller adjustment screen is selected.

Hold the Controller with both hands. Subtract the main trigger so that either the left or right eye line, the front site of the Controller and the rear site, and the marker displayed at the top of the screen are in a straight line. At this time, please hold the Controller vertically without tilting


Controller Adjustment screen


Press the P1 START Button and repeat steps for "LEFT", "RIGHT", etc.

5
Press the P1 START Button and select "CHECK". When turning the Controller toward the screen, the aim is displayed.
Move the Controller and move the aim along the edge of the screen. If the aim does not disappear during the movement, the setting is over.
If the aim disappears, proceed to step 13


Controller Adjustment screen


To perform the calibration of a section again, select one of the items (TOP, RIGHT, LEFT etc.)

7 Pull the main trigger again and repeat the calibration procedure
Refer to step 5 and confirm the setting.

## 9-8 OUTPUT ADJUSTMENT

Various volume and output adjustments and confirmation of gimmick / vibration can be done from this Test menu.

OUTPUT ADJUSTMENT

| SPEAKER TEST |  |
| :--- | :---: |
| FRONT LEFT SPEAKER | OFF |
| FRONT RIGHT SPEAKER | OFF |
| REAR LEFT SPEAKER | $0 F F$ |
| REAR RIGHT SPEAKER | OFF |
| CENTER SPEAKER | OFF |
| WOOFER SPEAKER | OFF |
| BLAST WOOFER SPEAKER | OFF |

GIMMICK OUTPUT TEST
SEAT VIBRATION OFF
STEP VIBRATION OFF
AIR GIMMICK OFF
P1 Controller Vibration OFF
P1 Controller VIBRATION OFF
ALL SOUND VOLUME $\quad 15 / 20$
ADVERTISE SOUND VOLUME 10/10
SENSOR VOICE VOLUME 10/10
WOOFER VOLUME 10/10
GIMMICK
SEAT VIBRATION $10 / 10$
STEP VIBRATION $\quad 10 / 10$
AIR GIMMICK 10/10
P1 Controller Vibration $\quad 10 / 10$
P2 Controller VIBRATION $\quad 10 / 10$
-> EXIT
SELECT WITH SERVICE BUTTON AND PRESS TEST BUTTON

## Output Adjustment Menu

Use Service to cycle through items. Use Test to select an item and change values/options of selected item. Use EXIT to return to Test Main Menu.

| SPEAKER TEST | Check the operation of the speaker output device |
| :---: | :---: |
| FRONT LEFT SPEAKER | Normal if the sound is heard from the left front speaker |
| FRONT RIGHT SPEAKER | Normal if the sound is heard from the right front speaker |
| REAR LEFT SPEAKER | Normal if the sound is heard from the left rear speaker |
| REAR RIGHT SPEAKER | Normal if the sound is heard from the right rear speaker |
| CENTER SPEAKER | Normal if the sound is heard from the center speaker |
| WOOFER SPEAKER | Normal if the sound is heard from the woofer speaker |
| BLAST WOOFER SPEAKER | Normal if the sound is heard from the blast woofer speaker |
| GIMMICK OUTPUT TEST | Check the operation of the gimmick output device |
| SEAT VIBRATION | Normal if the seat vibrates when ON |
| STEP VIBRATION | Normal if the step vibrates when ON |
| AIR GIMMICK | Normal if the air gimmick can shoot air when ON |
| P1/P2 Controller VIBRATION | Checks the speaker of the Controller MACHINEGUN is a full auto mode that repeats the launch sound reproduction ( 24 shots) $\rightarrow$ reload time OFF $\rightarrow$ shoot sound reproduction <br> "LASERGUN", "GRENADE" will play the launch sound every other shot, become silent, then launch sound will be played again, then loop |
| ALL SOUND VOLUME | It is volume setting of all sounds. The volume gets bigger as you approach 20/20 <br> (Default $=15 / 20$. Value Ranges $=1-20$, OFF) <br> "SEAT VIBRATION, STEP VIBRATION, AIR GIMMICK, P1 Controller VIBRATION, P2 Controller VIBRATION" are not affected by ALL SOUND VOLUME |
| ADVERTISE SOUND VOLUME | Sound volume setting of advertisement. The volume will increase as you approach 10/10. (Initial set value: 10/10 set value: $10 / 10$ to 1/10, OFF) |
| SENSOR VOICE VOLUME | Audio FX volume setting. The volume will increase as you approach 10/10. (Initial set value: 10/10 set value: 10/10 to $1 / 10$, OFF) |
| WOOFER VOLUME | Volume setting of Woofer. The volume will increase as you approach 10/10. (Initial set value: 10/10 set value: 10/10 to $1 / 10$, OFF) |
| GIMMICK | Set the volume of the gimmick output device |
| SEAT VIBRATION | It is the seat vibration setting. The vibration becomes greater as it approaches 10/10. (Initial set value: 10/10 set value: 10/10 to $1 / 10$, OFF) |
| STEP VIBRATION | It is vibration setting of step. The vibration becomes greater as it approaches 10/10. (Initial set value: 10/10 set value: 10/10 to $1 / 10$, OFF) |


| AIR GIMMICK | Setting of strength to shoot out air. It gets stronger as it <br> approaches 10/10. (Initial set value: $10 / 10$ set value: $10 / 10$ to <br> $1 / 10$, OFF) |
| :--- | :--- |
| P1/P2 Controller VIBRATION | Vibration setting of the Controller. The vibration becomes greater <br> as it approaches $10 / 10$. <br> (Initial set value: $10 / 10$ set value: $10 / 10$ to $1 / 10$, OFF) |

## 9-9 BACKUP DATA CLEAR

In this menu you can delete the back-up data.


## Backup Data Clear Menu

- Use the Service Button to select the item
- Use the Test Button to select the highlighted item
- YES (CLEAR) You will see a confirmation saying "Are you sure?

Select "YES (CLEAR)" to erase backup data. Press the Test Button to return to the Game Test Menu screen
NO (CANCEL) - You will return to the Game Test Menu screen without erasing the backup data.

- NO (CANCEL) You will return to the Game Test Menu screen without erasing the backup data.


## 9-10 ERROR CODES

## A CAUTION

- If an error code is displayed, arrange to have the issue resolved by maintanence personnel or a qualified individual. Attempting to resolve the issue without knowledge of electronics or components could lead to short circuit, electric shock or risk of fire
- Electronic components on the IC board may be damaged by static electricity of the human body. Take measures such as touching a grounded metal surface before work and discharge static electricity

| 0912 | Display | The graphics board could not continue rendering |
| :--- | :--- | :--- |
|  | Cause | DVI cable is not connected |
|  | Solution | Connect the DVI cable to the graphic board |


| 0019 | Display | DVD Drive is still connected |
| :--- | :--- | :--- |
|  | Cause | DVD Drive is still connected |
|  | Solution | Remove the DVD Drive |


| 3001 | Display | Communication with Controller failed |
| :--- | :--- | :--- |
|  | Cause | Communication with Controller failed |
|  | Solution | Check the connection of the Controller board |


| 3010 | Display | The coin setting is invalid |
| :--- | :--- | :--- |
|  | Cause | The game cost setting is an unacceptable value |
|  | Solution | Set the value to allow game cost setting from coin setting in system test <br> mode |


| 6401 | Display | I/O Board is not recognised |
| :--- | :--- | :--- |
|  | Cause | I/O Communication with the board failed |
|  | Solution | I/O Check the board connection. |

## 9-11 WARNING DISPLAYS

Warnings can be canceled arbitrarily. Press the Service Button to cancel the warning and return to the Attract Screen.
Warnings are displayed at startup and when returning from the test mode to the game.

| Display | Touch type card reader can not be recognized <br> SERVICE BUTTON: Release warning |
| :--- | :--- |
| Cause | Touch type card reader can not be recognized |
| Solution | Please check the connection of the touch type card reader |


| Display | LED Communication with the board failed <br> SERVICE BUTTON: Release warning |
| :--- | :--- |
| Cause | LED Communication with the board failed |
| Solution | LED Check the connection of the control board. Alternatively, connect the USB serial <br> conversion board (USB port) |


| Display | USB Failed to communicate with the serial board <br> SERVICE BUTTON: Release warning |
| :--- | :--- |
| Cause | USB Failed to communicate with the serial board |
| Solution | Check the serial conversion board connection (USB port). This warning also occurs <br> even when both the LED control board and the touch type card reader are not <br> connected |

## A CAUTION

The LCD display screen is adjusted prior to leaving the factory. Avoid any unnecessary adjustment.

## stop IMPORTANT

- If the adjustment method in this manual does not resolve the problem, contact the customer service number in this manual or your supplier.
- Do not stick tape, stickers or anything else onto the screen. Any kind of adhesive may damage the surface of the screen.


## 10-1 GENERAL DESCRIPTION

This specification applies to the 54.6 inch Color TFT-LCD Module P550HVN02.0. This LCD module has a TFT active matrix type liquid crystal panel 1,920x1,080 pixels, and diagonal size of 54.6 inch.
This module supports $1920 \times 1080$ mode. Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 10-bit gray scale signal for each dot.

The P550HVN02.0 has been designed to apply the 10-bit 2 channel LVDS interface method. It is intended to support displays which have high brightness, wide viewing angle, high color saturation, and high color depth.

* General Information

| Items | Specification | Unit | Note |
| :--- | :--- | :--- | :--- |
| Active Screen Size | 54.6 | Inch |  |
| Display Area | $1209.6(\mathrm{H}) \times 680.4(\mathrm{~V})$ | mm |  |
| Outline Dimension | $1235.6(\mathrm{H}) \times 706.4(\mathrm{~V}) \times 25.5(\mathrm{D})$ | mm | 1 |
| Driver Element | a-Si TFT active matrix |  |  |
| Display Colors | 10 bit $(8 b i t+\mathrm{FRC}), 1073.7 \mathrm{M}$ | Colors |  |
| Number of Pixels | $1,920 \times 1080$ | Pixel | mm |
| Pixel Pitch | $0.21(\mathrm{H}) \times 0.63(\mathrm{~W})$ |  |  |
| Pixel Arrangement | RGB vertical stripe |  | Haze $=11 \%$ |
| Display Operation Mode | Normally Black |  |  |
| Display Orientation | Landscape/Portrait Enable |  |  |
| Surface Treatment | AG |  |  |

## 10-2 CLEANING THE SCREEN

## A CAUTION

- Since the LCD display screen is susceptible to damage, pay careful attention to its handling. When cleaning, refrain from using water or volatile chemicals.
- Do not climb onto the control panel. This could lead to injuries, such as bumping your head.
- When reaching across the control panel to clean the screen there is a risk of hurting your shoulder or arm. Use a mop with a non-feathery, soft, dry cloth mop head and wipe the surface of the screen.

When the screen surface becomes dirty, clean it by using a soft cloth such as gauze. When water, and volatile chemicals such as benzene, thinner, etc., spill on the screen surface, it may be subject to damage. Therefore, do not use them.

Also, since the surfaces are susceptible to damage, refrain from rubbing them with a hard material or using a duster. If the screen is especially dirty, call in a professional cleaner.


FIG. 10-1

## 11 CONTROLLER UNIT

## A WARNING

- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause an electric shock, short circuit or present a risk of fire.
- Do not touch any parts that are not specified in these directions. Touching unspecified locations may lead to electric shock or cause short circuits.
- This work should be performed by site maintenance personnel or other skilled professionals. Work performed by non-technical personnel can cause a severe accident such as an electric shock.
- Exercise due caution in performing soldering procedures. If soldering iron is handled carelessly, there could be fires or burns.
- Proceed very carefully when heating thermal contraction tube. Careless operations can result in fires or burns.


## A CAUTION

- When fastening plastic parts, be careful not to tighten screws and nuts excessively. Otherwise parts may be damaged, resulting in injuries from fragments, etc.
- Be careful not to get hand or finger caught when removing or attaching the parts.
- Disconnection and connection of connectors will be performed within the narrow cabinet space. Take due care not to scratch or otherwise injure yourself.
- Take care when carrying the removed Control Units. Such heavy liffing carries a risk of injury to back or shoulders.


## stop IMPORTANT

- After the volume has been replaced, be sure to set the volume value on the test mode calibration screen and the input test screen and check variations in the volume value.
- After adjusting or replacing a microswitch, always check ON/OFF of the switch on the input test screen of the test mode.
- Handle parts inside the Control Unit very carefully. Be especially careful to avoid damage, deformation or loss of these parts. If any one of these parts is lost or defective, it can result in damages and/or faulty operations.

If the operability of the Control Unit is unsatisfactory, or if settings on the test mode calibration screen are ineffective, the problem could be a defective mechanism, displacement of the position where volume or microswitch has been fastened, or malfunctioning of volume or microswitch.

Carry out the following procedure to replace Control Unit or microswitch. Also be sure to grease the mechanical components of the Control Unit once every 3 months.

## 11-1 REMOVING THE CONTROLLER

## Tools required for work

| PH Screwdriver |
| :--- | :--- | :--- |
| M4 |

## 1 Turn power OFF <br> 2 Remove 4 screws and remove the Holder Lid



Left side of control cabinet

## 3 <br> Unplug the connector




Remove one screw and remove the cable bracket from the Controller
When installing, refer to "How to attach cable bracket" below


1 Place the Controller as shown so that there is no twist of the cable


2 Plug the cable bracket into the cable. Please refer to the figure below and pay attention to the installation direction


## A CAUTION

Immediately after turning off the power supply, do not touch the Controller Vibration Unit as it is may still be hot.

Tools required


When connecting, wire the wiring as shown below:


4
Remove the 2 screws and remove the Vibration Unit cover



Remove the 2 screws and remove the Controller Vibration Unit.
When installing, make sure that wiring of Controller Vibration Unit is on top.
When checking periodically, please check whether there is loose screw


7
Please refer to steps 1 to 6, install the new Controller Vibration Unit in reverse order and reassemble. Be careful not to overtighten the screw

Refer to manual sections "INPUT TEST" and "OUTPUT TEST" and check the operation of each device

Please refer to manual section "CONTROLLER ADJUSTMENT" and adjust

## 11-3 REPLACING MICROSWITCH

## Tools Required



Inside the Controller there are microswitches for Main Trigger, Sub Trigger, and Select Lever

Refer to "11-1" and remove the Controller in the same procedure

Remove 16 screws and remove Cover R.
When installing, pay attention to the direction of the select lever



Direction of Select Lever

Unplug the connector of the microswitch that is to be replaced


4
Remove the Microswitch to be replaced from the Cover L


Refer to steps 1 to 4, install the new Microswitch in reverse order and reassemble. Be careful not to overtighten the screw

6
Refer to manual sections "INPUT TEST" and "OUTPUT TEST" and check the operation of each device

Please refer to manual section "Controller ADJUSTMENT" and adjust

## 11-4 CHANGE SENSOR UNIT

## Tools Required

| PH Screwdriver |
| :--- | :--- |
| M3. M4 |

Refer to "11-1" and remove the Controller in the same procedure

Remove 16 screws and remove cover $R$.
When installing, please pay attention to the direction of the Select Lever



Direction of Select Lever

Lift the Sensor Unit and pull out connector


Refer to steps 1 to 3, install the new Sensor Unit in reverse order and reassemble. Be careful not to overtighten the screws.

## 5 Refer to manual sections "INPUT TEST" and "OUTPUT TEST" and check the operation of each device

## 6 <br> Please refer to manual section "Controller ADJUSTMENT" and adjust

## 11-5 REPLACING THE CONTROLLER CABLE

## Tools Required




1 Screw
M4x8, Flat with spring
washer

## 4

Lift the Controller cable and disconnect connector


5
Refer to steps 1 to 4, install the new Controller cable in reverse order and reassemble. Be careful not to overtighten the screw

## 11-6 CONTROL PANEL BUTTON SWITCH CHANGE

## Tools Required



1 Turn off the power switch
2 Release with the Master Key and open the Control Panel.
At this time, open the Control Panel until the stay is locked.
When closing the Control Panel, please open it once, unlock it and close it


3
Unplug the connector of the switch you want to replace


## Turn counterclockwise $45^{\circ}$ to unlock and remove the switch




## 5 <br> Unplug LED



6
Attach LED removed in step 5 to the new switch. Attach "+" marked on the LED and switch.


## 12 COIN HANDLING

## Handling the Coin Jam

If the coin is not rejected when the REJECT button is pressed, open the coin chute door and open the selector gate. After removing the jammed coin, put a normal coin in and check to see that the selector correctly functions.

12-1 CLEANING THE COIN SELECTOR

- Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry.
- Never apply machine oil, etc. to the Coin Selector.
- After cleaning the Coin Selector, insert a regular coin in the normal working status and ensure that the selector correctly functions.

The Coin Selector should be cleaned once every 3 months.
When cleaning, follow the procedure below:


Turn the power for the machine OFF. Open the Coin Chute Door

Remove the Coin Selector from the Coin Chute Door

Open the gate and dust off by using a soft brush (small soft Paint Brush, etc.)


12-1 FIG 1

## CLEANING THE COIN SELECTOR (MECHANICAL).

Remove the CRADLE. When removing the
Remove and clean smears by using a soft cloth dipped in water or diluted chemical detergent and then squeezed dry. retaining ring ( E ring) be very careful so as not to bend the rotary shaft.

Remove stain from the rotary shaft and shaft receiving portions by wiping off with a soft cloth.
 etc.

After wiping off as per previous step, further apply a dry cloth to completely dry the Coin Selector.

## Coin Insertion Test

Once every month, when performing the Coin SW Test, simultaneously check the following:

Does the Coin Meter count satisfactorily?
Does the coin drop into the cashbox correctly?

Is the coin rejected when inserted while keeping the REJECT Button pressed down?


12-1 FIG 3

## CLEANING THE COIN SELECTOR (SR3 / NRI)

1
Remove and clean smears by using a damp soft cloth dipped in water. DO NOT use any diluted chemical detergent or cleansing agent as this will impair the workings of the component.



Open the reject gate to gain access to the rundown path.

Remove the dirt and stains from the runway by wiping off with a soft damp cloth.

After wiping off as per previous step, further apply a dry cloth to completely dry the coin Selector.

## 12-2 FAULT FINDING

## Fault Finding

The following information is presented for customers' guidance in rectifying a fault but does not cover all possible causes.

All acceptors with electronic faults should be returned to an approved service centre for repair.

| SYMPTOM | INVESTIGATE | POSSIBLE CAUSE |
| :---: | :---: | :---: |
| Acceptor does not work (all coins reject) | Connector | Poor Contact |
|  |  | Loose Wire |
|  | Power Supply | Not switched on |
|  |  | Incorrect voltage |
|  |  | Inadequate current |
|  |  | Rise time too slow |
|  | Inhibit all inputs | Acceptor Inhibited |
|  | Accept gate | Gate not free or dislocated |
|  | Accept channel | Obstruction |
|  | Reject gate | Not fully closed |
|  | LED on rear cover RED | EEPROM chksm error |
|  |  | SR Sensor fault |
|  |  | Credit opto fault |
|  |  | Credit sensor blocked |
|  |  | Reject lever pressed |
|  | LED on rear cover YELLOW | Reinstall power |
| Poor Acceptance | Power Supply | Voltage less than 10v (Voltage drops when coil engages) |
|  | Accept gate | Gate jam or dislocated |
|  | Connector | Loose |
|  | Coin rundown | Dirty |
|  | Bank Select | Both banks enabled |
| Coin stick or jam in acceptor | Accept channel | Acceptor dirty or may have some damage |
|  | Accept gate |  |
|  | Regect gate |  |
| A true coin type rejects | Label | Coin not programmed |
| No accept signal | Connector | Loose or broken wire |
|  | Accept channel | Path dirty or obstructed |

## stoo IIPORTANT

- The price of play is determined by the configuration of switches located on either the EXCEL or VTS board. The type of board used is determined by product location. Switch settings for both types of board remain the same.

This product comes equipped with a Crane NRI Coin Acceptor. To adjust the price of play ALL CREDIT SETTINGS are adjusted via the EXCEL CREDIT BOARD.

## IMPORTANT!

The CREDIT SETTINGS within the SYSTEM TEST MODE must be set to 1 coin 1 credit to allow the CREDIT BOARD to function correctly.

The CREDIT BD has a built in accumilator. This is controlled by 2 DIL Switches. These allow the operator to select the price of play, type of coin acceptor and region.

EXCEL Credit Board


DIL SW3 (Regional Settings)
Adjust these switches to specify the type of Coin Acceptor used and currency.
Default $=$ SW1\&SW2 ON - SR3/NRI in parallel mode, Sterling.

SERVICE BUTTON
Status LED
CHANNEL 1
DIL SW1 (credit settings)
VOL CONTROL

Provides a SERVICE CREDIT when pressed
Flashes when functioning.
To Coin Acceptor (SR3 TYPE.)
Adjust to required price of pay.
MAIN VOLUME ADJUSTMENT (FRONT SPEAKERS)

## 12-4 ADJUSTING THE PRICE OF PLAY (VTS)

This product comes equipped with a Crane NRI Coin Acceptor. To adjust the price of play ALL CREDIT SETTINGS are adjusted via the VTS CREDIT BOARD.

IMPORTANT!
The CREDIT SETTINGS within the SYSTEM TEST MODE must be set to 1 coin 1 credit to allow the CREDIT BOARD to function correctly.

The VTS BD has a built in Credit Board. This is controlled by 2 DIL Switches. These allow the operator to select the price of play, type of coin acceptor and region.

## VTS Board



DIL SW3 (Regional Settings)
Adjust these switches to specify the type of Coin Acceptor used and currency.
Default $=$ SW1\&SW2 ON - SR3 in parallel mode, Sterling.

TEST BUTTON
SERVICE BUTTON
Status LED
CHANNEL A
DIL SW1 (credit settings)
DEMAG

Provides access to the TEST MENU when pressed.
Provides a SERVICE CREDIT when pressed
Flashes when functioning.
To Coin Acceptor (SR3 TYPE.)
Adjust to required price of pay.
NOT USED

VOL CONTROL AMAIN VOLUME ADJUSTMENT (FRONT SPEAKERS)
VOL CONTROL BSECONDARY VOL ADJUSTMENT (GUN SPEAKERS)
VOL CONTROL CNOT USED

## 13 PERIODIC INSPECTION

The items listed below require periodic check and maintenance to retain the performance of this machine and to ensure safe business operation.
When handling the controller, the player will be in direct contact with it. In order to always allow the player to enjoy the game, be sure to clean it regularly. Also, it is advisable to provide wet tissues, etc. available for player use.

## WARNING

- Every 6 months check to see if power cords are damaged, the plug is securely inserted, no dust has accumulated between the socket outlet and the power plug, etc. Using the product with accumulated dust in the interior may cause fire or electric shock.
- Never use a water jet, etc. to clean the inside or outside of the cabinet. If wetness occurs for any reason, do not use the product until it has completely dried.
- Once a year, request the office shown on this manual or the dealer from whom the product was originally purchased to perform the internal cleaning. Using the product with accumulated dust in the interior may cause fire or other accidents.
- Note that you are liable for the cost of cleaning the interior parts.
- There is the danger of accidents involving electrical shorts circuits or fire caused by factors such as the deterioration of insulation in electrical and electronic equipment over time. Check that there are no abnormalities such as odours from burning.

14 TABLE 01 PERIODIC INSPECTION TABLE

| PERIOD | ITEM | DESCRIPTION | REFERENCE |
| :---: | :---: | :---: | :---: |
| As appropriate | Cabinet Surface | Cleaning | As Below |
|  | Control Unit Surface |  |  |
| Daily | Cabinet | Confirm Adjusters Contact Floor |  |
| Weekly | Control Unit | Aim Test |  |
|  | LCD | Screen Cleaning |  |
|  |  | Screen Alignment |  |
| Monthly | Front Cabinet | Speaker Volume |  |
|  | Controller Cabinet | Check Input Devices |  |
|  | Controller Cabinet | Check Output Devices |  |
|  | Controller Unit | Check Speaker Volume |  |
|  |  | Speaker Inspection |  |
|  |  | Check Each Input Device |  |
|  |  | Check Each Output Device |  |
|  | LED board | LED Inspection |  |
|  | Coin Selector | Coin Path Inspection |  |
|  |  | Coin Insertion Test |  |
| Every 3 Months | Coin Selector | Cleaning |  |
| 1 Year | Ringwide | Cleaning |  |
|  | Power Cables | Inspection / Cleaning |  |
|  | Cabinet Interior | Cleaning |  |

## Cleaning the Cabinet Surfaces

When the cabinet surfaces are badly soiled, remove stains with a soft cloth dipped in water or diluted (with water) chemical detergent and squeezed dry. To avoid damaging surface finish, do not use solvents such as thinner, benzine, etc. other than ethyl alcohol, or abrasives, bleaching agent and chemical dustcloth.
Some general-purpose household, kitchen and furniture cleaning products may contain strong solvents that degrade plastic components, coatings, and print. Before using any cleaning product, read the product's cautionary notes carefully and test the product first on a small area that is not highly visible.

## 14 TROUBLESHOOTING

## 14-1 TROUBLESHOOTING (WHEN NO ERROR MESSAGE IS SHOWN)

## WARNING

- This work should be performed by site maintenance personnel or other skilled professionals. Work performed by non-technical personnel can cause a severe accident such as an electric shock. If there are no site maintenance personnel or other skilled professionals available, turn off the power immediately and contact the office given in this manual or from point of purchase.
- When working with the product, be sure to turn the power off. Working with the power on may cause and electric shock or short circuit accident.
- In order to prevent electric shock and short circuit, be sure to turn power off before performing work.
- Be careful so as not to damage wirings. Damaged wiring can cause electric shock or short circuit.
- After removing the cause of the functioning of the Circuit Protector, reinstate the Circuit Protector. Depending on the cause of the functioning, using the Circuit Protector as is without removing the cause can cause generation of heat and fire hazard.
- In the event that a problem cannot be resolved by employing the procedures listed in this Manual, be sure to request service from the office shown in this Manual or the dealer from whom the product was originally purchased. Attempts to employ procedures other than those specified in this Manual can cause electrical shock, shorting, or fire.
- In the event of a problem that is not described here, be sure to contact the office shown on this Manual or the dealer from whom the product was originally purchased. Careless attempts at repair can result in electrical shock, shorting, or fire.
- If an error message is displayed, identify the cause and without delay take the appropriate countermeasures. Leaving the error unaddresses could result in a breakdown.
- If a problem occurs, first inspect the connection of any wiring connectors.
- Static electricity from your body may damage some electronic devices on the IC board. Before handling any IC board, touch a grounded metallic surface so that static electricity is discharged.

If a problem occurs, first check to make sure that the wiring connectors are properly connected.

15 TABLE 01

$\left.$| PROBLEM | CAUSE | COUNTERMEASURES |
| :---: | :---: | :---: |
| When the Main <br> SW is turned ON, <br> the machine is not <br> activated. | The power is not ON | Firmly insert the plug into the outlet |
|  | Incorrect power source/voltage | Make sure that the power supply/ <br> voltage are correct |
|  | The Fuse on the AC Unit has <br> blown due to momentary over <br> current | After eliminating the cause of <br> overload, replace the specified rating <br> fuse |
|  |  |  |
|  |  |  |
| over current |  |  |$\quad$| After eliminating the cause of |
| :---: |
| overload, replace the specified rating |
| fuse | \right\rvert\,

## A WARNING

- When working with the product, be sure to turn the power off. Working with the power on may cause an electric shock or short circuit.
- Be careful not to damage the wires. Damaged wires may cause electric shock, short circuit or present a fire risk.
- Do not expose the game board, etc. without good reason. Failure to observe this can cause electric shock hazard or malfunctioning.
- Do not use this product with connectors other than those that were connected and used with the game board at the time of shipping. Do not carelessly connect wires to connectors that were not used at the time of shipping as this may cause overheating, smoke, or fire damage.
- When returning the game board after making repairs or replacements, make sure that there are no errors in the connection of connectors. Erroneous connections can lead to electrical shock, short circuits or fires.
- When connecting a connector, check the direction carefully. Connectors must be connected in only one direction. If indiscriminate loads are applied in making connections, the connector or its terminal fixtures could be damaged, resulting in electrical shock, short circuits, or fires.


## A CAUTION

- In this product, setting changes are made during the test mode. The game board need not be operated. Use the game board, etc. as is with the same setting made at the time of shipment so as not to cause electric shock and malfunctioning.
- Static electricity from your body may damage some electronics devices on the IC board. Before handling the IC board, touch a grounded metallic surface so that the static electricity can be discharged.


## stop IMPORTANT

- When a game board is to be replaced, put the old game board with anomaly into a special box for replacing the game board. If a special box is not available or if it has been damaged, arrange to have the Game Board packed in suitable packaging.
- For replacement or repair, pack the game board and send it without disassembling it. Order for servicing may not be accepted if any part of the game board has been removed. If any part is removed, a service fee will be charged even if the warranty period has not yet expired.
- Do not remove the key chip from the game board before sending the board for servicing.


## 15－1 HOW TO REMOVE GAME BOARD

The game board is inside the Front Door R mounted on the top shelf．

1 Turn off the power．
2 Unlock Front Door R with Master Key and remove（2）truss screws．


FIG．16－1a

Remove Front Door R Panel．The Game
Board is located on the top shelf．


FIG．16－1b


FIG. 16-1c

5
Disconnect all of the connectors connected to the Game Board.


FIG. 16-1d

Unscrew the (4) M4 Phillips screws which secure the Game Board in place (2 M4 fixings on each BRKT GAME BOARD).


FIG. 16-1e
M4 FIXINGS (2)

Lift and remove the Game Board from the wooden BASE GAME BOARD. The Game Bd is HEAVY, take care not to clash with other components when removing as this could cause component damage.

## 16 DESIGN RELATED PARTS

For the warning display stickers, refer to Section 1.


## 17 PARTS LIST

HDZ-0000UK
TOP ASSY HOTD SCARLET DAWN SDX

| $\begin{aligned} & \text { HDZ-1000UK } \\ & \text { ASSY MONITOR CABI } \end{aligned}$ | $\begin{aligned} & \text { HDZ-1001UK } \\ & \text { ASSY SUB MONITOR CAB } \end{aligned}$ |
| :---: | :---: |
|  | $\begin{aligned} & \text { HDZ-1010UK } \\ & \text { ASSY MONITOR FAN } \end{aligned}$ |
|  | $\begin{aligned} & \hline \text { HDZ-1020UK } \\ & \text { ASSY MONITOR BOX SPEAKER } \end{aligned}$ |
|  | $-\begin{aligned} & \text { HDZ-1080UK } \\ & \text { ASSY AC UNIT } \end{aligned}$ |
|  | HDZ-1200UK ASSY 55" LED MONITOR |
|  | HDZ-1210UK ASSY MASK GUN SENSE UPPER |
|  | HDZ-1220UK <br> ASSY MASK GUN SENSE LWR |
|  | HDZ-4000UK ASSY ELEC BOARD UPPER |
|  | HDZ-4100UK ASSY ELEC BOARD LOWER |
|  | $\begin{aligned} & \hline \text { HDZ-4200UK } \\ & \text { ASSY GAME BOARD } \end{aligned}$ |


| $\begin{aligned} & \hline \text { HDZ-2000UK } \\ & \text { ASSY CTRL CABI } \end{aligned}$ | $\begin{aligned} & \text { HDZ-0320UK } \\ & \text { ASSY SW UNIT } \end{aligned}$ |
| :---: | :---: |
|  | HDZ-2200UK ASSY CONTROL PANEL |
|  | HDZ-2300UK <br> ASSY CONTROLLER L |
|  | HDZ-2350UK ASSY CONTROLLER R |
|  | HDZ-2400UK ASSY CTRL CABI ELEC |


| HDZ-3000UKASSY REAR CABINET | $\begin{array}{\|l} \hline \text { HDZ-3400UK } \\ \text { ASSY BACKREST } \end{array}$ |
| :---: | :---: |
|  | $\begin{array}{\|l} \hline \text { HDZ-3500UK } \\ \text { ASSY OBJECT LED } \end{array}$ |
|  | $\begin{aligned} & \hline \text { HDZ-3600UK } \\ & \text { ASSY SEAT BTM } \end{aligned}$ |
|  | $\begin{aligned} & \hline \text { HDZ-3800UK } \\ & \text { ASSY SPEAKER REAR R } \end{aligned}$ |
|  | HDZ-3850UK ASSY SPEAKER REAR L |
|  | HDZ-0600UK ASSY BILLBOARD SDX |


| HDZ-INST-SDX |  |  |
| :--- | :--- | :--- |
| ASSY INST HDZ SDX | HDZ-0400UK <br> ASSY STEP | HDZ-0450UK <br> ASSY FLOOR |


| HDZ-0500UK ASSY ROOF SDX | $\begin{array}{\|l\|} \hline \text { HDZ-0520UK } \\ \text { ASSY AIR BOX } \end{array}$ |
| :---: | :---: |
| $\begin{array}{\|l} \hline \text { HDZ-0550UK } \\ \text { ASSY CURTAIN } L \end{array}$ | HDZ-0530UK ASSY ROOF BOX |

ASSY CURTAIN R


| SEQ | PT NUMBER | DESCRIPTION |
| :--- | :--- | :--- | REFERENCE $\quad$ QTY



| SEQ | PT NUMBER | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | SSR-0321UK | SW BRKT DOUBLE METER |  | 1 |
| ***102 | 220-5643UK | COIN METER SMALL 12V |  | 1 |
| ***103 | 421-12043-01 | STICKER SW PANEL CE |  | 1 |
| ***104 | OS1098 | CRIMP BELL END SMALL |  | 2 |
| ***105 | 601-0460 | CABLE TIE NYLON 100MM |  | 2 |
| ***106 | 838-14548-01AUK | SW \& C VOL BD W/O POT |  | 1 |
| ***201 | 000-P00308-W | M3X8 MSCR PAN W/FS PAS |  | 3 |
| ***301 | HDZ-60026UK | WH COIN HANDLING |  | 1 |



| SEQ | PT NUMBER | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| **1 | HDZ-0402UK | ASSY CABI STEP |  | 1 |
| ***2 | 117-0001UK | PLATE NUT M8 SINGLE |  | 1 |
| ***3 | 117-0002-060UK | PLATE NUT M8 DUAL 060 CENTRES |  | 2 |
| ***201 | 012-P00412-FB | N8X1/2" S/TAP FLG BLK |  | 2 |
| **2 | HDZ-0450UK | ASSY FLOOR |  | 1 |
| **3 | HDZ-0406UK | BRKT STEP SEAT JOINT |  | 2 |
| **4 | HDZ-0403UK | SASH FLOOR CENTRE |  | 1 |
| **5 | HDZ-0405UK | SASH FLOOR REAR |  | 1 |
| **6 | HDZ-0404UK | SASH FLOOR CENTRE SIDE |  | 2 |
| **9 | HDZ-0408UK | BRKT STEP SEAT CORNER |  | 2 |
| **10 | HDZ-0407UK | PLATE CONN PNL BASS SHAKER |  | 1 |
| **201 | 029-B00425-0B | M4X25 SKT BH BLK |  | 10 |
| **202 | 068-441616-0B | M4 WSHR 16OD FLT BLK |  | 10 |
| **203 | 029-B00840-0B | M8X40 SKT BH BLK |  | 2 |
| **204 | 060-S00800-0B | M8 WSHR SPR BLK |  | 2 |
| **205 | 068-852216-0B | M8 WSHR 22OD FLT BLK |  | 2 |
| **206 | 029-B00416 | M4X16 SKT BH PAS |  | 10 |
| **207 | 068-441616 | M4 WSHR 16OD FLT PAS |  | 10 |
| **208 | 029-B00425 | M4X25 SKT BH PAS |  | 2 |
| **209 | 012-P00412-FB | N8x1/2" S/TAP FLG BLK |  | 2 |
| **301 | HDZ-60043UK | WH STEP |  | 1 |



| SEQ | PT NUMBER |
| :--- | :--- |
| $* * * 1$ | HDZ-0451UK |
|  |  |
| $* * * 3$ | HDZ-0454UK |
| $* * * 4$ | HDZ-0455UK |
| $* * * 5$ | HDZ-0452UK |
| $* * * 6$ | HDZ-0453UK |
|  |  |
| $* * * 101$ | $130-5314$ |
| $* * * 201$ | $029-\mathrm{B} 00416$ |
| $* * * 202$ | $068-441616$ |
| $* * * 203$ | $060-\mathrm{S} 00400$ |
| $* * * 204$ | $050-\mathrm{U} 00400$ |
| $* * * 205$ | $012-\mathrm{P} 00416-\mathrm{FB}$ |
|  |  |
| $* * * 301$ | HDZ-60047UK |

DESCRIPTION REFERENCE
FLOOR STEP
SASH FLOOR FRONT 2
SASH FLOOR SIDE
BRKT FLOOR FRONT 2
BRKT FLOOR SIDE 2
BASS SHAKER ACT-50-4 1
M4X16 SKT BH PAS 8
M4 WSHR 16OD FLT PAS 18
M4 WSHR SPR PAS 8
$\begin{array}{ll}\text { M4 NUT NYLOK PAS } & 10\end{array}$
N8x5/8" S/TAP FLG BLK 4
WH BASS SHAKER STEP

QTY

2



| SEQ | PT NUMBER | DESCRIPTION |
| :--- | :--- | :--- |
| $* * * 1$ | HDZ-0521UK | AIR BOX | REFERENCE $\quad$ QTY



| SEQ | PT NUMBER | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | HDZ-0531UK | BOX ROOF |  | 1 |
| ***2 | HDZ-0533UK | BRKT LIGHT ROOF |  | 2 |
| ***3 | HDZ-0534UK | COVER LIGHT ROOF |  | 2 |
| ***4 | FN1012 | FAN GUARD METAL 120MM (FG-12) |  | 2 |
| ***5 | SND-1340UK | ASSY FAN |  | 2 |
| ***6 | DSD-4002UK | PLATE PSU POST |  | 1 |
| ***101 | 837-15070-04 | IC BD LED DRV32CH RS232 |  | 1 |
| ***102 | 400-150-012-03 | PSU 12V DC 150W MW EPP-150-12 |  | 1 |
| ***103 | 838-19187 | RGB SPOTLIGHT LED BD 5V |  | 4 |
| ***107 | OS1011 | PCB FEET RICHCO LCBS-L-5-01 |  | 3 |
| ***201 | 050-F00400 | M4 NUT FLG SER PAS |  | 17 |
| ***202 | 050-U00400 | M4 NUT NYLOK PAS |  | 8 |
| ***203 | 050-U00300 | M3 NUT NYLOK PAS |  | 8 |
| ***204 | 020-B00308-0B | M3X8 SKT BH BLK |  | 9 |
| ***205 | 060-F00300 | M3 WSHR FORM A FLT PAS |  | 1 |
| ***301 | HDZ-60032UK | WH ROOF POWER |  | 1 |
| ***302 | HDZ-60033UK | WH ROOF LED |  | 1 |
| ***303 | HDZ-60046UK | WH AIR GIMMICK |  | 1 |
| ***304 | HDZ-60034UK | WH SPOT LIGHT |  | 2 |
| ***305 | HDZ-60029UK | WH ROOF SIG |  | 1 |
| ***306 | HDZ-60049UK | WH WOOFER |  | 2 |



| SEQ | PT NUMBER |
| :--- | :--- |
| $* * * 1$ | HDZ-0551UK |
| $* * * 2$ | HDZ-0552UK |
|  |  |
| $* * * 201$ | $029-B 00416$ |
| $* * * 202$ | $068-441616$ |

## DESCRIPTION

REFERENCE
QTY
BRKT JOINT ROOF LEFT
1
SASH CURTAIN
2
***202 068-441616
M4X16 SKT BH PAS
7
M4 WSHR 16OD FLT PAS
7


(11) ASSY MONITOR CAB (HDZ-1000UK)


| (11) ASSY | Y MONITOR C | BI (HDZ-1000UK) |  | (D-2/2) |
| :---: | :---: | :---: | :---: | :---: |
| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| **1 | HDZ-1001UK | ASSY SUB MONITOR CABI |  | 1 |
| **2 | HDZ-1010UK | ASSY MONITOR FAN |  | 2 |
| **3 | HDZ-1080UK | ASSY AC UNIT |  | 1 |
| **4 | HDZ-1200UK | ASSY 55" LED MONITOR |  | 1 |
| **5 | HDZ-1210UK | ASSY MASK GUN SENSE UPPER |  | 1 |
| **6 | HDZ01220UK | ASSY MASK GUN SENSE LOWER |  | 1 |
| **7 | HDZ-4000UK | ASSY ELEC BD UPPER |  | 1 |
| **8 | HDZ-4100UK | ASSY ELEC BD LOWER |  | 1 |
| **9 | HDZ-4200UK | ASSY GAMEBOARD |  | 1 |
| **10 | HDZ-4300UK | ASSY XFMR BD |  | 1 |
| **11 | HDZ-1014UK | SPEAKER MASK |  | 1 |
| **12 | HDZ-1016UK | MASK STRAP UPPER |  | 1 |
| **13 | HDZ-1017UK | SASH MONITOR SENSOR LOWER |  | 1 |
| **14 | HDZ-1020UK | ASSY MONITOR BOX SPEAKER |  | 3 |
| **15 | HDZ-1209UK | GLASS LED 55" SCREEN PROTECT |  | 1 |
| **16 | LMA-7003UK | MASK STRAP |  | 1 |
| **18 | HDZ-5007-01UK | MON CABI LH CHEEK STICKER |  |  |
| **20 | HDZ-5008-01UK | MON CABI RH CHEEK STICKER |  |  |
| **21 | HDZ-5005-01UK | SPEAKER MASK STICKER |  |  |
| **101 | 838-14551-02UK | AC DISTRIBUTION BD |  |  |
| **102 | 280-A012640-WX | ROUTER TWIST D12 SO6.4 WOOD XL |  |  |
| **201 | 012-P00325 | N4X1" S/TAP PAN PAS |  |  |
| **202 | 029-B00412-0B | M4X12 SKT BH BLK |  |  |
| **203 | 029-B00416-0B | M4X16 SKT BH BLK |  |  |
| **204 | 029-B00425-0B | M4X25 SKT BH BLK |  |  |
| **205 | 029-B00430 | M4X30 SKT BH PAS |  |  |
| **206 | 029-B00625 | M6X25 SKT BH PAS |  |  |
| **207 | 060-F00400-0B | M4 WSHR FORM A FLT BLK |  |  |
| **208 | 068-441616 | M4 WSHR 160D FLT PAS |  |  |
| **209 | 068-441616-0B | M4 WSHR 16OD FLT BLK |  |  |
| **210 | 068-652216 | M6 WSHR 22OD FLT PAS |  |  |
| *301 | HDZ-60003UK | WH AC OUT TH |  |  |
| *302 | HDZ-60004UK | WH AC DIST ELEC |  |  |
| *303 | HDZ-60014UK | WH AC IN ELEC TH |  |  |
| *304 | HDZ-60019UK | WH LED G SENSE 3 |  |  |
| *305 | HDZ-60020UK | EH DC OUT |  |  |
| *306 | HDZ-60021UK | WH CONTROLLER EXT |  |  |
| *307 | HDZ-60022UK | WH SPEAKER OUT MONITOR |  |  |



| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | HDZ-1002UK | ASSY MONITOR CABINET |  | 1 |
| ****2 | HDZ-1002-BUK | DOOR UPPER BACK |  | 1 |
| ****3 | HDZ-1002-CUK | DOOR LOWER BACK |  | 1 |
| ****4 | HDZ-1002-DUK | DOOR ELEC ACCESS |  | 1 |
| ****5 | HDZ-1002-EUK | DOOR GAMEBOARD ACCESS |  | 1 |
| ***2 | HDZ-1003UK | JOINT BRKT CTRL LOWER LH |  | 1 |
| ***3 | HDZ-1004UK | JOINT BRKT CTRL LOWER RH |  | 1 |
| ***4 | HDZ-1005UK | JOINT BRKT CTRL UPPER |  | 2 |
| ***5 | HDZ-1006UK | CONN PNL MONITOR |  | 1 |
| ***6 | HDZ-1007UK | CONN PNL ROOF LH |  | 1 |
| ***7 | HDZ-1008UK | CONN PNL ROOF RH |  | 1 |
| ***8 | HDZ-1009UK | JOINT BRKT SHIPPING |  | 1 |
| ***9 | HDZ-1011UK | JOINT BRKT ROOF |  | 2 |
| ***10 | LMA-7005UK | BRKT CORNER SECURE SENSOR BAR |  | 2 |
| ***11 | LMA-7006UK | BRKT CORNER SECURE ADJ SENSOR |  | 2 |
|  |  | BAR |  |  |
| ***12 | CFB-4003-01UK | EARTH TERMINAL PLATE |  | 2 |
| ***101 | FN1012 | FAN GUARD METAL 120MM (FG-12) |  | 4 |
| ***201 | 012-P03512-F | N6X1/2" S/TAP FLG PAS |  | 13 |
| ***202 | 029-B00412 | M4X12 SKT BH PAS |  | 24 |
| ***203 | 029-B00416 | M4X16 SKT BH PAS |  | 7 |
| ***204 | 029-B00612 | M6X12 SKT BH PAS |  | 8 |
| ***205 | 029-B00625 | M6X25 SKT BH PAS |  | 6 |
| ***206 | 060-F00400 | M4 WSHR FORM A FLT PAS |  | 27 |
| ***207 | 068-441616 | M4 WSHR 16OD FLT PAS |  | 4 |
| ***208 | 068-652216 | M6 WSHR 22OD FLT PAS |  | 14 |



## ITEM NO PART NO

DESCRIPTION

MONITOR FAN BRKT
REFERENCE
QTY

| $* * * 1$ | HDZ-1012UK |
| :--- | :--- |
| $* * * 2$ | HDZ-1013UK |
|  |  |
| $* * * 101$ | $260-0012-01 \mathrm{UK}$ |
| $* * * 102$ | FN1012 |
| $* * * 103$ | OS1195 |
|  |  |
| $* * * 201$ | $020-\mathrm{B} 00316-0 \mathrm{~B}$ |
| $* * * 202$ | $029-\mathrm{B} 00412$ |
| $* * * 203$ | $060-\mathrm{S} 00300-0 \mathrm{~B}$ |
| $* * * 204$ | $060-\mathrm{F} 00300-0 \mathrm{~B}$ |
| $* * * 205$ | $060-\mathrm{F} 00400$ |
|  |  |
| $* * * 301$ | DB-60030UK |

BRKT FAN LOCATING

FAN DC 12V AXIAL
FAN GUARD METAL 120MM (FG-12)
2
RIVET SNAP SR-4080B 4
M3X16 SKT BH BLK 4
M4X12 SKT BH PAS 4
M3 WSHR SPR BLK 4
M3 WSHR FORM A FLT BLK 4
M4 WSHR FORM A FLT PAS 4
WH LED WHT 1


| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| **1 | HDZ-1021UK | BRKT MONITOR SPEAKER |  | 1 |
| **2 | HDZ-1022UK | BOX SPEAKER |  | 1 |
| **3 | HDZ-1023UK | PLATE SPEAKER COVER |  | 1 |
| **101 | 130-04030-E | SPKR ELIP 4OHM 30W VIS DX4x6P |  | 1 |
| **201 | 012-P00412-FB | N8x 1/2" S/TAP FLG BLK |  | 4 |
| **202 | 029-B00416-0B | M4X16 SKT BH BLK |  | 4 |
| **203 | 029-B00425-0B | M4X25 SKT BH BLK |  | 4 |
| **204 | 060-S00400-0B | M4 WSHR SPR BLK |  | 8 |
| **205 | 068-441616 | M4 WSHR 16OD FLT BLK |  | 8 |
| **301 | HDZ-60050UK | WH SPEAKER |  | 1 |



| ITEM NO PART NO |  | DESCRIPTION |
| :--- | :--- | :--- |
| $* * * 1$ | DA-1081UK | PLATE AC |$]$ QTY


| ITEM NO PART NO | DESCRIPTION | REFERENCE |
| :--- | :--- | :--- |
| $* * * 1$ | HDZ-1201UKUK | PLATE MONITOR LOCATING |
| $* * * 101$ |  | LED 55" MAKVISION |
|  |  | 2 |
| $* * * 201$ | $029-$-B00408 | M4X8 SKT BH PAS |
| $* * * 202$ | $060-$ F00400 | M4 WSHR FORM A FLT PAS |



| ITEM NO PART NO |  | DESCRIPTION |
| :--- | :--- | :--- | REFERENCE $\quad$ QTY



| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | HDZ-1211UK | MASK GUN SENSE |  | 1 |
| ***2 | LMA-7142UK | LED FILTER PLATE |  | 5 |
| ***101 | 838-19185 | LED BD G-SENSE HDZ |  | 5 |
| ***102 | OS1249 | P CLIP 6.5MM |  | 4 |
| ***201 | 050-U00300 | M3 NUT NYLOK PAS |  | 14 |
| ***202 | 280-L008080-OS | STANDOFF 7.94OD 4.93ID 7.94L |  | 10 |
| ***301 | HDZ-60018UK | WH LED G SENSE 2 |  | 1 |
| ***302 | HDZ-60018UK | WH LED G SENSE 2 |  | 3 |



| ITEM NO | PART NO |
| :---: | :---: |
| **1 | HDZ-0320UK |
| **2 | HDZ-2200UK |
| **3 | HDZ-2300UK |
| **4 | HDZ-2350UK |
| **5 | HDZ-2400UK |
| **6 | HDZ-2002UK |
| **7 | HDZ-2003UK |
| **8 | HDZ-2004UK |
| **9 | HDZ-2005UK |
| **10 | HDZ-2006UK |
| **11 | HDZ-2007UK |
| **12 | HDZ-2008UK |
| **13 | DUT-0302UK |
| **14 | HDZ-5100-01UK |
| **15 | HDZ-5101-01UK |
| **101 | 220-5374-01 |
| **102 | 220-5575UK |
| **103 | OS1247 |
| **104 | 220-5727-01B |
| **105 | 280-A012640-WX |
| **106 | PP1087 |
| **201 | 029-B00412 |
| **202 | 029-B00416 |
| **203 | 029-B00430 |
| **204 | 029-B00612 |
| **205 | 029-B00625 |
| **206 | 029-B00830 |
| **207 | 068-441616 |
| **208 | 068-652016 |
| **209 | 068-852216 |

DESCRIPTION REFERENCE
QTY
ASSY SWITCH UNIT ..... 1
ASSY CONTROL PANEL ..... 1
ASSY CONTROLLER L ..... 1
ASSY CONTROLLER R ..... 1
ASSY CTRL CABI ELEC ..... 1
ASSY CONTROL BASE CABINET ..... 1
BRKT MOUNT ..... 2
GUIDE CONTROLLER HOLDER ..... 2
BRKTCONTROLLER BASE ..... 2
RETAINING
BRKT CONTROL PANEL RETAINING ..... 1
PLATE CONTROLLER PNL MOUNT ..... 2
PLATE COVER ..... 1
PLATE COIN PATH ..... 1
CTRL CABI LH CHEEK STICKER ..... 1
CTRL CABI RH CHEEK STICKER ..... 1
DOOR DFMD W/FR\&LOCK C120 ..... 1
UNIV
LOCK (J9117) KEY TO LIKE 22MM W ..... 1
CAM
ALUMINIUM STICKY CLIP ASK-3 ..... 3
DOOR CASH H.S. STS ..... 1
ROUTER TWIST D12 SO6.4 WOOD XL ..... 25
BOX CASH ..... 1
M4X12 SKT BH PAS ..... 4
M4X16 SKT BH PAS ..... 9
M4X30 SKT BH PAS ..... 1
M6X12 SKT BH PAS ..... 24
M6X25 SKT BH PAS ..... 2
M8X30 SKT BH PAS ..... 10
M4 WSHR 16OD FLT PAS ..... 14
M6 WSHR 200D FLT PAS ..... 26
M8 WSHR 22OD FLT PAS ..... 10


| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | HDZ-2201UK | BASE CONTROL PANEL |  | 1 |
| ***2 | HDZ-5112-01UK | PLATE CONTROL PANEL |  | 1 |
| ***3 | HDZ-2203UK | BOARD CONTROL PANEL |  | 1 |
| ***4 | HDZ-2206UK | BRKT LOCATING |  | 2 |
| ***5 | HDZ-2207UK | BRKT FRONT SECURING |  | 1 |
| ***6 | HDZ-2208UK | BTN LEGEND VOLUME ON/OFF |  | 1 |
| ***101 | 509-0001-BL | BTN 12V-1.2W BLU S'POINT CPBL |  | 1 |
| ***102 | 509-0001-RE | BTN 12V-1.2W RED S'POINT CPBL |  | 1 |
| ***103 | 509-0001-CLR | BTN 12V-1.2W CLR S'POINT CPBL |  | 1 |
| ***104 | 280-A012640-WX | ROUTER TWIST D12 SO6.4 WOOD XL |  | 6 |
| ***201 | 029-B00412 | M4X12 SKT BH PAS |  | 6 |
| ***202 | 029-B00416 | M4X16 SKT BH PAS |  | 6 |
| ***203 | 050-F00400 | M4 NUT FLG SER PAS |  | 6 |
| ***204 | 060-F00400 | M4 WSHR FORM A FLT PAS |  | 6 |
| ***205 | 068-441616 | M4 WSHR 160D FLT PAS |  | 12 |
| ***301 | HDZ-60025UK | WH CONTROL PANEL |  | 1 |



| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| *** 1 | HDZ-2301 | CTRL HOLDER FRP |  | 1 |
| ***2 | HDZ-2302UK | CONTROLLER HOLDER BASE LH |  | 1 |
| ***3 | HDZ-2303UK | CONTROLLER HOLDER BASE LID |  | 1 |
| ***4 | HDF-1004UK | CONTROLLER CABLE BRKT |  | 1 |
| ***5 | HDZ-5130-01UK | CTRL HOLDER STICKER |  | 1 |
| ***101 | HDZ-2100-01 | CONTROL UNIT HDZ |  | 1 |
| ***102 | 601-0460 | CABLE TIE 100MM |  | 4 |
| ***201 | 029-B00412-0B | M4X12 SKT BH BLK |  | 8 |
| ***202 | 029-B00820-0B | M8X20 SKT BH BLK |  | 4 |
| ***203 | 060-F00400-0B | M4 WSHR FORM A FLT BLK |  | 8 |
| ***204 | 060-F00800-0B | M8 WSHR FORM A FLT BLK |  | 4 |
| ***301 | HDZ-60027UK | WH CONT HOLDER LED |  | 1 |
| ***302 | 390-2012-025RGB | LED FLX STRIP RGB 250MM |  | 2 |
| ***303 | BE-6001UK | ASSY LED CLIP |  | 2 |



| ITEM NO PART NO |  | DESCRIPTION | REFERENCE |
| :--- | :--- | :--- | :--- |
| $* * * 1$ | HDZ-2301 | CTRL HOLDER FRP | QTY |
| $* * * 2$ | HDZ-2302UK | CONTROLLER HOLDER BASE RH | 1 |
| $* * * 3$ | HDZ-2303UK | CONTROLLER HOLDER BASE LID | 1 |
| $* * * 4$ | HDF-1004UK | CONTROLLER CABLE BRKT | 1 |
| $* * * 5$ | HDZ-5130-01UK | CTRL HOLDER STICKER | 1 |
|  |  |  | 1 |
| $* * * 101$ | HDZ-2100-01 | CONTROL UNIT HDZ | 1 |
| $* * * 102$ | $601-0460$ | CABLE TIE 100MM | 1 |
|  |  |  | 4 |
| $* * * 201$ | $029-B 00412-0 B$ | M4X12 SKT BH BLK | 8 |
| $* * * 202$ | $029-B 00820-0 B$ | M8X20 SKT BH BLK | 8 |
| $* * * 203$ | $060-F 00400-0 B$ | M4 WSHR FORM A FLT BLK | 4 |
| $* * * 204$ | $060-F 00800-0 B$ | M8 WSHR FORM A FLT BLK | 8 |
|  |  |  | 4 |
| $* * * 301$ | HDZ-60027UK | WH CONT HOLDER LED | 4 |
| $* * * 302$ | $390-2012-025 R G B$ | LED FLX STRIP RGB 250MM | 1 |
| $* * * 303$ | BE-6001UK | ASSY LED CLIP | 2 |



| ITEM NO PART NO |  | DESCRIPTION |
| :--- | :--- | :--- |
| $* * * 1$ | HDZ-2401UK | BOARD CTRL CABI ELEC |$]$ QTY



| ITEM NO | PART NO |
| :---: | :---: |
| **1 | HDZ-3002UK |
| ***2 | HDZ-3002-BUK |
| ***3 | HDZ-3002-DUK |
| ***4 | HDZ-3002-EUK |
| ***5 | 117-0001UK |
| ***7 | DA-0001UK |
| ***101 | 601-5699UK-01 |
| ***102 | ~ |
| ***103 | $\sim$ |
| ***104 | ~ |
| ***201 | 030-00625-S |
| ***202 | 060-F00600 |
| ***203 | 012-P00412-FB |
| **2 | HDZ-3500UK |
| **3 | HDZ-3800UK |
| **4 | HDZ-3850UK |
| **5 | HDZ-3600UK |
| **6 | HDZ-3400UK |
| **7 | HDZ-3700UK |
| **8 | HDZ-1531 |
| **9 | HDZ-5512-02UK |
| **10 | HDZ-3023XUK |
| **13 | HDZ-3008UK |
| **14 | HDZ-3013UK |
| **15 | HDZ-5512-03UK |
| **18 | HDZ-5305-01UK |
| **19 | HDZ-5306-01UK |
| **20 | HDZ-0600UK |
| **23 | HDZ-3003UK |
| **24 | HDZ-3007UK |
| **25 | HDZ-3014UK |
| **26 | HDZ-3015UK |
| **27 | HDZ-3017UK |
| **28 | HDZ-3018UK |
| **29 | HDZ-3019UK |
| **30 | HDZ-3020UK |
| **31 | HDZ-3021UK |
| **32 | HDZ-3022UK |
| **101 | 130-5313 |
| **301 | HDZ-60036UK |
| **303 | HDZ-60031UK |
| **304 | HDZ-60040UK |
| **305 | HDZ-60039UK |
| **306 | HDZ-60050UK |
| **307 | BE-6001UK |
| **308 | 390-2012-080R |

DESCRIPTION REFERENCE ..... QTY
ASSY REAR CABINET ..... 1
DOOR WOOFER ..... 2
BRKT WINDOW ..... 3
BRKT WINDOW UPPER ..... 2
PLATE NUT M8 SINGLE ..... 9
ADJUSTER PLATE ..... 4
LEG ADJ M16X100 1L/NUT ..... 4
CASTOR 2.5" ..... 4
T-EDGE (BLACK) ..... ~
T-EDGE (WHITE) ..... ~
M6X25 BLT W/S PAS ..... 24
M6 WSHR FORM A FLT PAS ..... 24
N8X1/2" S/TAP FLG BLK ..... 33
ASSY OBJECT LED ..... 8
ASSY SPEAKER REAR L ..... 1
ASSY SPEAKER REAR R ..... 1
ASSY SEAT BTM ..... 1
ASSY BACKREST ..... 1
ASSY REAR MOULDING ..... 1
OBJECT FRP ..... 1
REAR WINDOW ..... 1
BRKT UPR LED REAR COVER ..... 1
BASE COVER ..... 1
PLATE LID BILLBOARD ..... 2
REAR WINDOW BACK ..... 1
STICKER REAR CABI LH SIDE FULL ..... 1
STICKER REAR CABI RH SIDE FULL ..... 1
ASSY BILLBOARD SDX ..... 1
JOINT BRIDGE HOLDER ..... 2
BRKT CONN ROOF ..... 1
BRKT FRP GUIDE UPR ..... 2
BRKT EYE WH GUIDE ..... 1
BRKT OBJECT UPPER L ..... 1
BRKT OBJECT LOWER R ..... 1
BRKT OBJECT LOWER L ..... 1
BRKT OBJECT UPPER R ..... 1
PLATE WOOFER PANEL MTG ..... 2
COVER LED REAR ..... 4
WOOFER 7OHM 100W 20CM ..... 2
WH REAR GIMMICK ..... 1
WH BASS SHAKER SEAT ..... 1
WH REAR COVER LED ..... 1
WH SEAT CABI SPEAKER ..... 1
WH SPEAKER ..... 2
ASSY LED CLIP ..... 4
LED FLX STRIP RGB 800MM ..... 4

| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | HDZ-3401UK | PANEL SEAT BACK |  | 1 |
| ***2 | HDZ-3402UK | BRKT SEAT BACK |  | 1 |
| ***5 | HDZ-5310-01UK | STICKER BACKREST |  | 2 |
| ***201 | 012-P00412-FB | N8X1/2" S/TAP FLG BLK |  | 6 |



| ITEM NO PART NO |  | DESCRIPTION |
| :--- | :--- | :--- | REFERENCE $\quad$ QTY




| ITEM NO | PART NO | DESCRIPTION | REFERENCE | QTY |
| :---: | :---: | :---: | :---: | :---: |
| ***1 | HDZ-1610 | REAR COVER |  | 1 |
| ***2 | HDZ-3703UK | BRKT JOINT REAR COVER |  | 3 |
| ***101 | 509-6466 | SW OBSA-30UMQ HDZ EYE |  | 1 |
| ***301 | HDZ-60041UK | WH EYE SW |  | 1 |



| ITEM NO PART NO |  |
| :--- | :--- |
| $* * * 1$ | HDZ-3005UK |
| $* * * 2$ | HDZ-1022UK |
| $* * * 3$ | HDZ-1023UK |
|  |  |
| $* * * 101$ | $130-04030-\mathrm{E}$ |
|  |  |
| $* * * 201$ | $029-\mathrm{B} 00425-0 \mathrm{~B}$ |
| $* * * 202$ | $068-441616-0 \mathrm{~B}$ |
| $* * * 203$ | $060-\mathrm{S} 00400-0 \mathrm{~B}$ |
| $* * * 204$ | $029-\mathrm{B} 00416-0 \mathrm{~B}$ |
| $* * * 205$ | $012-\mathrm{P} 00412-\mathrm{FB}$ |

DESCRIPTION
BRKT SPEAKER LEFT
BOX SPEAKER
PLATE SPEAKER COVER

## REFERENCE

QTY

SPKR ELIP 4OHM 30W VIS DX4X6P

M4X25 SKT BH BLK4
M4 WSHR 16OD FLT BLK8
M4 WSHR SPR BLK ..... 8
M4X16 SKT BH BLK ..... 4
N8x1/2" S/TAP FLG BLK ..... 4


| ITEM NO PART NO |  |
| :--- | :--- |
| $* * * 1$ | HDZ-3005UK |
| $* * * 2$ | HDZ-1022UK |
| $* * * 3$ | HDZ-1023UK |
|  |  |
| $* * * 101$ | $130-04030-\mathrm{E}$ |
|  |  |
| $* * * 201$ | $029-\mathrm{B} 00425-0 \mathrm{~B}$ |
| $* * * 202$ | $068-441616-0 \mathrm{~B}$ |
| $* * * 203$ | $060-\mathrm{S} 00400-0 \mathrm{~B}$ |
| $* * * 204$ | $029-\mathrm{B} 00416-0 \mathrm{~B}$ |
| $* * * 205$ | $012-\mathrm{P} 00412-\mathrm{FB}$ |


| DESCRIPTION | REFERENCE | QTY |
| :--- | :---: | :---: |
| BRKT SPEAKER RIGHT |  | 1 |
| BOX SPEAKER | 1 |  |
| PLATE SPEAKER COVER | 1 |  |
| SPKR ELIP 4OHM 30W VIS DX4X6P | 1 |  |
| M4X25 SKT BH BLK | 4 |  |
| M4 WSHR 16OD FLT BLK | 8 |  |
| M4 WSHR SPR BLK | 8 |  |
| M4X16 SKT BH BLK | 8 |  |
| N8x1/2" S/TAP FLG BLK | 4 |  |




| ITEM NO PART NO |  | DESCRIPTION | REFERENCE |
| :--- | :--- | :--- | :---: |
| $* * * 1$ | HDZ-4101UK | BOARD LOWER ELEC | 1 |
| $* * * 101$ | $400-150-012-01$ |  |  |
| $* * * 102$ | $400-100-05-01$ | PSU 12V 150W LPP-150-12 | 1 |
| $* * * 103$ | $400-320-036$ | RSP-320 MW 320W 36V SMPSU | 1 |
|  |  |  | 1 |
| $* * * 105$ | $838-19184$ | IC BD G-SENSE HDZ | 1 |
| $* * * 106$ | $839-1383$ | CLASS D 10W STEREO AMP MAXIN | 1 |
| $* * * 107$ | OS1011 | PCB FEET RICHCO LCBS L-5-01 | 1 |
| $* * 108$ | $280-A 012640-W X$ | ROUTER TWIST D12 SO6.4 WOOD X | 8 |
| $* * * 109$ | $838-19183-01$ | 60-100W AUDIO AMP BD | 14 |
| $* * * 201$ | $000-$ P00420 |  | 1 |
| $* * 202$ | $012-P 00308$ | M4X20 MSCR PAN PAS | 4 |
| $* * * 203$ | $012-P 00325$ | N4X5/16" S/TAP PAN PAS | N4X1" S/TAP PAN PAS |

## (32) ASSY ELEC BOARD LOWER (HDZ-4100UK)

***301 HDZ-60006UK WH AC IN ELEC COM 1
***302 HDZ-60007UK WH ELEC DC OUT 1
***303 HDZ-60008UK
***304 HDZ-60009UK
***305 HDZ-60010UK
***306 HDZ-60011UK
***307 HDZ-60012UK
***308 HDZ-60013UK
***309 HDZ-60017UK
***310 HDZ-60050UK
WH IR LED OUT 1
WH RS232C G SENSE 1
WH AMP VOL CONT 1
WH 36V AUDIO ELEC 1
WH AMP VOL 1
WH SPEAKER DX 1
WH LED G SENSE 1 1
WH SPEAKER 3


ITEM NO PART NO
$\begin{array}{ll}* * * 1 & \text { HDZ-4201UK } \\ * * * 2 & \text { HDZ-4202UK }\end{array}$
$\begin{array}{ll}* * * 101 & 849-0005 \\ * * * 102 & 610-0 X X X X ? ? \\ * * * 103 & 280-\mathrm{A} 012640-\mathrm{WX}\end{array}$
***103 280-A012640-WX
***201 029-B00412
***202 029-B00416
***203 060-F00400
***204 068-441616
$\begin{array}{ll}\text { ***301 } & \text { HDZ-60005UK } \\ \text { ***302 } & \text { HDZ-60045UK } \\ \text { ***303 } & 600-7011-0200 \mathrm{UK}\end{array}$

DESCRIPTION

BASE GAMEBOARD
BRKT GAMEBD

ASSY CASE ALLS UX W S/B
KEY CHIP ????
ROUTER TWIST D12 SO6.4 WOOD X

M4X12 SKT BH PAS
M4X16 SKT BH PAS
M4 WSHR FORM A FLT PAS
M4 WSHR 16OD FLT PAS

WH RS232C TO ELEC
WH AUDIO JACK
DA DVI TO DVI 200CM


| ITEM NO PART NO |  | DESCRIPTION |
| :--- | :--- | :--- |
| $* * * 1$ | HDZ-4301UK | BOARD XFMR |$\quad$ QTY



| ITEM NO PART NO |  |
| :--- | :---: |
| $* * * 1$ | HDZ-0400UK |
| $* * * 2$ | HDZ-0500UK |
|  |  |
| $* * * 4$ | HDZ-0051UK |
| $* * * 5$ | HDZ-0503UK |
| $* * * 6$ | HDZ-0504UK |
| $* * * 7$ | HDZ-0550UK |
| $* * * 8$ | HDZ-0570UK |
| $* * * 9$ | HDZ-0603UK |
|  |  |
| $* * * 20$ | HDZ-5500-01UK |
| $* * * 21$ | HDZ-5501-02UK |
| $* * * 22$ | HDZ-5400-01UK |
| $* * * 23$ | HDZ-5401-01UK |
| $* * * 24$ | HDZ-5402-01UK |
|  |  |
| $* * * 201$ | $029-B 00850-0 B$ |
| $* * * 202$ | $029-B 00825-0 B$ |
| $* * * 203$ | $060-S 00800-0 B$ |
| $* * * 204$ | $068-852216-0 B$ |
| $* * * 205$ | $029-B 00416-0 B$ |
| $* * * 206$ | $068-441616-0 B$ |
| $* * * 207$ | $029-B 00840-0 B$ |
| $* * * 208$ | $029-B 00412-0 B$ |
| $* * * 209$ | $029-B 00412$ |
| $* * * 210$ | $068-441616$ |
| $* * * 211$ | $029-B 00408$ |
|  |  |


| DESCRIPTION | REFERENCE | QTY |
| :--- | :---: | :---: |
| ASSY STEP | 1 |  |
| ASSY ROOF SDX | 1 |  |
| JOINT BRIDGE | 2 |  |
| BRKT ROOF CONN LID REAR | 1 |  |
| BRKT ROOF CONN LID FRONT | 1 |  |
| ASSY CURTAIN L | 1 |  |
| ASSY CURTAIN R | 1 |  |
| BRKT POP | 1 |  |
| BILLBOARD PLATE | 1 |  |
| BILLBOARD POP | 1 |  |
| SIDE CURTAIN | 2 |  |
| SUB CURTAIN L | 1 |  |
| SUB CURTAIN R | 1 |  |
| M8X50 SKT BH BLK | 2 |  |
| M8X25 SKT BH BLK | 2 |  |
| M8 WSHR SPR BLK | 32 |  |
| M8 WSHR 22OD FLT BLK | 32 |  |
| M4X16 SKT BH BLK | 14 |  |
| M4 WSHR 16OD FLT BLK | 18 |  |
| M8X40 SKT BH BLK | 24 |  |
| M4X12 SKT BH BLK | 4 |  |
| M4X12 SKT BH PAS | 4 |  |
| M4 WSHR 16OD FLT PAS | 9 |  |
| M4X8 SKT BH PAS | 24 |  |
| M | 2 |  |

## 18 WIRE COLOR CODE TABLE

 from the previous wire colors will create a high risk of fire.The color codes for the wires used in the diagrams in the following chapter are as follows.
A PINK
B SKY BLUE
C BROWN
D PURPLE
E LIGHT GREEN
Wires other than those of any of the above 5 single colors will be displayed by 2 alphanumeric characters.

```
1 RED
2 BLUE
3 YELLOW
G GREEN
5 WHITE
7 ORANGE
BLACK
9 GRAY
```

If the right-hand side numeral of the code is 0 , then the wire will be of a single color shown by the lefthand side numeral (see the above).

Note 1: If the right-hand side numeral is not 0, that particular wire has a spiral color code. The lefthand side character shows the base color and the right-hand side one, the spiral color.
<Example> 51…....WHITE/RED


Note 2: The character following the wire color code indicates the size of the wire.

| U: | AWG16 |
| :--- | :--- |
| K: | AWG18 |
| L: | AWG20 |
| None: | AWG22 |

(1 OF 7)

(2 of 7)

(3 of 7 )

(4 of 7 )

(5 of 7)

(6 of 7)

(7 of 7)


## - SEGA TOTAL SOLUTIONS -

42 Barwell Business Park Leatherhead Road,<br>Chessington,<br>Surrey,<br>KT9 2NY<br>United Kingdom

Tel: +44 (0) 2083918060
Fax: +44 (0) 2083918096

## STIS

## Exclusive Suppliers of SEGA Spares

To Heathrow Airport



[^0]:    Item Select Screen

