

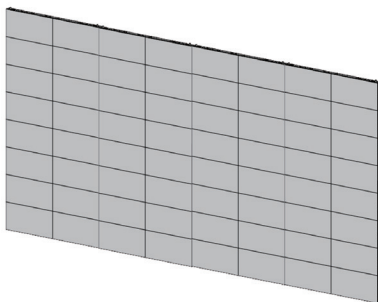
Operating Instructions Basic Guide

FHD LED Display For business use

English

Model No.

TL-110AD12AW



Read before use

This unit is made up of multiple components.
For more information on how to use this unit and the components,
please read their Operating Instructions.
For information on how to assemble this unit, please read the
Installation Instructions.
To download the Operating Instructions/Installation Instructions,
please visit the Panasonic website (<https://docs.connect.panasonic.com/prodisplays/>).

- Please read these instructions before operating your set and retain them for future reference.
- Illustrations and screens in this Operating Instructions are images for illustration purposes, and may be different from the actual ones.



Contents

Important Safety Instructions	2
Important Safety Notice	3
Safety Precautions	4
Precautions for use	8
Components of this Unit	11
Checking the Accessories Supplied for the Components	12
Separately Sold Optional Items	14
Preparation	14
Before Assembly, Installation, and Connection	15
Assembly, Installation, and Connection	16
Operations	17
Specifications	17



WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN



WARNING: To reduce the risk of electric shock, do not remove cover.

No user-serviceable parts inside. Refer servicing to qualified service personnel.



The lightning flash with arrow-head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

WARNING:

To prevent damage which may result in fire or shock hazard, do not expose this apparatus to rain or moisture.

Do not place a container filled with water or other liquid on top of the unit.

WARNING:

- 1) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
- 2) Do not remove the grounding pin on the power plug. This apparatus is equipped with a three pin grounding-type power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the grounding plug.

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Clean only with dry cloth.
- 6) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 7) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 8) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 9) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10) Only use attachments / accessories specified by the manufacturer.
- 11) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.
- 12) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 14) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.



Important Safety Notice

WARNING

- 1) To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.
Do not place a container filled with water or other liquid on top of the unit.
Do not place any objects on top of the device.
- 2) To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
- 3) Do not remove the earthing pin on the power plug. This apparatus is equipped with a three pin earthing-type power plug. This plug will only fit an earthing-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician.
Do not defeat the purpose of the earthing plug.
- 4) To prevent electric shock, ensure the earthing pin on the AC cord power plug is securely connected.

CAUTION

This appliance is intended for use in environments which are relatively free of electromagnetic fields.

Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the picture and sound to wobble or cause interference such as noise to appear.

Using this appliance near sources of strong electromagnetic fields or where electrical noise may overlap with the input signals could cause the sensor function not to work correctly.

To avoid the possibility of harm to this appliance, keep it away from sources of strong electromagnetic fields.

WARNING:

This equipment is compliant with Class A of CISPR32. In a residential environment this equipment may cause radio interference.

IMPORTANT INFORMATION: Stability Hazard

Never place the unit in an unstable location. The unit may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the unit.
- Only using furniture that can safely support the unit.
- Ensuring the unit is not overhanging the edge of the supporting furniture.
- Not placing the unit on cloth or other materials that may be located between the unit and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the unit or its controls.

If the existing unit is going to be retained and relocated, the same considerations as above should be applied.

**IMPORTANT: THE MOULDED PLUG
FOR YOUR SAFETY, PLEASE READ THE
FOLLOWING TEXT CAREFULLY.**

This unit is supplied with a moulded three pin mains plug for your safety and convenience. A 10 amp fuse is fitted in this plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 10 amps and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic dealer.

Do not cut off the mains plug.

Do not use any other type of mains lead except the one supplied with this unit.

The supplied mains lead and moulded plug are designed to be used with this unit to avoid interference and for your safety.

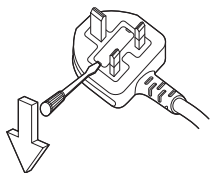
If the socket outlet in your home is not suitable, get it changed by a qualified electrician.

If the plug or mains lead becomes damaged, purchase a replacement from an authorized dealer.

WARNING : — THIS UNIT MUST BE EARTHED

How to replace the fuse.

Open the fuse compartment with a screwdriver and replace the fuse.



Safety Precautions

WARNING

■ Setup

- If the unit needs to be set up on a stand, use the separately sold Mobile Stand (TY-ST110AD1).
- To mount the unit on the wall, use the Wall Mounts included in the FHD LED Display (TL-110AD12AW) package.
- To prevent the wall-mounted unit from falling, check that the wall in the mounting area is sufficiently strong to support the weight of the unit and the Wall Mounts.
- The Power Box should be installed using the fittings included in the FHD LED Display (TL-110AD12AW) package.
- The Control Box should be installed using the fittings included in the FHD LED Display (TL-110AD12AW) package. Alternatively, installation on an ANSI/EIA-310-D-compliant rack is acceptable.

We are not responsible for any product damage, etc. caused by failures in the installation environment even during the warranty period.

Small parts can present choking hazard if accidentally swallowed. Keep small parts away from young children. Discard unneeded small parts and other objects, including packaging materials and plastic bags/sheets to prevent them from being played with by young children, creating the potential risk of suffocation.

Do not place the unit on sloped or unstable surfaces, and ensure that the unit does not hang over the edge of the base.

- The unit may fall off or tip over.

Install this unit at a location with minimal vibration and which can support the weight of the unit.

- Dropping or falling of the unit may cause injury or malfunction.

When using this unit, be sure to take safety measures to prevent falling or dropping of the unit.

- If an earthquake occurs or a child climbs the unit, the unit may fall or drop, resulting in an injury.

Cautions for Wall Installation

- The installation should be performed by an installation professional. Installing the unit incorrectly may lead to an accident that results in death or serious injury.
- Before installation, be sure to check if the mounting location has enough strength to support the weight of the unit and the wall hanging bracket for anti drop.
- If you terminate the use of the product, ask a professional to remove it promptly.

Ensure that the installation location is strong enough for this unit when it is used for a long term.

- If the installation location is not strong enough for this unit when it is used for a long term, this unit may fall and cause injury.

To avoid getting accidentally squeezed between the unit and the wall or a mounting fixture, the installer should make sure that there is nobody in the surrounding area before starting the unit installation or removal work.

- Injury may be caused by having your fingers or hands accidentally squeezed between objects.

■ When using the unit

The unit is designed to operate on 220 – 240 V AC, 50/60 Hz.

If problems or malfunction occur, stop using immediately.

If problems occur, unplug the power supply plug.

- Smoke or an abnormal odour come out from the unit.
- No picture appears or no sound is heard, occasionally.
- Liquid such as water or foreign objects got inside the unit.
- The unit has deformed or broken parts.

If you continue to use the unit in this condition, it could result in fire or electric shock.

- Unplug the power supply plug from the wall outlet, and then contact the dealer for repairs.
- To cut off the power supply to this unit completely, you need to unplug the power supply plug from the wall outlet.
- Repairing the unit yourself is dangerous, and shall never be done.
- To enable to unplug the power supply plug immediately, use the wall outlet which you can reach easily.

Do not touch the unit directly by hand when it is damaged.

- Electric shock could occur.

Do not stick any foreign objects into the unit.

- Do not insert any metal or flammable objects into the ventilation holes or drop them onto the unit, as doing so can cause fire or electric shock.

Do not attempt to disassemble or alter the unit in any way.

- High voltages which can cause fire or electric shocks are present inside the unit. For any inspection, adjustment and repair work, please contact your local Panasonic dealer.
- The unit may have damage or fall, and cause injury.

Ensure that the mains plug is easily accessible.

The mains plug shall be connected to a mains socket outlet with a protective earthing connection.

Do not use any power supply cord other than that provided with this unit.

- Doing so may cause short-circuit, generates heat, etc., which could cause electric shock or fire.

Do not use the supplied power supply cord with any other devices.

- Doing so may cause short-circuit, generates heat, etc., which could cause electric shock or fire.

Clean the power supply plug regularly to prevent it becoming dusty.

- If there is a build up of dust on the plug, the resultant humidity may cause short-circuit, which could cause electric shock or fire. Unplug the power supply plug from the wall outlet and wipe it with a dry cloth.

Do not handle the power supply plug with wet hands.

- Doing so may cause electric shocks.

Use a 15-A outlet exclusively for this unit.

- Using a 15-A outlet together with other units may cause fire due to heat generation.

Make sure to connect the power supply connectors (on the unit) of the power supply cords (for outlet connection) of the Power Box (TY-PWRBX1W) to AC IN and make sure they are locked.

- Doing so may cause short-circuit, generates heat, etc., which could cause electric shock or fire.
- For each of the connectors, plug it fully to the end, turn it clockwise, and make sure it is locked.

Make sure that the mains plug is fully inserted into the socket outlet and the power supply connector is fully inserted into the Power Box, Control Box or Cabinet Module.

- Incomplete insertion may cause electric shock or fire due to heating.
- Do not keep using a damaged mains plug or a loose socket outlet.
- Make sure that the power supply connector is locked.
- For the power supply connectors (on the unit) of the power supply cords (for outlet connection) of the Power Box (TY-PWRBX1W), plug it fully to the end, turn it clockwise, and make sure it is locked.

Do not do anything that may damage the power supply cord or the power supply plug.

- Do not damage the cable, make any modifications to it, place heavy objects on top of it, heat it, place it near any hot objects, twist it, bend it excessively or pull it. To do so may cause fire and electric shock. If the power cable is damaged, have it repaired at your local Panasonic dealer.

Do not touch the power supply cord or the plug directly by hand when they are damaged.

- Doing so may cause electric shock or fire due to short-circuit.

All parts and accessories included in the product package should be stored out of children's reach.

- These items are detrimental to human health if accidentally swallowed.
- Please contact a doctor immediately in case you doubt that the child may have swallowed it.

Do not allow anyone wearing a cardiac pacemaker or implanted medical electronic device to approach this unit.

- The magnetic force of a magnet in this unit may affect the device.
If a person wearing such a device feels unwell near this unit, let the person consult a doctor.

CAUTION

Do not close or plug any of the air vents in the unit.

Do not place the unit in a narrow, poorly ventilated place.

Do not place the unit upside down.

Do not install the unit, making its front face upward or downward.

Do not place the unit in contact with fabric material, for example under a table cloth or on a carpet or bedclothes.

- Heat buildup inside the unit may lead to fire or mechanical failure.

Install the mounting screws and power cable in such a way that they will not make contact with the inside parts of the wall.

- Electric shocks may result from contact with any metal objects inside the wall.

Do not pull or snag the connection cable.

- This may cause the unit to fall or tip over, resulting in injury.
- Pay special attention to children.

Do not fit at any locations subject to humidity, dust, smoke, steam or heat.

- This may have an adverse effect on the unit and cause fire or electric shock.

Do not place the unit in a place where it can be exposed to the weather, salt damage, or corrosive gas.

- Doing so may cause the unit to fall due to corrosion, and it may result in injury. Also, the unit may malfunction.

The installer should avoid getting their hands or fingers pinched during installation.

- Such pinching could lead to Injury.

Do not touch the LED Module with bare hands.

- You may have low-temperature burns or the LED Module may get faulty or malfunction.
- The LED Module may go wrong due to static electricity.

Do not bring a magnetic card or magnetic recording medium near this unit.

- Data in it may be damaged and unreadable.

We do not assume responsibility for any accident or damage that is caused as a result of attempting to install or handle the unit in any way not specified in our operating instructions/installation instructions or by using any part or material other than the ones specified.

When disconnecting the power supply cord, make sure to do so by holding the mains plug (when disconnecting from the socket outlet) or the power supply connector (when disconnecting from the unit).

- Pulling the cord may damage the cord, and it may cause electric shock or fire due to short-circuit.

If the unit needs to be moved, make sure to do so after disconnecting the power supply cord and all the device connection cables and also removing any anti-tip/anti-drop anchor installed.

- If the unit is moved while some of the cables are still connected, the cables may become damaged, and fire or electric shock could result.

Disconnect the power supply plug from the wall socket as a safety precaution before carrying out any cleaning.

- Electric shocks can result if this is not done.

For safety reasons, disconnect the unit's mains plug from the socket outlet and also disconnect the power supply connector from the Power Box before installing, removing, cleaning or servicing the function board (sold separately).

- Electric shock may result.

Do not step on, or hang from the unit.

- They might tip over, or might be broken and it may result in injury. Pay special attention to the children.

Do not mix old and new batteries. Use only specified batteries.

Do not reverse the polarity (+ and -) of the battery when inserting.

- Mishandling the battery may cause its explosion or leakage, resulting in fire, injury or damage to surrounding properties.
- Insert the battery correctly as instructed.

Do not use batteries with the outer cover peeling away or removed.

- Mishandling the batteries may cause the batteries to short circuit, resulting in fire, injury or damage to surrounding properties.

Remove the batteries from the remote control transmitter when not using for a long period of time.

- The battery may leak, heat, ignite or burst, resulting in fire or damage to surrounding properties.

Remove exhausted batteries from the remote control immediately.

- Leaving the batteries unattended in it may cause battery leakage, heat or burst.

Do not burn or breakup batteries.

- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Do not subject the unit to excessive force or impact.

- Doing so may result in damage to the unit and/or personal injury.

Ask a professional to unpack/transport this unit.

When using a mobile stand, take safety measures to prevent it from tumbling down or falling.

- In the event of an earthquake or if a child climbs on it, it may tumble down or fall and cause injury.

Do not use the components for any unit not specified in the catalog.

- The unit may fall and cause injury.

If the unit is deformed or cracked, do not use it.

- It may tumble over and become damaged, resulting in injury.
In case the unit is damaged, contact your dealer immediately.

Install the unit on a level and stable surface.

- It may fall, get damaged, and cause injury.

When assembling, be sure to securely fasten all screw fastening points.

- If assembled improperly, the unit may not have enough strength, tumble over, and become damaged, resulting in injury.
- The tightening torques are specified in the assembly instructions.

Regularly inspect the product for deformation, cracks, and loose screws. Consult your dealer if you discover a problem.

Precautions for use

■ Cautions when installing

Follow the instructions below when installing the unit.

Even before expiration of the warranty period, we do not assume responsibility for any damage arising from installing the unit in an inappropriate environment.

This unit must be installed in an indoor location. Even inside a building, avoid installing the unit in the following types of locations:

- Where the unit is exposed to the weather
- Where the unit may be subject to drastic changes in temperature or humidity, for example near an air conditioning device
- Where the unit may receive vibration or impact
- Near a fire sprinkler or sensor

Do not install the unit where it may receive vibration or impact.

- Vibration or impact on the unit may damage its internal parts and can lead to mechanical failure. Choose a place free from vibration or impact to install the unit.

Install this unit at a location which can support the weight of the unit.

- Dropping or falling of the unit may cause injury.

Do not install the unit near a high-voltage line or a power source.

- Installing the unit near a high-voltage line or a power source may receive interference.

Watch out for mutual interference between devices.

- Place the unit away from risks of video distortion or audio noises due to electromagnetic interference.

Environmental temperature to use this unit

- When using the unit where it is below 1 400 m (4 593 ft) above sea level: 0 °C to 40 °C (32 °F to 104 °F)
- When using the unit at high altitudes (1 400 m (4 593 ft) and higher and below 2 800 m (9 186 ft) above sea level): 0 °C to 35 °C (32 °F to 95 °F)

Make sure to allow sufficient air flow around and through the unit so as not to exceed these temperature ranges.

- Service life of the unit components may be shortened or mechanical failure may be caused.

Install the unit out of direct sunlight and also away from heat-generating devices.

- Even in an indoor location, direct sunlight can cause the LED module temperature to increase to result in mechanical failure.
- Cabinet deformation or failure can be caused.
- Excessive light or heat can cause mechanical failure or other problems arising from increase in the device temperature.
- Deterioration of video quality may be experienced.

Device connection should be made with the devices in de-energized condition.

- Connect the devices according to their respective manuals.

Do not grab the LED Module.

- Do not push the LED Module hard or with a sharp object. Applying strong force to the LED Module may cause it to break.

Securing a clearance distance around the installed unit

- If the unit is installed inside a protective casing or enclosure, make sure to offer adequate ventilation by providing a cooling fan or air vents so that the temperature around the unit (inside the casing or enclosure) including the front of the LED panel will be kept within the specified allowable operating temperature range.

In the case of storage, store the unit in a dry room.

■ Note for connection

Removing and inserting the power cord and connection cables

- When the unit has been installed on the wall, if the power cord and connection cables are difficult to remove and insert, make connections first before installation.
- Be careful not to allow the cables to be entangled. After installation is completed, insert the power plug to the outlet.

■ When using

After setting the Cabinet Module to the unit, avoid moving it to the following places. Vibrations applied to the unit while it is moved may cause misalignment or gaps between the LED Modules.

- Place with a stepped surface
- Place with bumps and digs on the surface

Parts of the unit may become hot during use.

- Parts of the unit housing may become hot, but this is normal and does not affect unit performance or quality.

Fan replacement may become necessary.

- The unit fan may need to be replaced with a new one after the number of cumulative operating hours of the fan exceeds 25 000 hours.
- Note that time to fan replacement may differ depending on the operating environment.
- Contact your dealer for fan replacement service. The cumulative operating hours of the fan can be found in the "Options" menu.

Dots that are always lit or do not light up may appear on the screen.

- Although the LED panel is made with high-precision technology, such dots may appear on the screen. Please note that such dots are not faulty.

To maximize the service life of LEDs

- The LED elements can absorb moisture if the unit is used or stored in a highly humid place or has not been run for an extensive period of time. Selecting a high luminance setting with the LED elements in such moist condition can cause the LED elements to go through a rapid temperature change, which can result in LED element failure. To select a higher luminance setting, set the "Warm up aging" (an intermediate mode where the luminance setting is raised a little at a time before entering the regular operation mode) option to "On" or "Auto".
- For more information about the warm up aging, refer to the "Operating Instructions - Functional Manual" for the Control Box.

The unit may experience burn-in.

- If still images are displayed for a long period of time, the unit may experience burn-in. It can be reduced by "Wobbling" or "Pixel Calibration" (burn-in correction). For details on the functions, refer to the "Operating Instructions - Functional Manual" for the Control Box.

Depending on the temperature, humidity, or displayed content, the brightness may get uneven, but it is not a failure.

- It is a phenomenon that occurs on self-luminous panels. The phenomenon may occur if still images remain displayed for a long time.

Notes on the LED Module surface

- Fingerprints or dirt on the LED Module surface will lead to a decrease in image quality. Handle with care to avoid scratches and dirt on it.
- Do not touch the LED panel unnecessarily as this may cause malfunctions or failures.

Keep an appropriate audio volume so as not to annoy your neighbors

- Close the window or take other action to protect the peace and quiet of your neighbors. Be especially careful at night where even small sounds carry more clearly than in daytime.

If the unit is not going to be used for any prolonged length of time, unplug the power supply plug from the wall outlet.

- If the unit is going to be stored without power connection, be sure to store it out of direct sunlight or moisture.

If the power is instantaneously interrupted or stopped, or if the power voltage is instantaneously lowered, the unit may not operate normally.

- In this case, turn off the power of the unit and the connected devices once, and then turn on the power again.

Picture noise may occur if you connect / disconnect the cables connected to the input terminals you are currently not watching, or if you turn the power of the video equipment on / off, but it is not a malfunction.

Do not apply an adhesive tape or sticker to the unit.

- The unit surface will become soiled.

Do not keep the unit in contact with a rubber or soft plastic material for an extensive period of time.

- Unit deterioration may be caused.

■ Connection via RJ45 terminals

The RJ45 terminal on the front of the unit is for network connection only.

On the other hand, the RJ45 terminal on the rear of the unit is provided for video connection to the Cabinet Module or for control connection to the Power Box. Do not connect this terminal to a network device.

If the terminal is mistakenly connected to a network device, system failure may result.

Using the unit in a place where static charges easily build up should be avoided.

- You may experience frequent communication interruptions when the unit is being used in an area where static charges tend to build up, for example on a carpet. If this happens, eliminate the suspected cause of the static charge and other potential noise-generating factors, and then turn off the unit and all the devices connected to it and turn them on again.

Strong radio interference from a broadcast station or a radio communication device can prevent the unit from functioning correctly.

- If there is a system or device nearby that generates strong radio signals, position the unit as far away from such device as possible and/or cover the unit's LAN cable with a length of metal foil or metal conduit which is grounded at both ends.

■ Request Regarding Security

When using this unit, take safety measures against the following incidents.

- Personal information being leaked via this unit
- Unauthorized operation of this unit by a malicious third party
- Interfering or stopping of this unit by a malicious third party

Take sufficient security measures.

- Set a password for the LAN control and restrict the users who can log in.
- Make your password difficult to guess as much as possible.
- Change your password periodically.
- Panasonic Projector & Display Corporation or its affiliate companies will never ask for your password directly. Do not divulge your password in case you receive such inquiries.
- The connecting network must be secured by a firewall, etc.
- When disposing the product, initialize the data before disposing.

■ Notes on AC IN and AC OUT

Connect AC IN to a socket outlet and AC OUT to the Cabinet Module and Control Box.

- A connection to an unspecified device may cause heat generation, resulting in malfunction or fire.

■ Cleaning and maintenance

Before cleaning the unit, make sure that the mains plug is disconnected from the socket outlet and double-check that the unit is not energized.

To remove dirtiness on the unit (except for the LED Module surface), wipe gently with soft antistatic cloth (cotton fabric or flannel).

Note

- Static charges may cause electrical circuit failure.
- Wiping the unit surface with stiff cloth or rubbing the surface hard may cause mechanical failure.

When cleaning the LED Module surface, be careful not to damage the LED elements.

- Catching LED elements with a cleaning cloth or tool may cause the LED elements to come off from the LED Module, resulting in damage or malfunction.

Use of chemically impregnated wipes

- Follow the instructions provided with the wipe when using the wipe on the unit.

Do not spray or apply volatile liquid on the unit such as insecticide, benzene or paint thinner.

- Exposure to volatile liquid may cause failure or mechanical damage of the unit and may also damage its surface coating.

Do not put alcohol on the surface of the LED Module.

- The LEDs may get faulty.

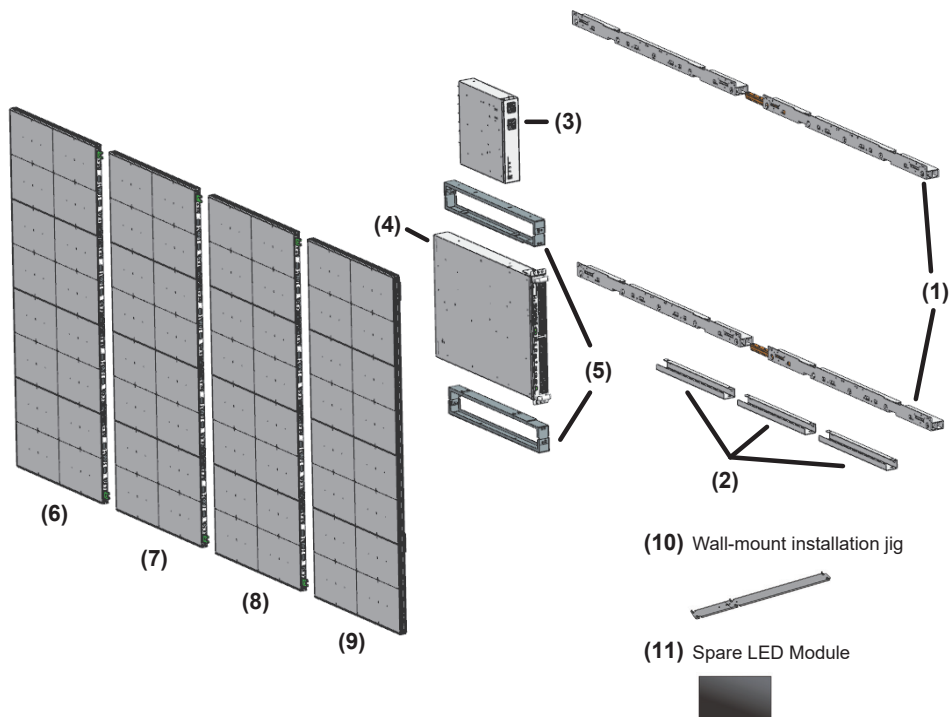
Remove dust or dirt from unit airways such as the air vents.

- Dust may adhere to the vicinity of the ventilation holes depending on the usage environment. As a result, if the internal cooling of this unit or circulation of exhaust heat deteriorates, it may result in a decrease in brightness or a malfunction. Clean and remove dust from the ventilation holes.
- The amount of dust and dirt that adheres depends on the installation location and usage time.

■ Disposal

When disposing the product, ask your local authority or dealer about the correct methods of disposal.

Components of this Unit



The components are used when the Control Box is attached to the rear of this unit.

The components (1) to (9) are packed in the boxes respectively labeled with the component names shown in the next section.

The Cabinet Modules (6) to (9) are subject to a specified installation order, so please check the numbers representing the order on the upper right of the component labels carefully.

In order to secure as much working space as possible, it is recommended to unpack the boxes in the order (1) to (9).

For instructions on how to use (10), please refer to the Installation Instructions.

Checking the Accessories Supplied for the Components

The following shows the accessories included in the component packing boxes. The number shown in < > is the quantity of the item included in the package.

For details, please refer to the Operating Instructions supplied with the component.

(1) TY-WMM1 / Wall Mount (2 boxes)

Component name label



Accessories

- M6-14 screw, for connecting brackets <12>
- M6-14 screw, for positioning the stand <4>

(2) Cable cover / (5) Fixing bracket (1 box)

Component name label



Accessories

- M6-12 bolt <8>

(3) TY-PWRBX1W / Power Box (1 box)

Component name label



Accessories

- Power supply cord
For connection to the socket outlet for UK (approx. 3 m) <1>
For connection to the socket outlet for EU (approx. 3 m) <1>
- Power supply cord
For connection to the Cabinet Module <4>

- Sensor module / Double-sided tape <1>
- 4-pole ultra mini cable <1>
- RJ-45 cable (for the LED driver) <1>
- M6-8 bolt, for retaining the box <4>
- Cable tie wrap <20>
- Velcro strip <10>

(4) TY-CTRFHD1W / Control Box (1 box)

Component name label

TY-CTRFHD1W
CONTROL BOX

Accessories

- Power supply cord
For connection to the socket outlet for UK (approx. 2 m) <1>
For connection to the socket outlet for EU (approx. 2 m) <1>
- Power supply cord
For connecting TY-PWRBX1W (approx. 2 m) <1>
- RJ-45 cable <4>
- Remote Control Transmitter <1>
- Battery for the Remote Control Transmitter <2>
(AAA/R03/LR03 type)
- SLOT adapter <2>
- External IR receiver (approx. 1.8 m) <1>
- Cable tie wrap <20>
- Velcro strip <10>
- Connection fitting, vertical <8>*
- Connection fitting, horizontal <2>*
- M8-14 bolt
For vertical connection fittings <16>*
- M10-20 bolt
A for horizontal connection fittings <2>*
- M10-18 bolt
B for horizontal connection fittings <2>*
- M6-12 bolt, for retaining the box <4>
- Hex wrench (for M4) <1>
- Hex wrench (for M5) <1>
- LED Module height adjustment jig <1>

* These accessories are not intended for use with the TL-110AD12AW package.

(6) TY-FD12AS4 / Cabinet Module (1 box)

Component name label

TY-FD12AS4 1
キャビネットモジュール 4
CABINET MODULE 4

Accessories

- M8-90 spacer bolt <2>
- Y-axis adjustment bolt <2>
- Stopper fixing bolt <2>

(7) TY-FD12AS4 / Cabinet Module (1 box)

Component name label

TY-FD12AS4 2
キャビネットモジュール 4
CABINET MODULE 4

Accessories

- M8-90 spacer bolt <2>
- Y-axis adjustment bolt <2>

(8) TY-FD12AS4 / Cabinet Module (1 box)

Component name label

TY-FD12AS4 3
キャビネットモジュール 4
CABINET MODULE 4

Accessories

- M8-90 spacer bolt <2>
- Y-axis adjustment bolt <2>

(9) TY-FD12AS4 / Cabinet Module (1 box)

Component name label

TY-FD12AS4 4
キャビネットモジュール 4
CABINET MODULE 4

Accessories

- M8-90 spacer bolt <2>
- Y-axis adjustment bolt <2>
- Stopper fixing bolt <2>

(10) Wall-mount installation jig (1 box)

Component name label

設置ジグ
Installation jig

(11) Spare LED Module (1 box)

Component name label

Panasonic
TY-MD12AS1
LED モジュール / LED MODULE /
Module LED / MODULO LED

Attention

- Store small parts in an appropriate manner, and keep them away from young children.
- The part numbers of accessories are subject to change without notice. (The actual part number may differ from the ones shown above.)
- In case you lost accessories, please purchase them from your dealer. (Available from the customer service)
- Dispose the packaging materials appropriately after taking out the items.
- When tightening screws, use a torque driver or torque wrench; do not use an electric screwdriver or impact driver.

Separately Sold Optional Items

When installing this unit using the optional mobile stand or wall mount bracket, make sure to install it securely. Request for a professional service to install this unit.

Install this unit with assistance of other workers.

Mobile stand:

- TY-ST110AD1

Note

- When mounting this unit on the mobile stand, please read the Operating Instructions supplied with the mobile stand carefully and install it correctly.
- When mounting this unit on the wall mount bracket, please read the Operating Instructions for TL-110AD12AW carefully and install it correctly.
- For best performance and safety, contact your dealer or other professional service provider to have these items installed.
- Please note that we are not responsible for any damage to this unit caused by improper installation of the mobile stand or wall mount bracket even in the warranty period.
- At the end of its use, the unit should be swiftly removed by a professional service qualified for the work.
- The optional accessory numbers may be changed without notice.

Preparation

Prepare the following parts (commercially available)

Bolts and washers

- They are used to install the wall mount bracket on a wall.
(Bolt diameter: M8, 16 places)
- Use bolts that are suitable for the mounting surface.

Maintenance tool

- Used to detach LED modules.

Before Assembly, Installation, and Connection

- Before assembly, installation, and connection, please read through the TL-110AD12AW Installation Instructions carefully.
- Before connection, please read through the Operating Instructions included with the components (TY-CTRFHD1W, TY-PWRBX1W, and TY-FD12AS4) carefully.
- Turn off all the devices before making cable connections.
- Follow the rules below when making cable connections. An improper connection may cause a malfunction.
 - When connecting a cable, touch a nearby metal object before handling the cable to remove any static electricity from your body.
 - Use the power cables supplied with TY-PWRBX1W and TY-CTRFHD1W.
 - Please observe the following for the LAN cables connected to TY-CTRFHD1W and TY-PWRBX1W.
 - When installing TY-CTRFHD1W on the back of TY-FD12AS4, use the LAN cable supplied with TY-CTRFHD1W.
 - When installing TY-CTRFHD1W in another position, use a CAT5e-compliant cable of 30 m or less.
 - Please note that the LAN cable with an anti-breakage cover may come into contact with the back cover and become difficult to unplug.

Assembly, Installation, and Connection

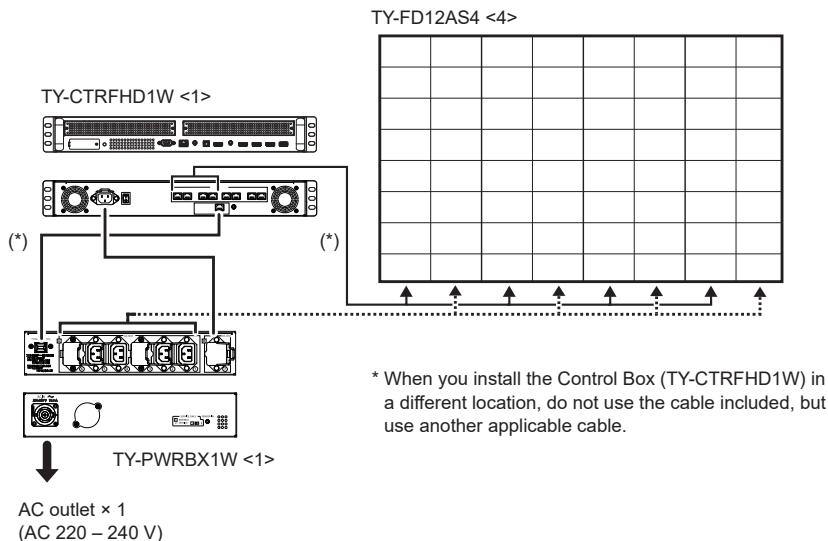
For assembly, installation, and connection instructions, please read through the TL-110AD12AW Installation Instructions.

To download the Installation Instructions, please visit the Panasonic website (<https://docs.connect.panasonic.com/prodisplays/>).



The Installation Instructions contains the instructions for the following:

1. Assembling the Wall Mounts
2. Installing the Wall Mounts
3. Installing the Power Box
4. Installing the Control Box
5. Laying the Cables
6. Installing and Assembling the Cabinet Module
7. Detaching or Installing the LED Module
8. Aligning the LED Modules (Z axis)
9. Aligning the LED Modules (X and Y axes)



Note

- Ensure each AC IN power plug on the Power Box is connected to a separate, independently wired outlet on the distribution board. Do not connect multiple plugs to the same circuit, as this can cause an overload and create a safety hazard.
- Apply power only after all assembly, mounting, and connections are complete.
- If you cannot turn off the main power switch on the Control Box, disconnect the power plug.

Operations

Power indicator on the Control Box: Press the power button on the remote control transmitter when the power indicator is lit in red or orange (standby mode) to make this unit start running.

The first time you turn the power on, “OSD language” will be displayed on the screen.

For details, please read the Operating Instructions for TY-CTRFHD1W.

Specifications

Model No.	TL-110AD12AW
Device type	FHD LED Display
Power supply	AC 220 V – 240 V, 50/60 Hz
	10.0 A
Power consumption	1503 W*1
	Approx. 0.5 W when this unit is turned off / Approx. 0.7 W when this unit is powered off by using the remote control transmitter
LED type	3-in-1 SMD
Pixel pitch	1.27 mm
Screen size	110-inch (aspect ratio 16:9)
Screen dimensions	2 432.0 mm (W) × 1 368.0 mm (H) × 2 790.3 mm (diagonal) / 95.74" (W) × 53.85" (H) × 109.85" (diagonal)
Number of pixels	2 073 600 pixels (1 920 horizontal x 1 080 vertical)
Operating condition	Temperature: 0 °C – 40 °C (32 °F – 104 °F) *2
	Humidity: 10 % – 80 %
Connection terminals *3	HDMI IN ×3 / HDMI OUT ×1 / USB ×1 / AUDIO IN ×1 / AUDIO OUT ×1 / DIGITAL AUDIO OUT ×1 / LAN ×1 / RS232C ×1 / Sensor Module ×1
Dimensions (W × H × D)	2 442 mm × 1 378 mm × 30.5 mm / 96.14" × 54.25" × 1.20" (display)
Mass	Approx. 109.4 kg / 241.2 lbs *4
Cabinet material type	Aluminum die-cast

*1 Shipping condition

*2 Environmental temperature to use this unit at high altitudes (1 400 m (4 593 ft) and higher and below 2 800 m (9 186 ft) above sea level); 0 °C to 35 °C (32 °F to 95 °F)

*3 For details, please refer to the Operating Instructions for the Control Box and Power Box.

*4 For the weight of this unit by configuration, please refer to the Operating Instructions of the components.

Disposal of Old Equipment and Batteries

Only for European Union and countries with recycling systems



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

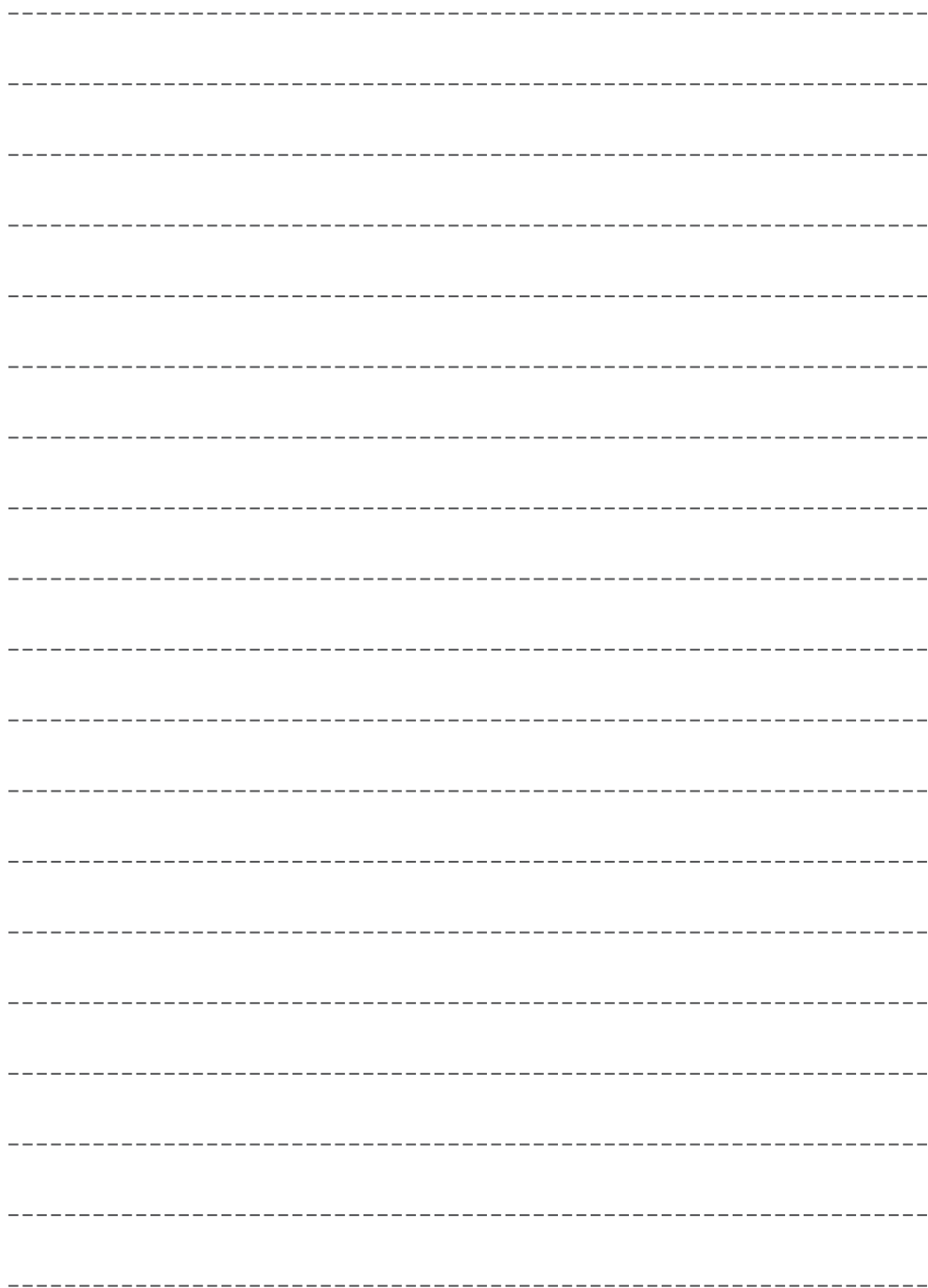
For more information about collection and recycling, please contact your local authority.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



Note for the battery symbol (bottom symbol)

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.



Customer’s Record

The model number and serial number of this product may be found on its rear panel. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number	Serial Number
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Manufactured by:
Panasonic Projector & Display Corporation
2-15 Matsuba-cho, Kadoma City, Osaka 571-8503, Japan
Importer:
Panasonic Connect Europe GmbH
Hagenauer Strasse 43, 65203 Wiesbaden, Germany
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Panasonic Testing Centre
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