



OWNER'S MANUAL

LG LED Signage

(LG LED CINEMA SCREEN)

Please read this manual carefully before operating your set and retain it for future reference.

LAD033FB7B*

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WARNING - This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

SAFETY PRECAUTIONS

Please read these safety precautions carefully before using the product.

WARNING

- If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

CAUTION

- If you ignore the caution message, you may be slightly injured or the product may be damaged.

Precautions In Installing the Product

WARNING

- Keep away from heat sources like electrical heaters.
 - Electrical shock, fire, malfunction, or deformation may occur.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
 - Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- Do not put heavy objects on the product or sit upon it.
 - If the product collapses or is dropped, you may be injured. Children must pay particular attention.
- Do not leave the power or signal cable unattended on the pathway.
 - The passerby can trip or fall, which can cause electrical shock, fire, product breakdown, or injury.
- Install the product in a neat and dry place.
 - Dust or moisture can cause electrical shock, fire or product damage.
- If you dropped the product or the case is broken, turn off the product and unplug the power cord.
 - If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.

- Do not drop an object on or apply pressure to the product. Do not throw any toys or objects on the product screen.
 - It can cause injury to human, problem to product and damage the display.
- Do not let the product fall or drop when connecting it with an external device.
 - This may cause injury and/or damage to the product.
- Do not install this product on a wall where there is high risk of exposure to oil fumes or mist.
 - This may damage product and cause it to fall.
- Install the product firmly fixed on a floor, wall, etc. to prepare against external impact such as wind and earthquake.
 - You must refer to the installation guide.
- Safely install the product in a place that can hold the weight of the product.
 - A lack of strength may cause the product to fall.



CAUTION

- Make sure the product ventilation holes are not blocked. Install the product in a suitably wide place (more than 100 mm (3.9 inches) from the wall).
 - If you install the product too close to the wall, it may be deformed or fire can break out due to internal heat.
- When installing the product on a shelf or cabinet, make sure that the bottom end of the product is not protruding forward.
 - The product may fall due to unbalanced center of gravity, which may cause personal injury or damage to the product. Be sure to use cabinets or shelves that fit your product.
- Do not block the ventilation hole of the product with a tablecloth or curtain.
 - The product can be deformed or fire can break out due to overheating inside the product.
- Install the product on a flat and stable place that has no risk of dropping the product.
 - If the product is dropped, you may be injured or the product may be broken.
- Install the product where no EMI occurs.
- Keep the product away from direct sunlight.
 - The product can be damaged.
- If you install the product in a place that does not meet the recommended conditions, this may cause serious damage to the product's picture quality, life cycle, and appearance. Please check with LG or a qualified installer before installing. This caution applies to a place where there is an abundance of fine dust or oil mist, chemical substances are used, the temperature is very high or low, the humidity is very high, or the product is likely to remain turned on for a long period of time (airport and train station). failure to do so will invalidate the warranty.
- Do not install the product in an area with poor ventilation (e.g. on a bookshelf, in a closet) or outside and avoid placing on cushions or carpets.
- In addition, do not install it where there are heating objects such as lighting equipment.

Precautions to the AC Adapter and Electrical Power

WARNING

- If water or any foreign substance goes inside the product (TV, monitor, power cord, or AC adapter), disconnect the power cord immediately and contact the service center.
 - Otherwise, this may cause a fire or electric shock due to damage to the product.
- Do not touch the power plug or AC adapter with wet hands. If the pins of the plug are wet or dusty, wipe and dry them before use.
 - Otherwise, this may cause a fire or electric shock.
- Make sure to completely insert the power cord into the AC adapter.
 - If loosely connected, the poor connection may cause a fire or electric shock.
- Be sure to use power cords and AC adapters provided or approved by LG Electronics, Inc.
 - The use of non-approved products may cause a fire or electric shock.
- When unplugging the power cord, always pull it by the plug. Do not bend the power cord with excessive force.
 - The power line can be damaged, which may cause electric shock or fire.
- Be careful not to step or place heavy objects (electronic appliances, clothing, etc.) on the power cord or AC adapter. Be careful not to damage the power cord or AC adapter with sharp objects.
 - Damaged power cords may cause a fire or electric shock.
- Never disassemble, repair or modify the power cord or AC adapter.
 - This may cause a fire or electric shock.
- Make sure to connect the power cable to the grounded current.
 - You may be electrocuted or injured.
- Use the rated voltage only.
 - The product can be damaged, or you may be electrocuted.
- In the presence of thunder and lightning, never touch the power cord and signal cable because it can be very dangerous.
 - It can cause electric shock.
- Do not connect several extension cords, electrical appliances, or electrical heaters to a single outlet. Use a power strip with a grounding terminal designed for exclusive use with the computer.
 - A fire can break out due to overheating.
- Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off.
 - You may be electrocuted due to excess moisture.

- If you don't intend to use the product for a long time, unplug the power cable from the product.
 - Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- Fix the power cable completely.
 - If the power cable is not fixed completely, a fire can break out.
- Do not insert a conductor (like a metal chopstick) into one end of the power cable while the other end is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal.
 - You may be electrocuted.
- The appliance coupler is used as the disconnect device.
- Please make sure the device is installed near the wall outlet to which it is connected and that the outlet is easily accessible.
- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.

**CAUTION**

- Be sure to keep the outlet, AC adapter, and pins of the power plug clean from dust and etc.
 - This may cause a fire.
- Do not unplug the power cord while the product is in use.
 - Electrical shock can damage the product.
- Use only the power cord supplied with the unit. If you use another power cord, make sure that it is certified by the applicable national standards when not provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.
- Ensure the power cord does not come into contact with hot objects such as a heater.
 - This may cause a fire or an electric shock hazard.

Precautions In Moving the Product

WARNING

- Make sure to turn off the product.
 - You may be electrocuted or the product can be damaged.
- Make sure to remove all cables before moving the product.
 - You may be electrocuted or the product can be damaged.
- Make sure the panel faces forward and hold it with both hands to move. If you drop the product, the damaged product can cause electric shock or fire. Contact an authorized the service center for repair.
- Make sure the product is turned off, unplugged, and all cables have been removed. It may take 2 or more people to carry larger apparatus. Do not press against or put stress on the front panel of the apparatus.

CAUTION

- Do not shock the product when moving it.
 - You may be electrocuted or the product can be damaged.
- Do not dispose the product-packing box. Use it when you move.

Precautions In Using the Product

WARNING

- Do not disassemble, repair or modify the product at your own discretion.
 - Fire or electric shock accident can occur.
 - Contact the service center for check, calibration or repair.
- When the display is to be left unattended for an extended period of time, unplug it from the wall outlet.
- Do not shock or scratch the front and sides of the screen with metallic objects.
 - Otherwise, it may cause damage to the screen.
- Never touch the wall outlet when there is leakage of gas, open the windows and ventilate.
 - It may cause a fire or a burn by a spark.
- Keep the product away from water.
 - Fire or electric shock accident can occur.
- If you can smell smoke or other odors or hear a strange sound unplug the power cord and contact the service center.
 - Fire or electric shock accident can occur.
- Do not touch the surface to overheat.
- Avoid high temperatures and humidity.
- Do not use high voltage electrical goods near the product(e.g. electric swatter).
 - This may result in product malfunction.

CAUTION

- All the power sources must be disconnected by removing the power cables to remove all power from the unit.
- Do not put or store inflammable substances near the product.
 - There is a danger of explosion or fire due to careless handling of the inflammable substances.
- When cleaning the product, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not clean with a wet cloth or spray water or other liquids directly onto the product. An electric shock may occur. (Do not use chemicals such as benzene, paint thinners, or alcohol.)
- Take a rest from time to time to protect your vision.
- Keep the product clean at all times.
- Take a comfortable and natural position when working with a product to relax the muscles.
- Take a regular break when working with a product for a long time.
- Do not press strongly upon the panel with a hand or sharp object such as nail, pencil, or pen, or make a scratch on it.
- Keep the proper distance from the product.
 - Your vision may be impaired if you look at the product too closely.
- Leaving a fixed image on the screen for a long time may cause damage to the screen and cause image retention.
 - Image retention and related problems are not covered by the warranty on this product.

- Set the appropriate resolution and clock by referring to the User's Guide.
 - Your vision can be impaired.
- Use authorized detergent only when cleaning the product. (Do not use benzene, thinner, or alcohol.)
 - Product can be deformed.
- Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).
- Batteries should not be exposed to excessive heat. For example, keep away from direct sunlight, open fireplace, and electric heaters.
- Do not place non-rechargeable batteries in charging device.
- Since the LED Signage uses a high technology to produce a screen comprised of millions of LED packages, a few pixel spots (red, green, white, and black) may occasionally appear on the screen during use.
 - This is a phenomenon that can occur due to the unique properties of the LED Signage and does not indicate any performance issues or malfunction.
- To clean the product, use an air gun to lightly remove dust from the front frame and the screen. If there are foreign substances in between the LEDs on the screen, it may cause a defect in the screen.
 - Do not physically come in contact with the screen of the LED Package. This may cause damage to the product.

Mounting on a Wall

- Do not install this product by yourself as you may injure yourself or cause damage to product. Please contact service personnel authorized by manufacturer.

Precautions for Using the Lithium Batteries

WARNING

- Avoid places with high humidity.
 - It may cause electrical shock or damage the product.
- Do not expose batteries to excessive heat, such as direct sunlight, open fireplace, and electric heaters.
 - It may cause fire and you may be injured.
- Do not dispose of batteries in a fire.
 - Please dispose batteries at a local recycling center or a retail store that handles batteries.
- Used batteries, which include rechargeable batteries, should be recycled separately from waste.
 - Please dispose used batteries and rechargeable batteries at a local recycling center or a retail store that handles batteries.

CAUTION

- Do not short circuit and disassemble of batteries.
 - It may cause electrical shock or fire.
- Do not mix new batteries with old batteries.
 - Overheating or leaking batteries may cause fire or electric shock.
- Only use the specified type of battery. Do not insert batteries that are not rechargeable into the charger.
 - Overheating or leaking batteries may cause fire or electric shock.

ASSEMBLING AND PREPARING



CAUTION

- Always use genuine components to ensure safety and durability of the product.
- The product warranty will not cover damage or injury caused by the use of unauthorized components.
- There is a risk of explosion if the battery is replaced with one that is a different type.
- Batteries that have reached end-of-life should be disposed in an appropriate manner.



NOTE

- The accessories provided with your product may vary depending on the model or region.
- Product specifications or content in this user manual may be changed without prior notice due to the upgrade of product functions.
- The warranty will not cover any damage caused by using the product in an excessively dusty environment.

SAFETY TIPS

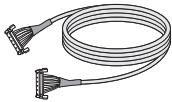
- 1 Please read these safety instructions carefully prior to installation.
- 2 Properly store these safety instructions.
- 3 Abide by all safety instructions.
- 4 Please do not install the cabinets in an environment where they are exposed to dust and/or liquid.
- 5 Please do not expose the cabinets to water or mist.
- 6 Do not install the cabinets in places near heat sources including heaters, radiators, electric furnaces, stoves and other devices (including amplifiers) that produce high levels of heat.
- 7 Please do not block any vents. Install the cabinet according to the instructions of the manufacturer.
- 8 Please properly protect the power cables and related electrical facilities, especially the power plugs, easy power sockets, as well as joints between power cables and the cabinets. Do not trample on or squeeze them.
- 9 Electrical accessories that are not authenticated by the manufacturers are not allowed to use.
- 10 Maintenance and service should be carried out by qualified professional technicians, in case of the following circumstances:
 - The damage of the power cables
 - Liquid that are infiltrated into the cabinet
 - Particles dropped into the cabinet
 - The cabinet that has been influenced by water or mist in a bad way.
 - Physical damage of the cabinet itself
- 11 Please do not use chemical solvents to clean the cabinet.
- 12 Reliable grounding is required for on-site installation of the cabinets.
- 13 Requirements for altitude, ambient humidity, and ambient temperature:
 - Altitude $\leq$ 2000 m (6561.6 ft)
 - Operating ambient temperature $\leq$ 40 °C (104 °F)
 - Operating ambient humidity $\leq$ 80 %
- 14 Follow the procedure outlined in the IMB manual when powering off or on the IMB equipment.
- 15 When assembling the product, place a circuit breaker or power switch near the equipment to cut off the equipment's power supply for easy access and operation.
 - Use the circuit breaker and power switch that are appropriate based on the screen rating.
- 16 No any flame(such as a candle) should be placed on/near the cabinets. When the operating temperature of the cabinet becomes higher than 40 degrees celsius (104 °F), proper air conditioning should be provided.
- 17 The power supply to the cabinets should include a protective grounding connection.
- 18 The size of grounding conductor is 1.5 mm² (0.05 in²).
- 19 The screen must be securely attached to the floor or wall.

ACCESSORIES

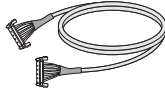
! NOTE

- All the accessories are necessary to complete one LED screen with 176 cabinets.
- The accessories are packed separately from a packing box for each cabinet.

UHD Screen



LVDS Cable
2500 mm (98.4 inches): 3 EA



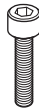
LVDS Cable
1100 mm (43.3 inches): 173 EA



AC Power Cable
1320 mm (51.9 inches): 144 EA



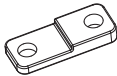
AC Power Cable
14500 mm (570.8 inches): 33 EA



M5 x L12 Screws: 1000 EA



M6 x L20 Screws: 740 EA



Fixer: 500 EA



Lithium Battery: 358 EA
(CR2025 3.0 V 150 mAh)



Tamper Proof Label: 704 EA



M3 x L8 Screws: 704 EA



Setup Guide
LAD033FB7B1



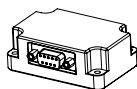
Cable Tie: 528 EA



Cabinet Plate 4-hole
(Center type): 175 EA



Cabinet Plate 2-hole
(Top-Bottom-type): 55 EA



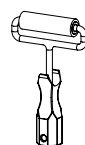
3D Conversion Board: 1 EA

3D Cable
1500 mm (59 inches) :
1 EA3D Cable
10000 mm (393.7 inches):
1 EA3D Cable(DB9)
300 mm (11.8 inches) :
1 EA3D Cable
300 mm (11.8 inches) :
1 EA

IMB Thermal Pad: 2 EA



Installation Tool Set: 1 EA



Roller: 2 EA



Glue Ball: 10 EA



Pincette: 2 EA

! NOTE

- For smooth installation, the above parts are supplied with extra quantities.

Separate Purchase

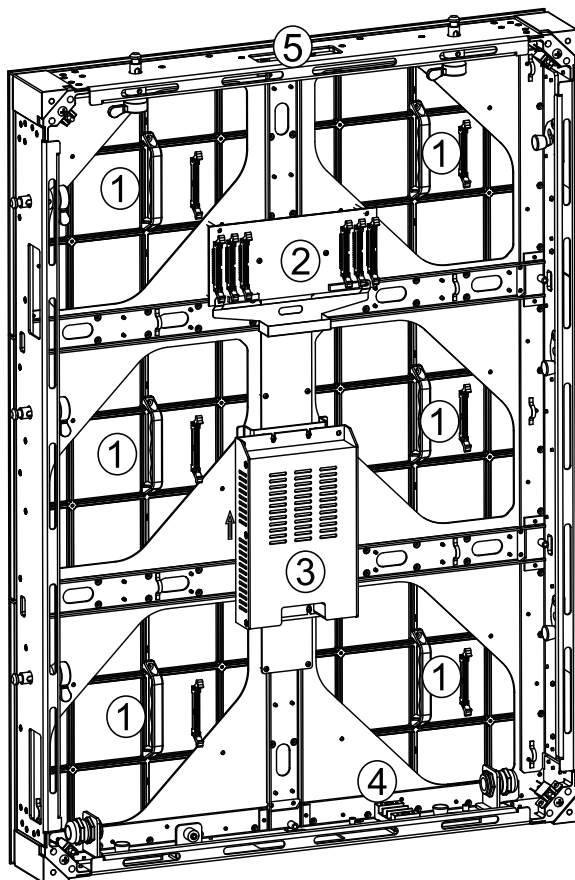
Lithium Battery: 3 EA
(CR2032 3.0 V 210 mAh)

INTERNAL STRUCTURE AND COMPOSITION OF A CABINET

(Applicable to both main / secondary cabinets)

Composition of Unit Cabinet

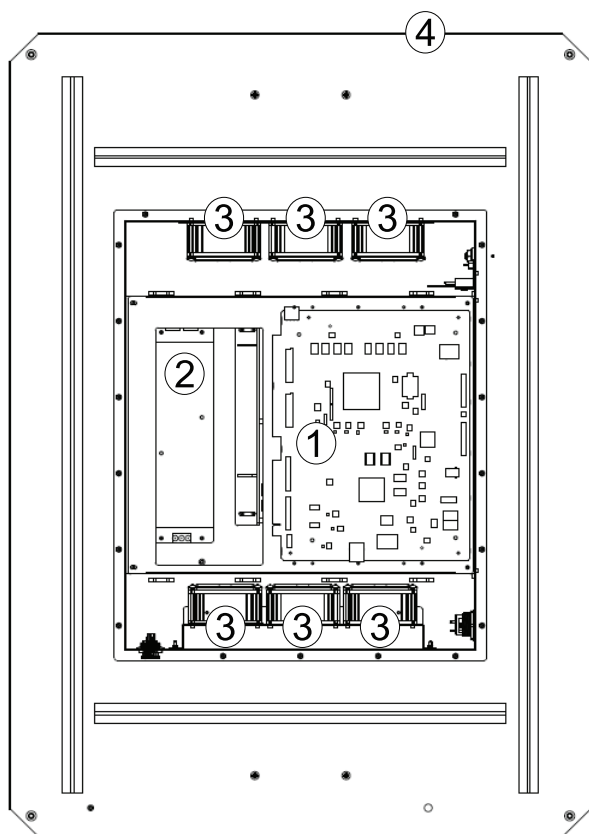
- 1 LED module (6 EA)
- 2 Receiving card (built-in I / O interfaces) (1 EA)
- 3 4.2 V, 30 A power supply (1 EA)
- 4 AC power supply terminal (1 EA)
- 5 Cabinet frame



INTERNAL STRUCTURE AND COMPONENTS OF MAIN CABINET BACK COVER

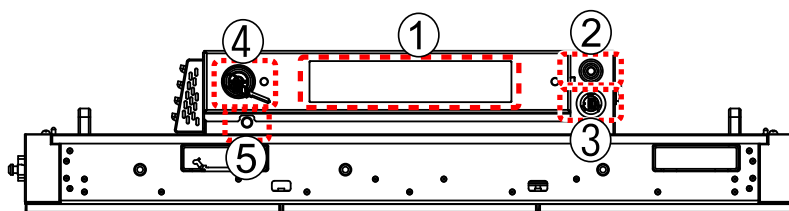
Internal Structure of Main Cabinet Back Cover

- 1 Mainboard (1 EA)
- 2 12 V, 17 A power supply (1 EA)
- 3 Fan (6 EA)
- 4 Cabinet back cover



TERMINALS AND BUTTONS OF MAIN CABINET

- 1 IMB port
- 2 Marriage button
- 3 Ethernet input (Service only)
- 4 Door lock
- 5 3D port (Service only)



CAUTION

- Do not leave the door of the IMB port open for a long time. The battery may discharge quickly.

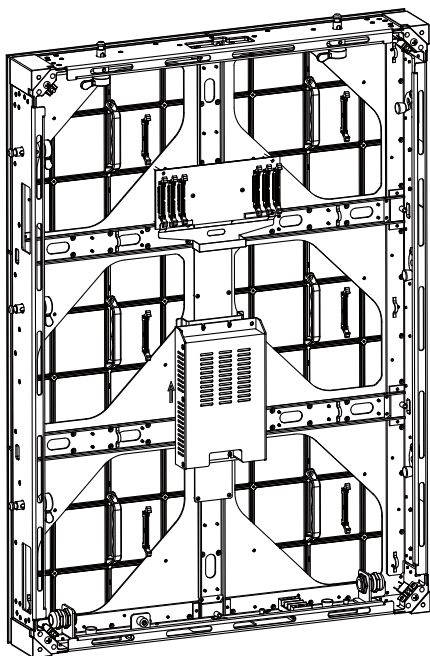
INSTALLATION

Safety Tips: Please handle with care when carrying, installing and maintaining the display unit cabinets or LED modules to avoid damaging the LED lamp bead.

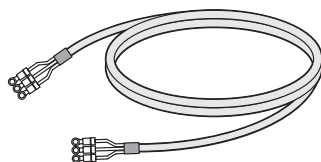
Cabinet Screen Test

Check if the screen works normally by testing it before installing the cabinet.

- 1 Open the back cover of the cabinet and connect it with the panelboard using the accompanying AC power cable. (See page 32)
- 2 Check if the screen displays an image after the cable is connected. (The pattern displayed on the screen might vary.)



Cabinet

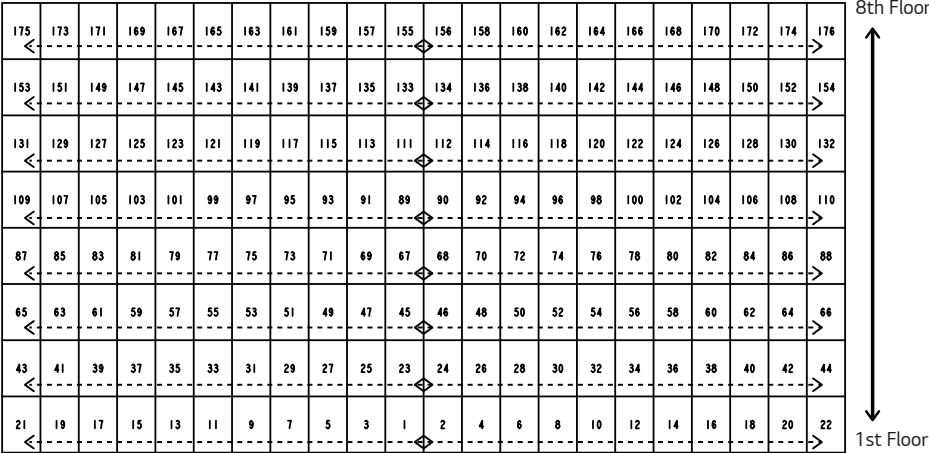


AC Power Cable

- No output on the Full Screen
 - Check again that the power is connected properly.
- Some of the 6 LED modules are not working or noise occurs.
 - Check again if the data cable of the malfunctioning module is properly connected.

Cabinet Installation Order

Please install the cabinet following the order from bottom to top, and from middle to both side for each row. Install in numerical order as marked in the picture below.



Locations of the cabinets in the screen

The 10 models that consist of one LED Cinema Screen are as below.
The location of each cabinet model for installation on the screen is marked in the picture below.

- LAD033FB7B0
- LAD033FB7B1
- LAD033FB7B2
- LAD033FB7B3
- LAD033FB7B4
- LAD033FB7B5
- LAD033FB7B6
- LAD033FB7B7
- LAD033FB7B8
- LAD033FB7B9

B 5	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 4	B 6
B 2	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 3
B 2	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 3
B 2	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 3
B 2	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 1	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 3
B 2	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 3
B 2	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 0	B 3
B 8	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 7	B 9

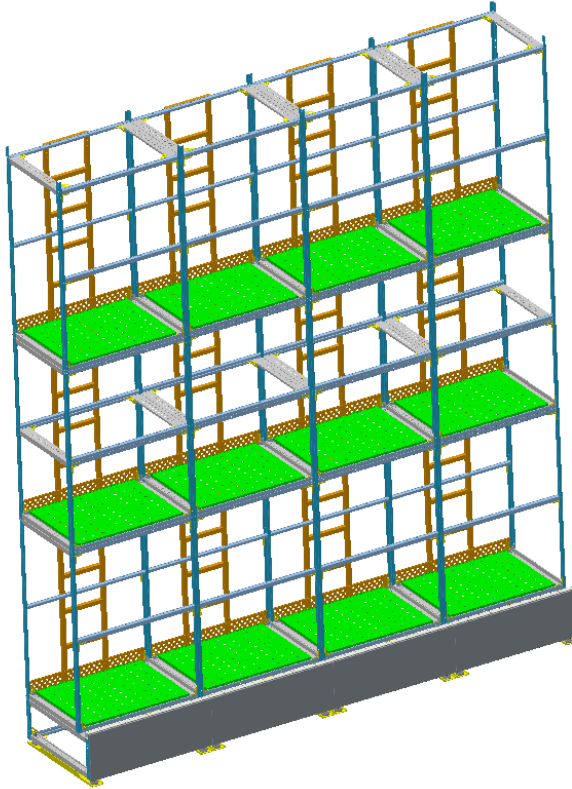
CAUTION

- Install each cabinet in its correct location when installing the screen.

Installation Guide

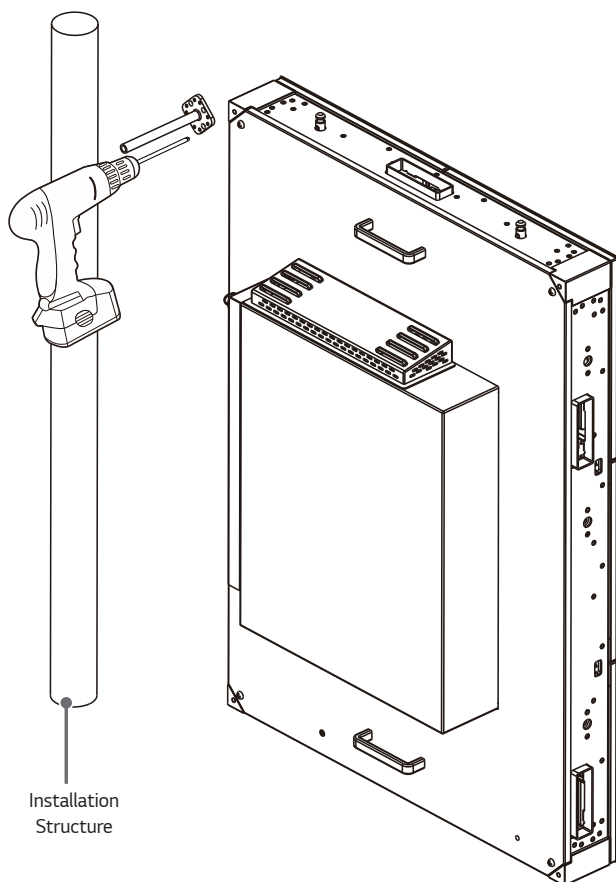
Installation Structure

Refer to the following picture when building the installation structure and adjusting it to suit the installation site's conditions. Leave space when building the structure for the ladder and platform for maintenance.



CAUTION

- The structure and the drawing of the structure are not provided.
- These pictures are for reference only, and installation workers should build the structure with adjustments for the specific installation site's conditions.

**CAUTION**

- When installing the cabinet, install the structure and cabinet vertically.
- When using a tool, place the tool in the vertical position to the cabinet.
- Design the structure so as not to interfere with the use of tools.

Pieces for adapting the Cabinets

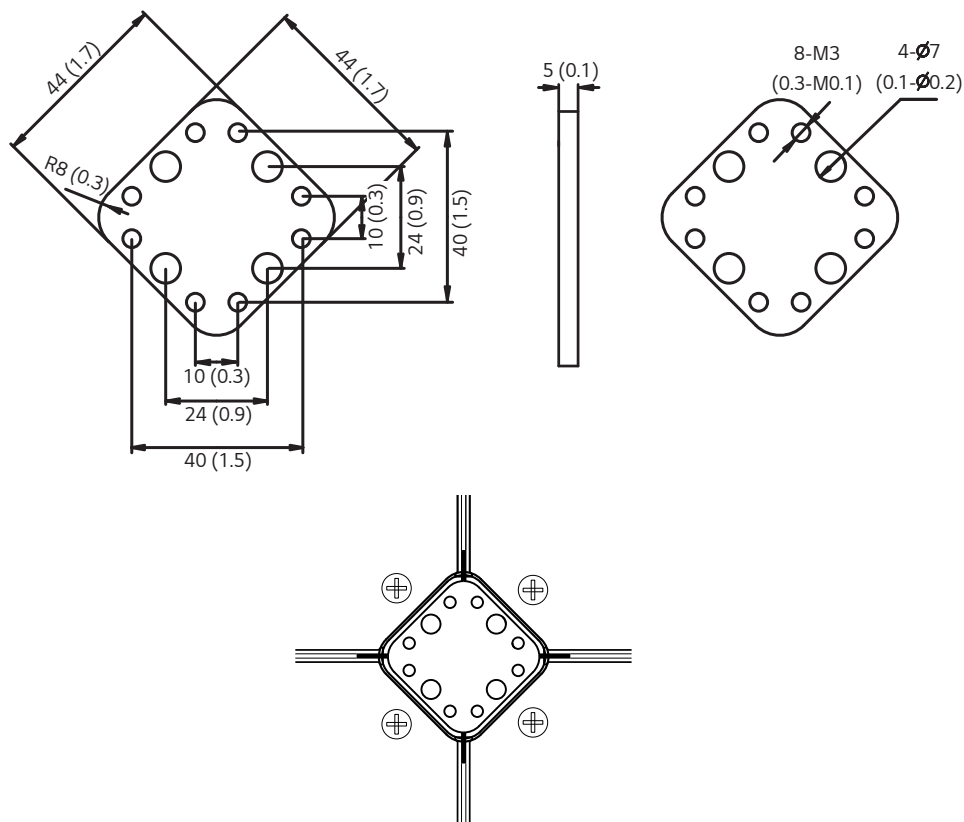
Please use the adapting pieces while assembling the product.

Adapting pieces should be manufactured by the installation professional, using this drawing as a reference to fit the structure and the product.

Adapting pieces can be manufactured and used in various forms, depending on the installation location of the cabinet.

Reference Drawing for Adapting Pieces

[Unit: mm (inches)]



Adapting piece is used for connection of Cabinets

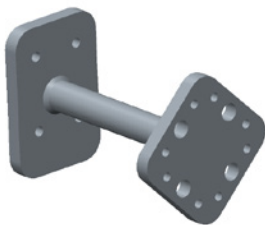
Examples of Adapting Pieces Usage



Example 1



Example 2



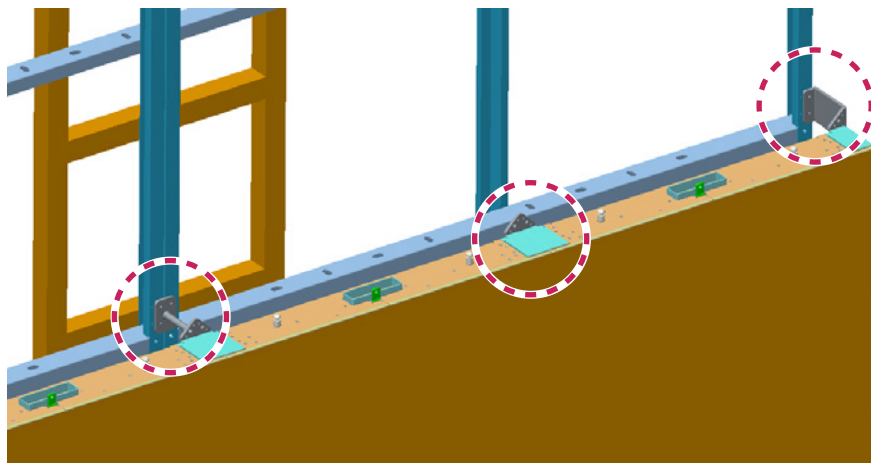
Example 3



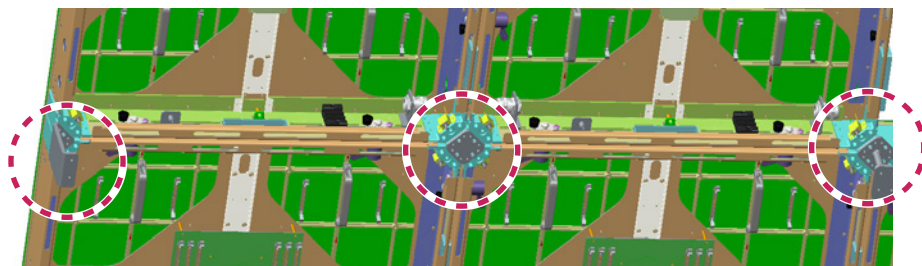
CAUTION

- The drawing of the pieces is not provided.
- These pictures are for reference only, and installation workers should build the fixers with adjustments for the specific installation structure.

Adapting pieces are used to fix the cabinet to the installation structure. The following figure shows where you can install these three types of adapting pieces.



Front of the screen



Back of the screen

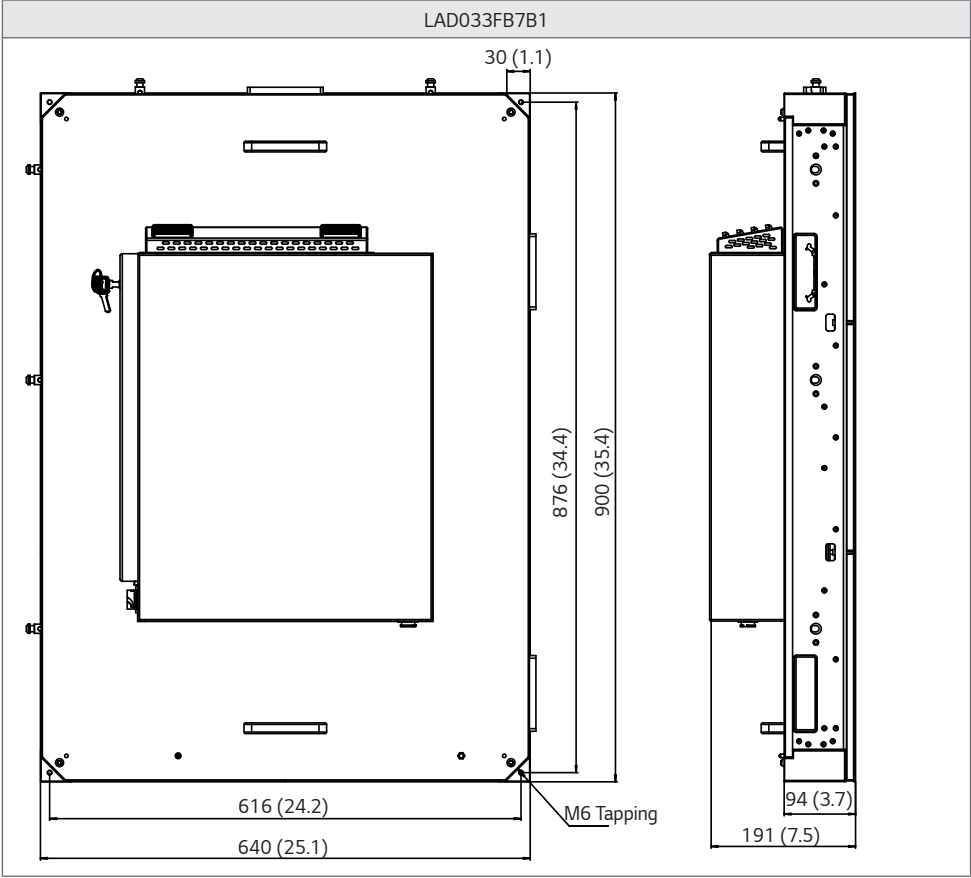
 CAUTION

- These pictures are for reference only.

Cabinet Drawings

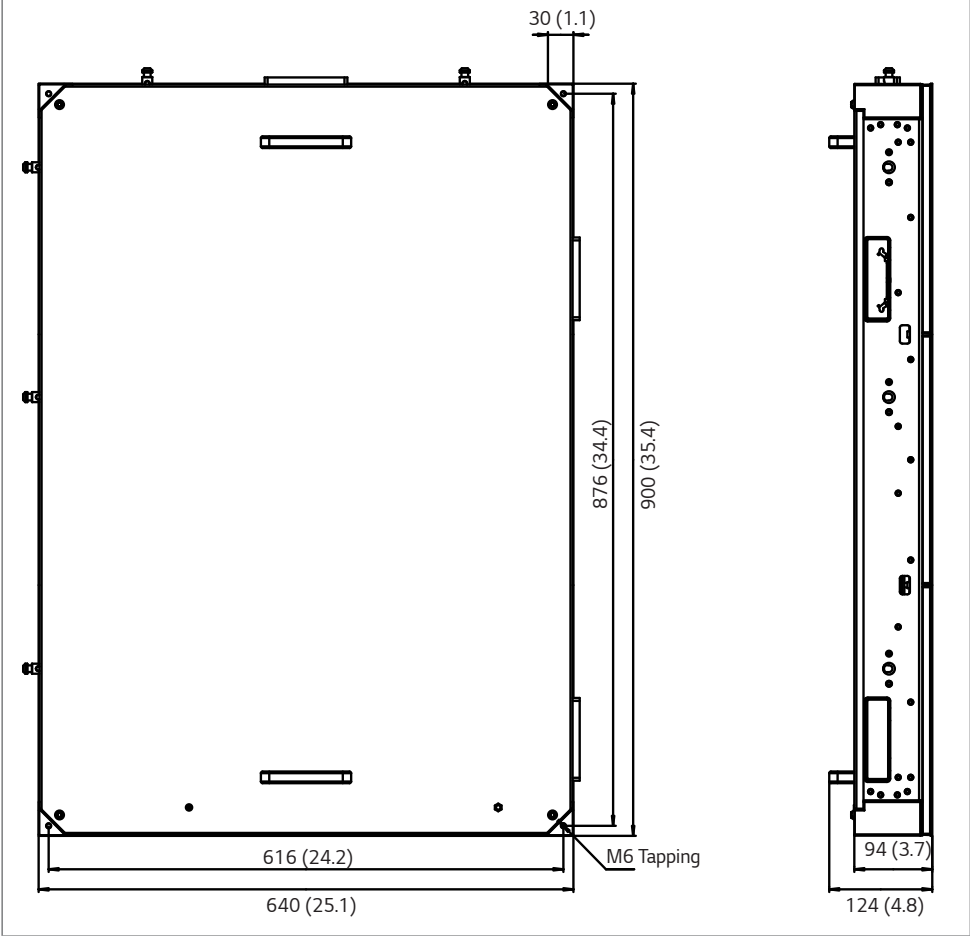
Please refer to this drawing when building the installation structure.

[Unit: mm (inches)]



[Unit: mm (inches)]

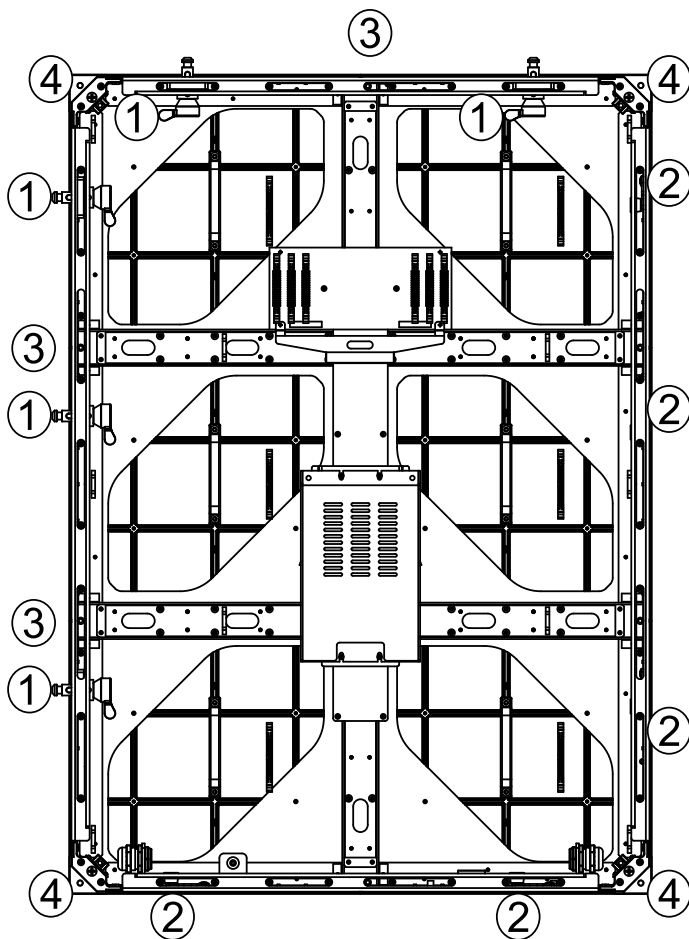
LAD033FB7B0, LAD033FB7B2, LAD033FB7B3, LAD033FB7B4, LAD033FB7B5,
LAD033FB7B6, LAD033FB7B7, LAD033FB7B8, LAD033FB7B9



Installation Guide of Cabinet

Cabinet lock catches and installing holes. See the following figure

- 1 Side lockers
- 2 Side lock plates
- 3 Adapting plates
- 4 Installing holes of the cabinet



Cabinets Level Adjustment

Z-axis Level Adjustment

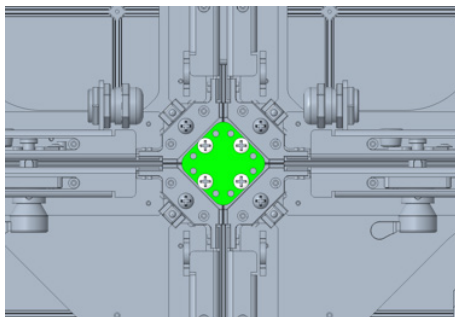
Adjust the vertical and horizontal position of the installation structure before installing the cabinet.

The installation professionals should work on the structure at the front and back at the same time.

The installation professional at the front should check the level difference between the cabinets.

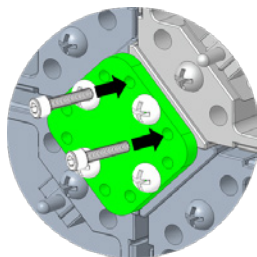
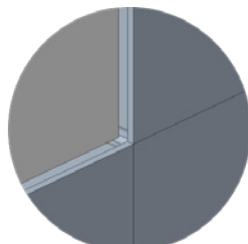
The installation professional at the back should follow the instructions given by the installation professional at the front to adjust the level in the following order:

- 1 Join the cabinet to the installation structure using the adapting pieces.

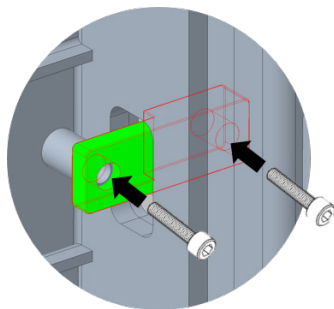
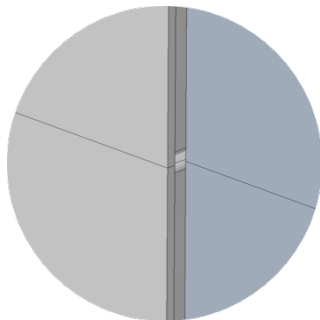


- 2 Adjust the level of the corners of the cabinet with the adapting pieces.

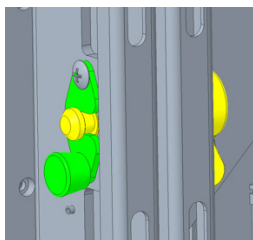
- Push the edge of the cabinet forward with the screws if the cabinet is pushed back.



- 3 Adjust the level between the cabinets with the fixers.



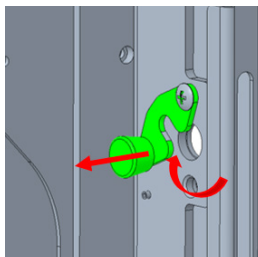
- 4 After level adjustment, tighten the cabinet with the locker. (See the next page)



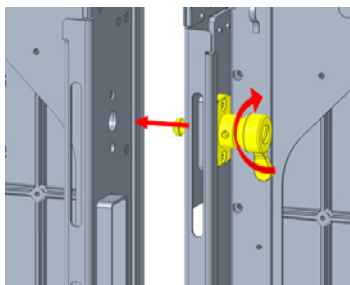
X and Y axes Level Adjustment

Adjust the level of the X and Y axes using the cabinet locker.

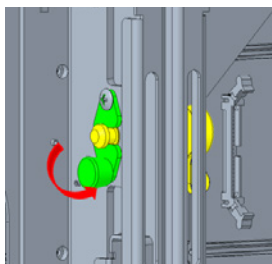
- 1 Pull the spring pin, then rotate the lock plate.



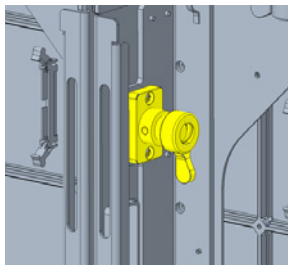
- 2 Turn the locker handle of the cabinet on the right side to bring out the spring pin, and insert the spring pin into the cabinet on the left side, as shown in the figure.



- 3 Rotate the lock plate back to its original position and let the spring pins enter the lock hole.



- 4 Lock the cabinets by rotating the handles of lockers, as shown in the figure.

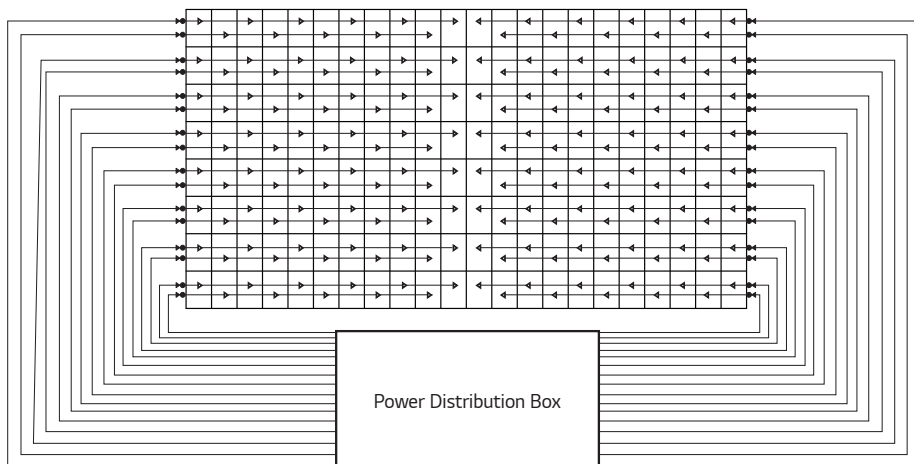


Connection of Power Cables

Each AC power cable connected from the power distribution box should be initially connected to the cabinets located in the very left and right on the LED screen.

One or more cabinets can be connected to the same power supply line in series through the AC power terminal in each cabinet.

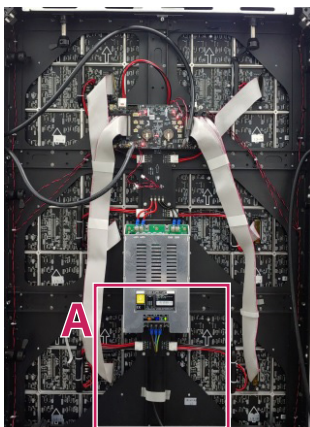
Refer to the following picture for more detail.



CAUTION

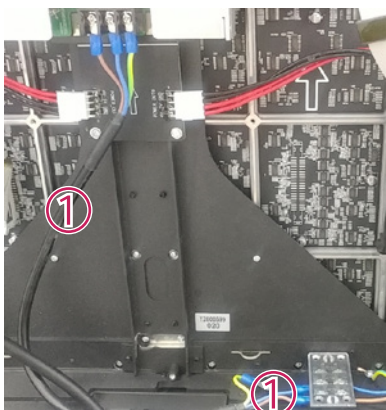
- A single power supply line can simultaneously be connected to up to 6 cabinets.
- When connecting the power supply line, skip the cabinets one by one, as indicated by the arrows in the picture above.

Power Connection at Terminals in the Cabinet



A-1 Before AC power Daisy Chain configuration

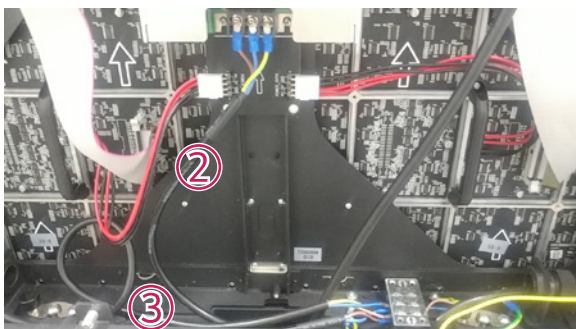
① Only the terminal and PSU are connected



A-2 After AC power Daisy Chain configuration

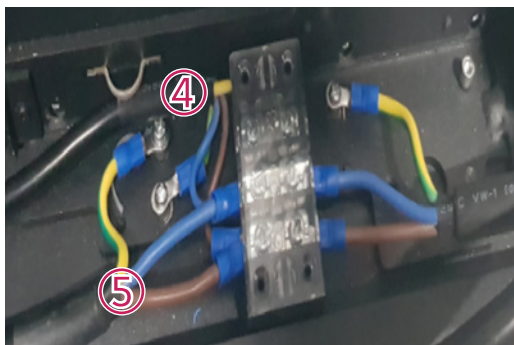
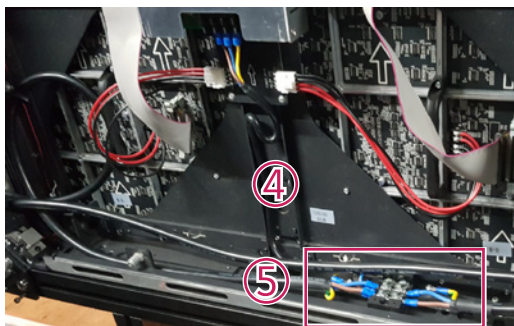
② The terminal and PSU are connected

③ Terminals in the current cabinet and those in the previous cabinet are connected



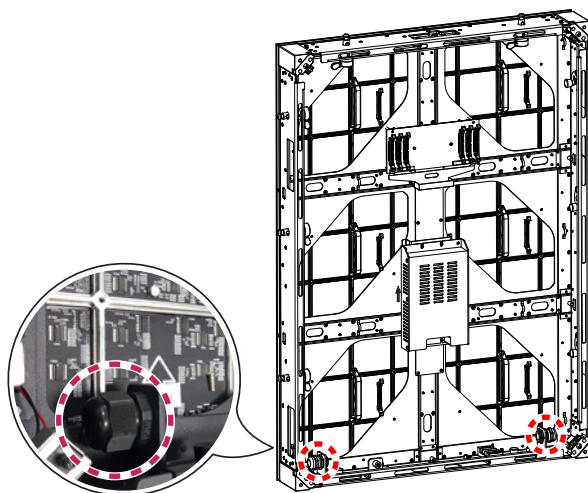
A-3 Terminal connection after AC power Daisy Chain configuration

- ④ The terminal and PSU are connected
- ⑤ Terminals in the current cabinet and those in the previous cabinet are connected



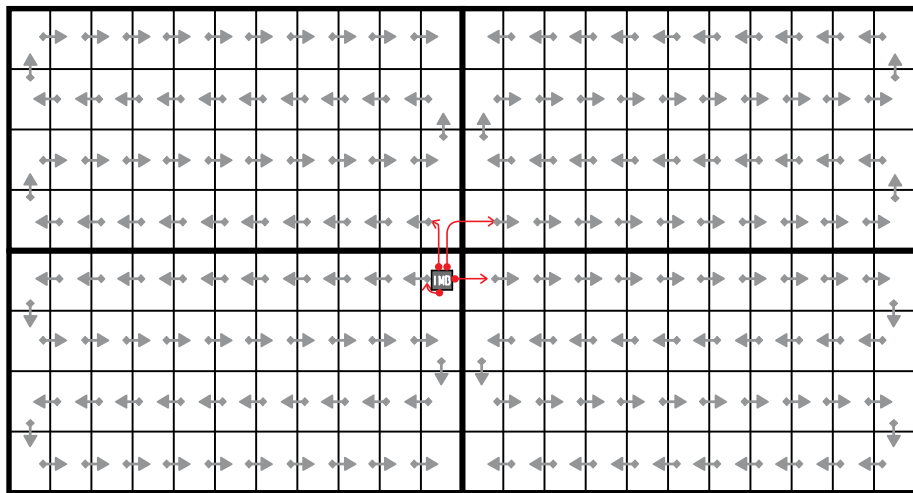
! NOTE

- The power supply line does not need to be inserted into the holder at the lower part of the cabinet.



Connection of Signal Wires

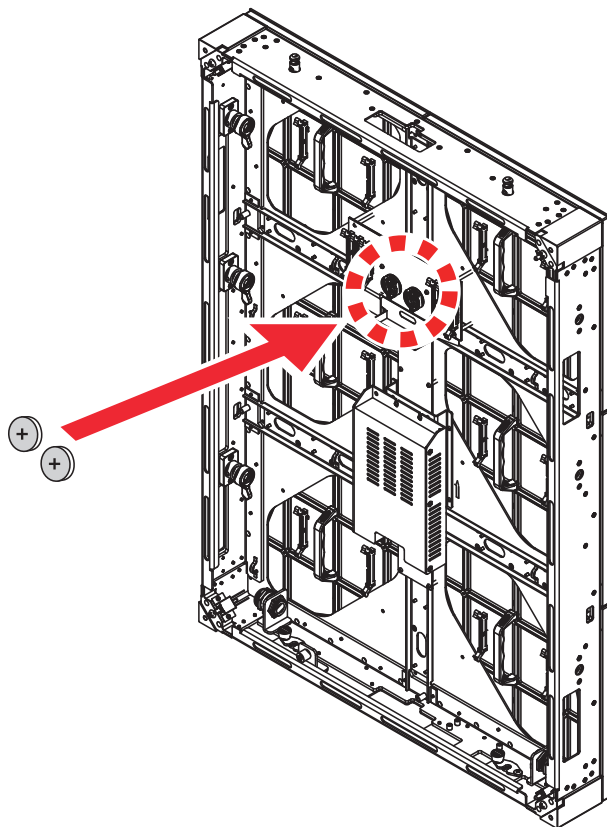
LVDS signals on the screen are output in four directions from the master cabinet to control each respective area. See the figure below for details.



Battery Mounting

Mount the two lithium batteries provided as accessories in each cabinet.

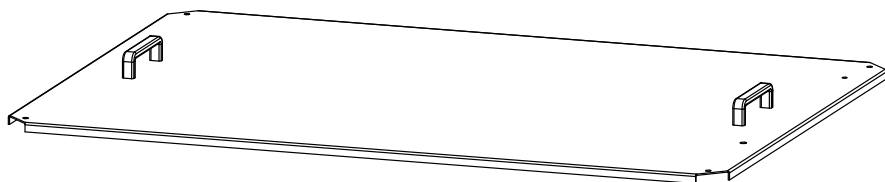
The batteries should be mounted in every cabinet.



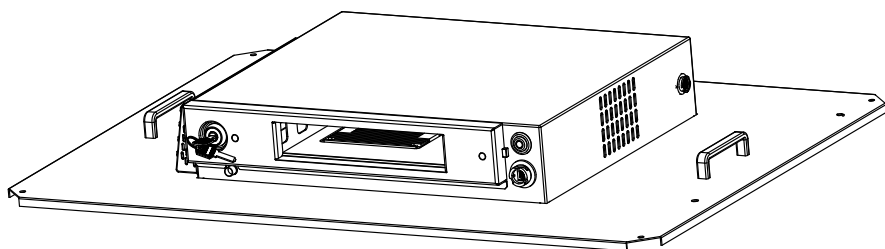
Back Cover Assembly

Back covers Used after Installation

When the screen installation is complete, attach the rear back cover. There are two kinds of back covers, only the back cover for B1 is different to others, as shown in the figure below.



Back Cover for LAD033FB7B0, LAD033FB7B2, LAD033FB7B3, LAD033FB7B4, LAD033FB7B5, LAD033FB7B6, LAD033FB7B7, LAD033FB7B8, and LAD033FB7B9



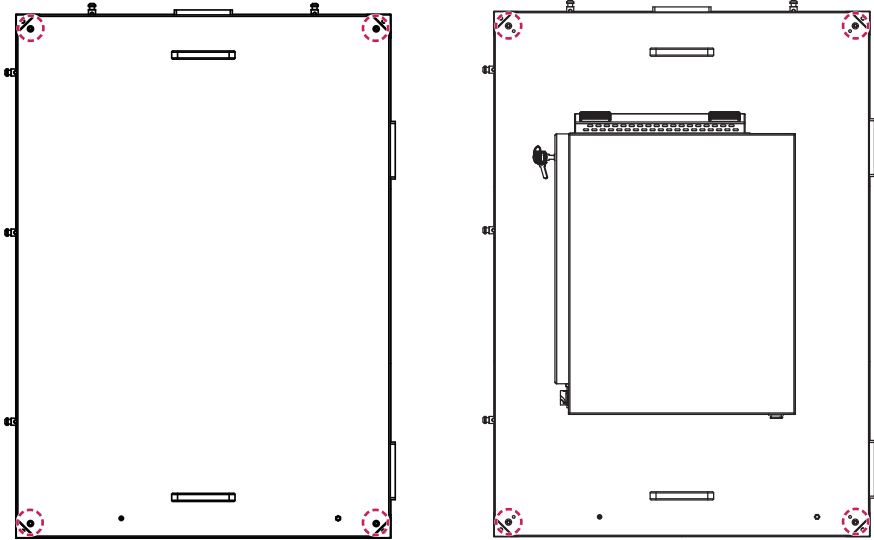
Back Cover for LAD033FB7B1
(IMB Built-in Back Cover)

Tamper Proof Label Attachment

For security, attach the back cover to the cabinet, and attach the Tamper Proof Label on the assembled screws.



Tamper Proof Label



Attachment Location of Tamper Proof Label

PRODUCT SPECIFICATIONS

Pixel pitch (Pixel-to-pixel distance)	3.3
LED PKG Type	SMD Type
Resolution (Per cabinet)	192 x 270
Pixels Per Cabinet	51,840 pixels
Pixel Density	90,000 pixels/m ²
Refresh Rate	3,072 Hz
Frame(Video) Rate	24 Hz, 25 Hz, 30 Hz, 48 Hz, 50 Hz, 60 Hz
Brightness	48/55/65/75/100 nit
Contrast Ratio	4000 : 1
Color Space (Gamut)	DCI - P3
Viewing Angle (Horizontal, Vertical)	120°, 120°
Color Depth	12 bit
Luminance Uniformity	85 % (from 75 % to 90 %)
Chromaticity Uniformity	i) In case of White: within ± 0.000 x, ± 0.000 y (within ± 0.015 x, ± 0.015 y)
Gamma	2.6 (Variation: 5 %)
Color Processing	16 bit
Gray Scale Intensity	16 bit
Color Temperature (White)	(x. y) = (0.314, 0.351) DCI-P3 theater
3D	Supported only 24 Hz

Color Temperature (R, G, B)	R: (x. y) = (0.68, 0.32) G: (x. y) = (0.265, 0.690) B: (x. y) = (0.15, 0.06) DCI-P3 theater
Scan Rate	24 : 1
Response Time	48 ms (Max)
LED Life Time (48 nit)	100,000 Hours
Operation Hours	16 hrs per day / 7 days
Dimension (Width x Height x Depth)	640 mm x 900 mm x 94 mm (Secondary Cabinet) (25.1 inches x 35.4 inches x 3.7 inches) 640 mm x 900 mm x 191 mm (Main Cabinet) (25.1 inches x 35.4 inches x 7.5 inches)
Weight (per cabinet)	LAD033FB7B1: 29 kg (63.9 lbs) LAD033FB7B0: 15 kg (33.0 lbs) LAD033FB7B2: 15 kg (33.0 lbs) LAD033FB7B3: 15 kg (33.0 lbs) LAD033FB7B4: 15 kg (33.0 lbs) LAD033FB7B5: 15 kg (33.0 lbs) LAD033FB7B6: 15 kg (33.0 lbs) LAD033FB7B7: 15 kg (33.0 lbs) LAD033FB7B8: 15 kg (33.0 lbs) LAD033FB7B9: 15 kg (33.0 lbs)
Material of Cabinet Body	Iron & Aluminum
Service (Front / Rear)	Rear Service
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity	10 % to 80 %
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Storage Humidity	5 % to 85 %
Rated Voltage	AC 100 - 240 V- 50/60 Hz

Power Consumption per Cabinet (watt)	LAD033FB7B1: 160 W LAD033FB7B0: 70 W LAD033FB7B2: 70 W LAD033FB7B3: 70 W LAD033FB7B4: 70 W LAD033FB7B5: 70 W LAD033FB7B6: 70 W LAD033FB7B7: 70 W LAD033FB7B8: 70 W LAD033FB7B9: 70 W
Dolby IMS3000 compatibility	Compatibility

 NOTE

- The power consumption value specified above include the power consumption value of the IMB.

MARRIAGE

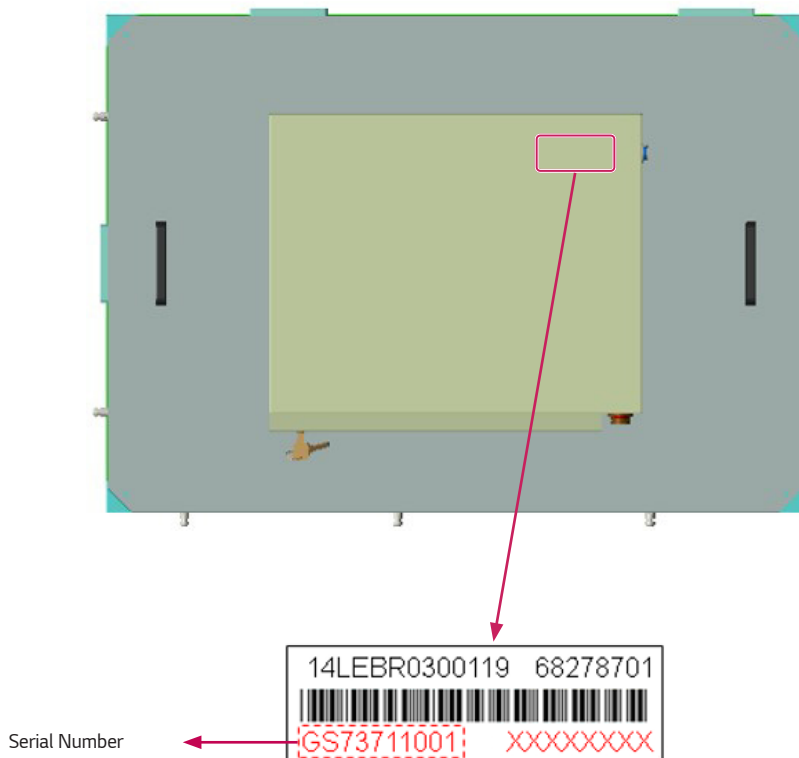


CAUTION

- Before proceeding with Marriage, ensure that all cabinet doors are closed.
- Marriage procedure can only be conducted by the authorized one who is given the right for the Marriage.
- When proceeding the Marriage, make sure that you follow the steps stated in the manual.
- Pressing the physical marriage button in main cabinet can only be done by the authorized one who is given the right for the Marriage.
- All the steps of the Marriage procedure(including HW and SW marriage) have to be monitored/supervised by the authorized one who has the right for the Marriage.
- The authority figure(s) responsible for installation and maintenance of the LED Screen and IMB shall:
 - Be physically present at the LED Screen and IMB during all Marriage activities.
 - Only use a trusted, non-networked, PC that is directly connected to the LED Screen and IMB for initiation of all Marriage related commands and associated I/O; use of LAN/WAN for this purpose is strictly prohibited.
 - Physically inspect all connections between the LED Screen and IMB to ensure Tampering has not occurred before initiating Marriage events.
 - Before starting the Marriage procedure, inspect the cabinets, making sure that all the back covers and doors of the cabinets of the LED screen are securely closed, the back covers are assembled properly, etc. Make sure all the Tamper Proof Labels used for configuring the LED Screen are intact. In addition, make sure there are no signs of tampering in any form before starting the Marriage procedure.
 - Periodically inspect the LED Screen and IMB for signs of Tampering, and retain records of such inspections. Upon recognition of any suspicious markings or other signs of malice on the LED Screen and/or IMB, the LED Screen and IMB shall be immediately removed from service. Immediately contact appropriate personnel at LGE responsible for DCI compliance and take steps as necessary.

⚠ CAUTION

- The human authority figure(s) responsible for installation and maintenance of the LED Screen shall reference the serial number provided in the white sticker and ensure it corresponds with the serial number of the LED Screen leaf certificate. The white sticker will be located in the back cover of the main cabinet:





Supplier's Declaration of Conformity

Trade Name	LG
Responsible Party	LG Electronics USA, Inc.
Address	111 Sylvan Avenue, North Building, Englewood Cliffs, NJ 07632
E-mail	lg.environmental@lge.com

MODEL _____

SERIAL NO. _____

Temporary noise is normal when powering ON or OFF this device.