

LCD Display with Modular Bracket

Installation Guide

<u>User Manual</u>

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About this Manual

This Manual is applicable to Full-Color LED Display Unit.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website. (http://overseas.hikvision.com/en/).

Please use this user manual under the guidance of professionals.

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Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and CE comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include

lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

Applicable Models

This manual is applicable to LCD displays.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description		
	Provides additional information to emphasize or supplement important points of the main text.		
	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.		
	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.		

Safety Instructions

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
- If the product does not work properly, please contact your supplier or the nearest service center. Never attempt to disassemble the device yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)
- Make sure the power supply voltage is correct before using the device.
- Do not drop the device or subject it to physical shock.
- Make sure the AC outlet is unplugged or switched to OFF before the repair or maintenance in case of the human injury.
- Do not aim the device at the sun or extra bright places. Blooming or smearing may occur otherwise (which is not a malfunction), and affect the endurance of screen at the same time.

- When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- Do not bend, pull or drag the power cord, and do not change the position of the power cord randomly. Make sure the power cord is away from the heat resource in case of the fire or electric shock. Please contact the dealer if there is anything wrong with the power cord.
- The screen may be burned out by a laser beam, so when any laser equipment is in using, make sure that the surface of screen will not be exposed to the laser beam.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Keep the device away from liquid while in use.
- While in delivery, the device shall be packed in its original packing, or packing of the same texture.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Chapter 1 Preparation for Installation

1.1 Precautions

To ensure safety, please read this manual carefully before the installation. Store this installation guide for future reference.

- Ensure the wall is solid and strong enough to bear the weight of the LCD displays.
- Complete screen installation first and then do other decorating on site. If you have to do decorating in advance, leave at least 2 cm space from the screen area to the surrounding. However, if no enough space is kept from the video wall to the wall, keep at least 10 cm from the surrounding.
- It is recommended that the video wall is not higher than 3 rows. If 4 rows or higher is required, use the drawbars for fixing.
- Mark out the dimensions on the wall using a measuring tool such as a level.

1.2 Notes on Moving LCD Displays

When you want to move or place displays, take the following tips:

- Always move the displays by at least 2 adults.
- When taking out the displays, always keep the displays vertical.
- When moving the displays, one person should hold the screen handles and the other should hold the screen from the bottom. Always keep the display vertical.
- When laying down the display, stand the display vertically.
- Do not place the display face up or face down.
- Do not stack the displays.

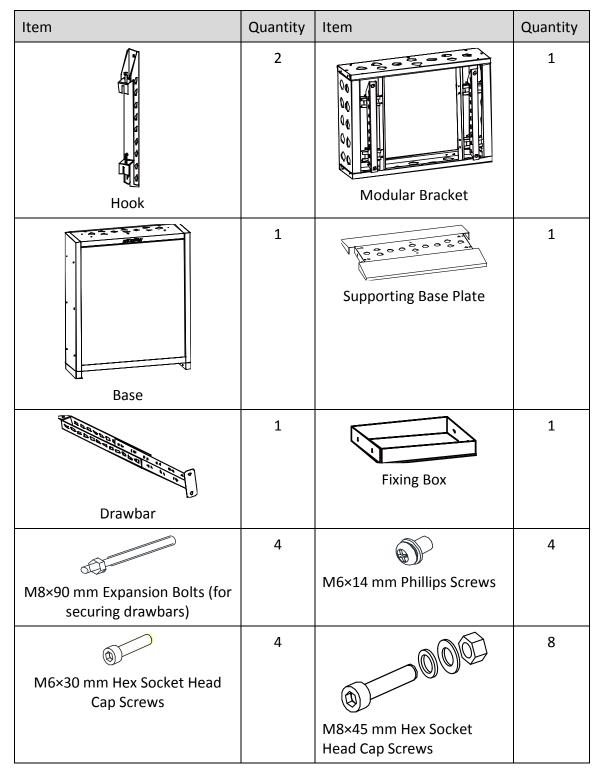
1.3 Device Check

Check the device after you receive the device.

- Check the appearance and take pictures if required for later handling.
- Check the device against the checking list. Check if the device model, accessory quantity, and bracket quantity are correct and check if the brackets are in proper conditions. If there is any damage or lack, keep the original package and contact your dealer.
- Take out the devices and perform appearance and power-on tests one by one.

1.4 Packing List

The following table lists the packing list for one LCD display package.



M8×75 mm Hex Socket Head Cap Screws	8	M10×50 mm Hex Head Cap Screws	8
M10×20 mm Hex Head Cap Screws	4	M10×75 mm Hex Head Cap Screws	4
M16×135 mm Foot crews	8	_	-

Chapter 2 Installation

This section uses a 46-inch LCD video wall with 2×2 scale as an example to describe how to mount LCD displays with modular brackets.

2.1 Mount the Base

Step 1 Take out the base and place the base face down, and then secure the supporting base plate into the base with four M6×135 foot screws.

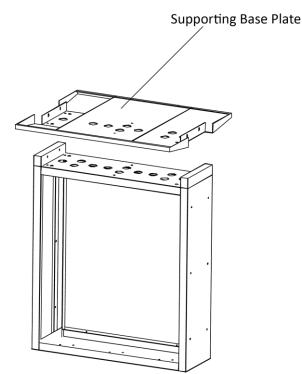


Figure 2-1 Mount the Supporting Base Plate

Step 2 Secure the supporting base plate to the base with four M6×135 mm foot screws, four M10×20 screws on the side, and six M10×50 screws in the middle, as shown in the following figure.

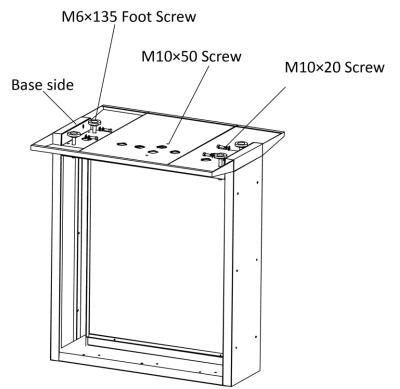


Figure 2-2 Mount the Foot Screws

Ensure that the top of the foot screws is lower than the sides of the base.

Step 3 Stand the base with the logo side facing the front.

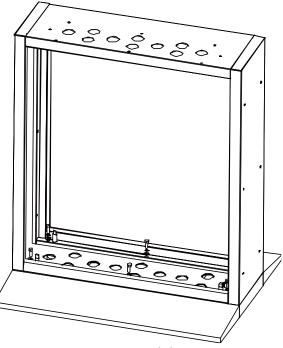
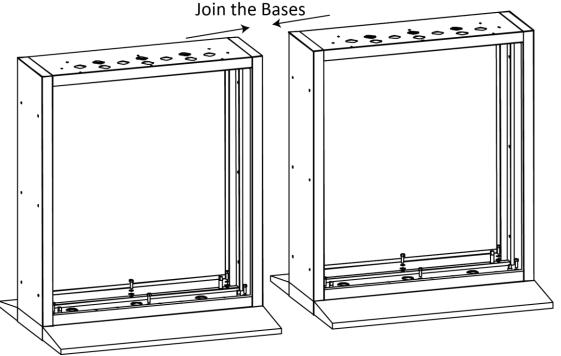


Figure 2-3 Stand the Base



Step 4 Join the bases and secure them with M10×75 mm screws.

Figure 2-4 Join the Bases

Step 5 Adjust the flatness and tightness of the joined base.

- 1) Use a measuring tool such as a level to adjust the flatness of the joined base.
- 2) Tighten or loosen the foot screws to adjust the tightness of the joined base.

Step 6 Secure all the M6×135 mm foot screws against the ground.

2.2 Mount Modular Brackets

Install the brackets from the bottom to the top, from the middle to the sides. That is, finish the lowest row first and then move to the upper row.

Step 1 Mount the brackets and fixing boxes in the lower row.

- 1) Take out one modular bracket and secure the bracket into the base with M8×45 mm screws.
- 2) Repeat the preceding step to secure the other bracket in the lower row into the base with screws. Do not screw the screws too tight for later adjustment when securing the bracket to the base.
- 3) Secure the two fixing boxes to the two brackets with M8×45 mm screws. Make sure that the fixing box on the bottom faces its opening up and that on the top faces down.

Step 2 Mount the brackets and fixing boxes in the upper row.

- 1) Secure the brackets in the upper row to those in the lower row with M8×75 mm screws.
- 2) Secure the two fixing boxes to the brackets in the upper row with M8×45 mm screws.

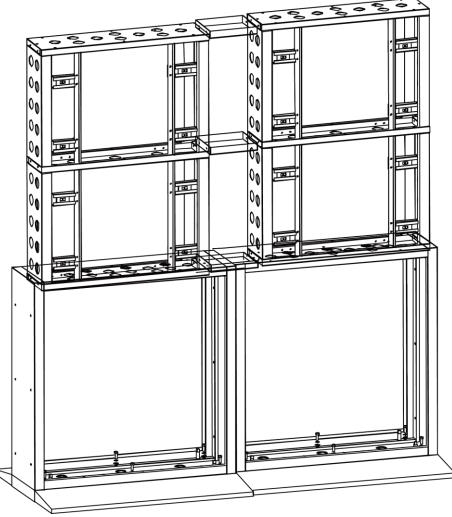


Figure 2-5 Mount Modular Brackets

2.3 Mount Drawbars

Use a Plumb Bob for vertical reference and secure the drawbars of the brackets to the wall. Measure and make sure that the distance is the same between the vertical thread and each of the brackets.

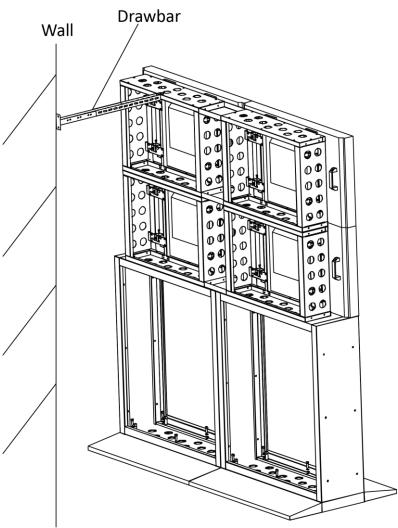


Figure 2-6 Mount Drawbars

2.4 Mount Displays

2.4.1 Mount Hooks

Step 1 Take out one display. Align the mounting holes of the hooks with the display and secure the hooks to the display with M6×14 mm Phillips screws.

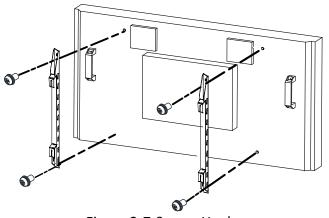
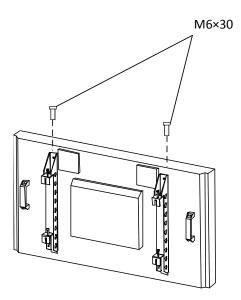
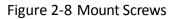


Figure 2-7 Secure Hooks

Step 2 Screw the M6×30 mm hex socket head cap screws into the top of the hooks for later adjustment.





Step 3 Repeat the preceding steps to mount hooks to the other three displays.

2.4.2 Mount Displays onto Brackets

Step 1 Hold one display and attach the hooks to the slots of the adjusting screws.

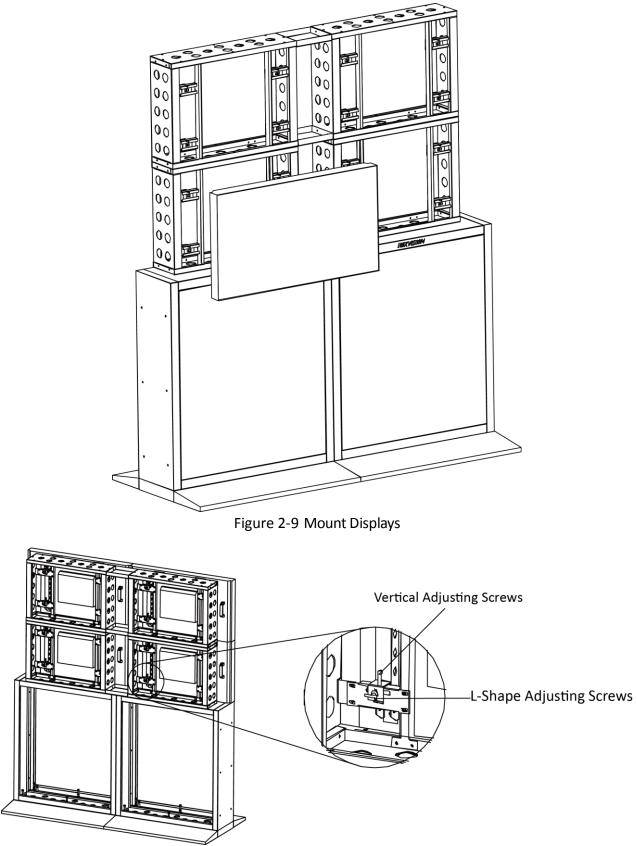


Figure 2-10 Screw Position

Step 2 Repeat step 1 to mount the other three displays onto the brackets.

- Step 3 Adjust the displays. After finishing one row, make preliminary adjustments of the flatness and verticality of the displays.
 - 1) Tighten or loosen the L-shape adjusting screws on the rear to adjust the flatness of the displays.
 - 2) Tighten or loosen the vertical adjusting screws to adjust the gaps between the two top-down displays and gaps between the displays and the base.

Ensure that the four vertical adjusting screws on each display carry equal stress. Otherwise, the display body may become tilted, thus damaging the screen.

2.5 Adjust Flatness and Gaps

After all the displays are mounted, make the following adjustments if required.

- Step 1 Tighten or loosen the L-shape adjusting screws on the rear to adjust the flatness of the displays.
- Step 2 Tighten or loosen the vertical adjusting screws to adjust the gaps between the two top-down displays and gaps between the displays and the base. The perfect gap is 0.6 mm.

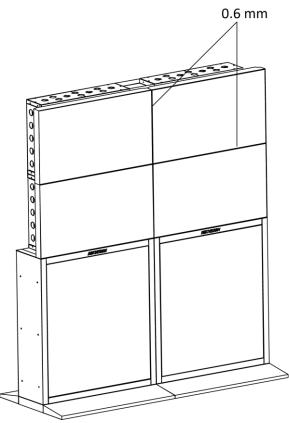


Figure 2-11 Adjust Flatness and Gaps

2.6 Verify the Installation

- The video wall is flat in surface.
- The whole screen is vertical at 90 degrees and the deviation should not be greater than 2 mm.
- The whole screen is horizontal at 180 degrees and the deviation should not be greater than 2 mm.
- Make sure appropriate gaps are kept between the displays. The perfect gap is about 0.6 mm, and make sure that an A4 paper can easily go through the gap.
- Power on the displays and check that the entire video wall screen is lit up normally.

