49XF/XS2B Installation guide

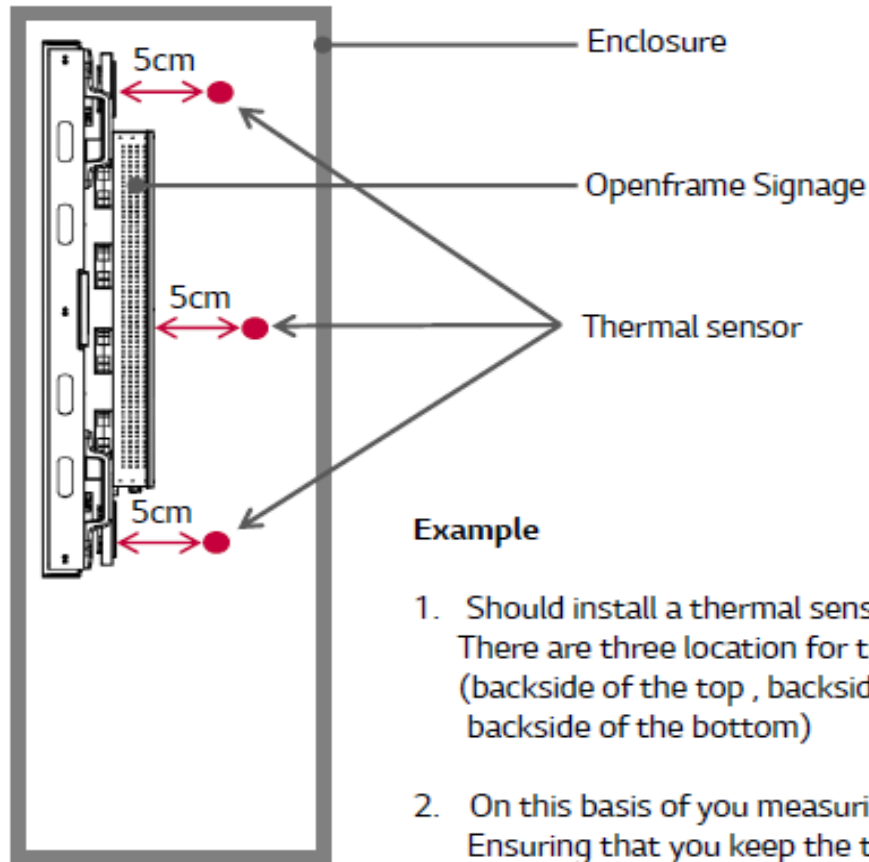| Index |
|:---:|
| 1. 49XF2B (Open frame)

2. 49XS2B (window facing) |

15. Sep. 2015

1. 49XF2B(open frame) Installation guide

1-1. Keep temperature 0℃~50℃ (without direct sunshine)
　　　　0℃~40℃ (with direct sunshine)

When designing the enclosure, the temperature inside the enclosure must be maintained above degree(℃)

Enclosure

Openframe Signage

Thermal sensor

5cm

5cm

5cm

Example

1. Should install a thermal sensor inside the enclosure.
   There are three location for thermal sensor.
   (backside of the top , backside of the middle,
   backside of the bottom)

2. On this basis of you measuring the temperature,
   Ensuring that you keep the temperature
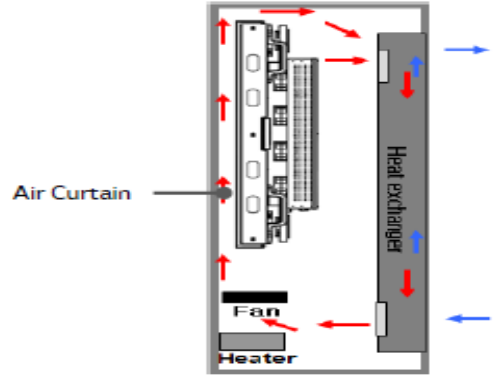
1. 49XF2B(open frame) Installation guide

1-2. Consider using a cooling & heater solution (Mandatory)

- To maintain the temperature inside the enclosure, you should consider using a cooling and heater solution such as an air conditioner, heat exchanger, or combined cooler and heater depending on the external environment. (Please see below examples)
- You could also employ an air flow circulation system and air curtain* between the front panel and the enclosure.
- Recommend to design the exterior of the enclosure to meet with the IP65 standard.
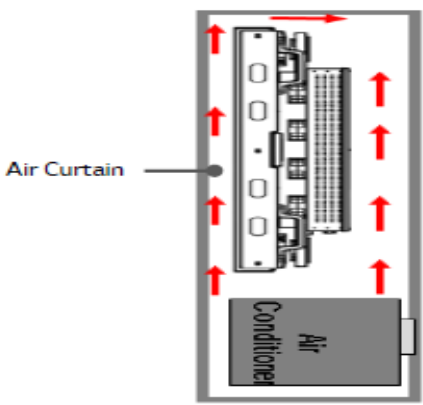- Use a dust filter to prevent dust .(At air inlet and outlet)

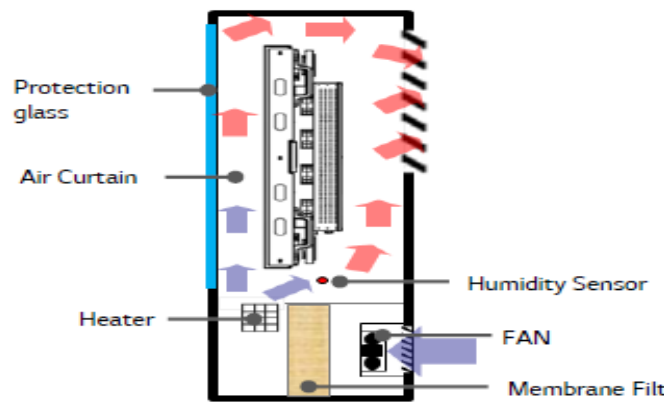### Example 1 : Enclosure (Just fans)

Air Curtain

Fan
Heater
Fan
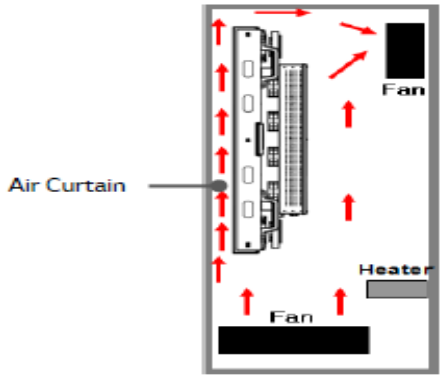
Example 2 : Enclosure (Heat exchanger)

Air Curtain

Heat exchanger
Fan
Heater

Example 3 : Enclosure (Air conditioner)

Air Curtain

Air Conditioner

Example 4 : Direct Air Cooling Solution

Protection glass

Air Curtain

Heater

Humidity Sensor
FAN
Membrane Filter

*Air curtain :
Air flow circulation system between the front panel and the enclosure.

- Filter should be used for filtering out bugs, dust and water.
- For preventing from rust of lead frame in circuit board, operates the Heater if relative humidity is high.
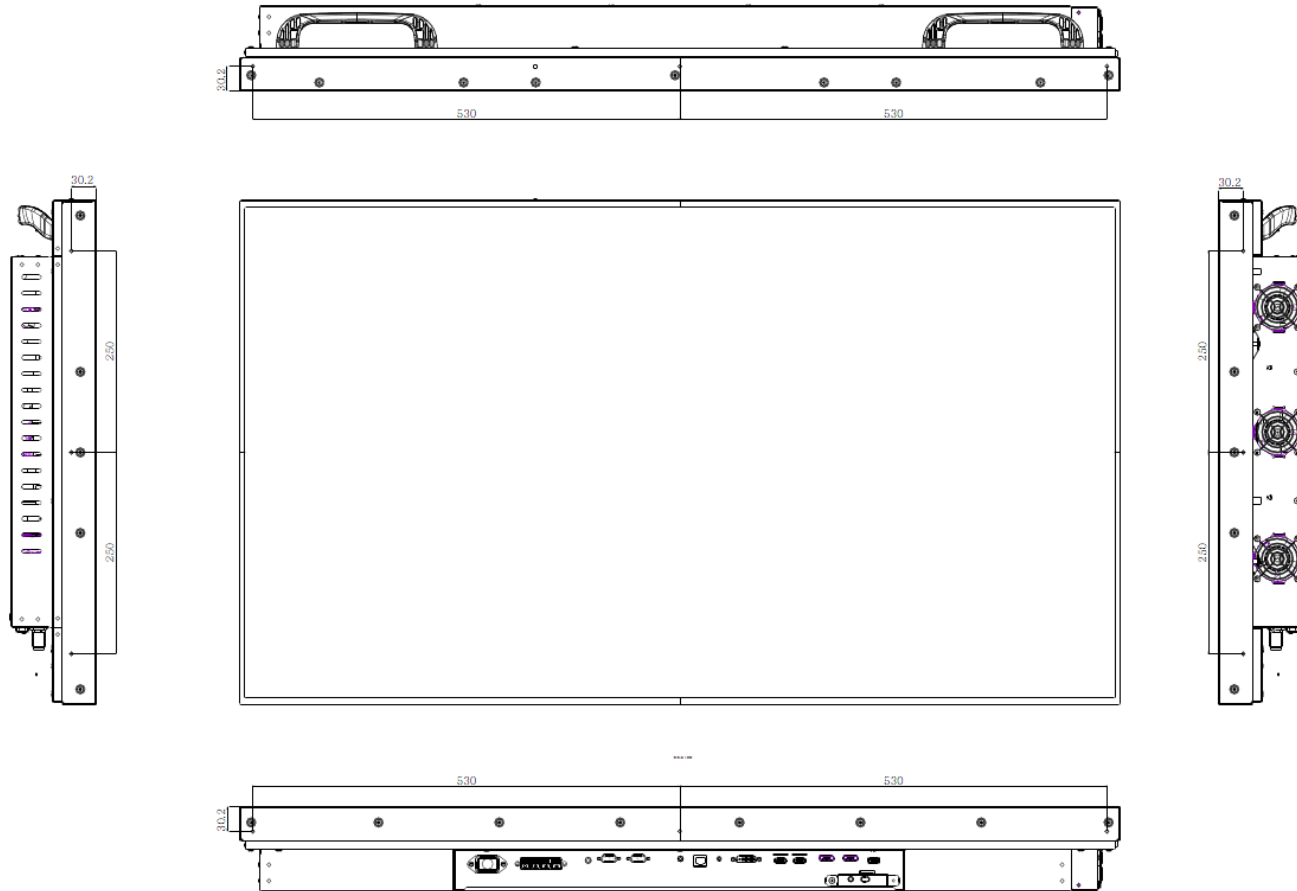
5

1. 49XF2B(open frame) Installation guide

1-3. Do not disassemble Handle, Fan bracket (Mandatory)

Handle

Fan
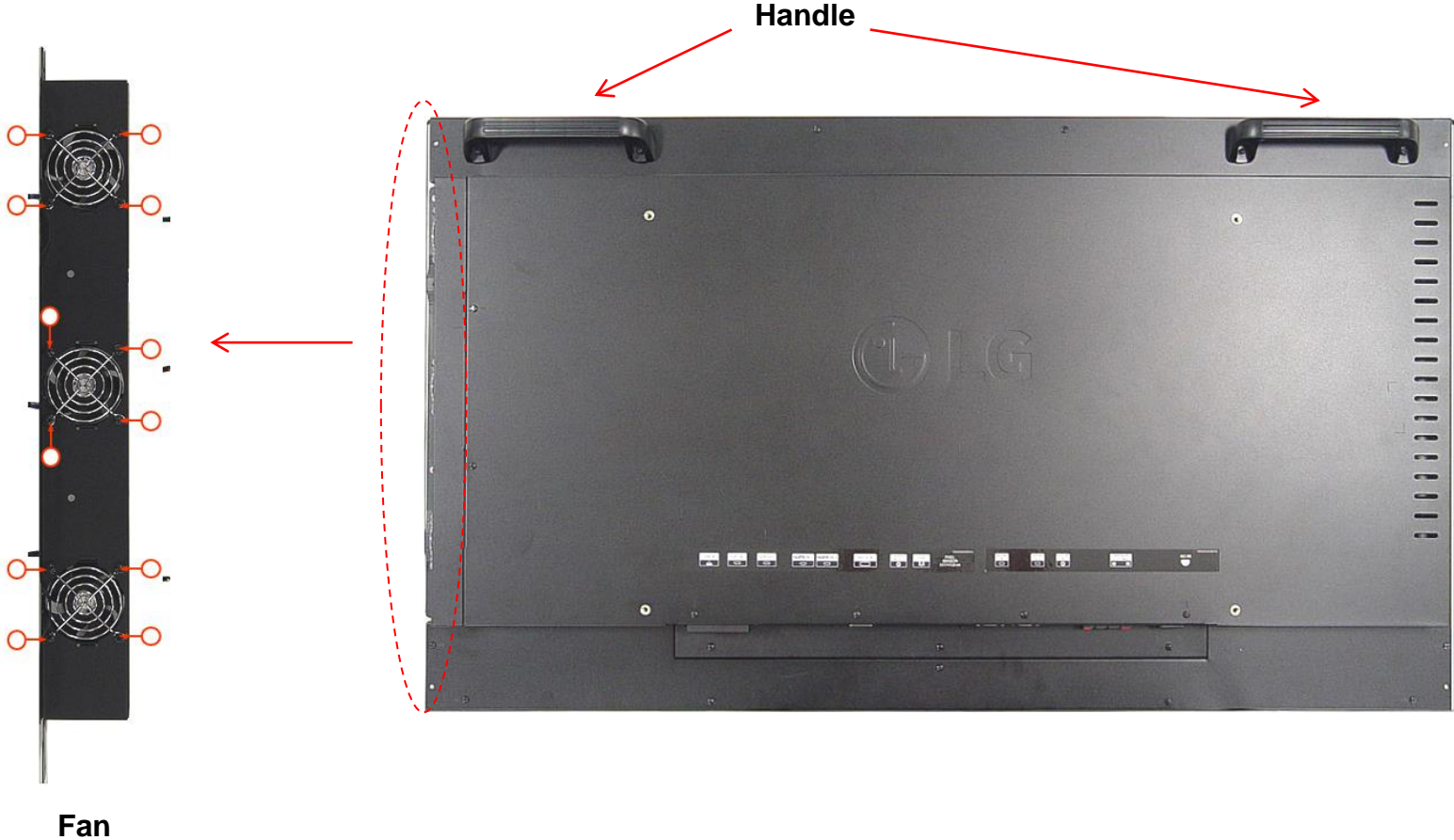
1. 49XF2B(open frame) Installation guide

## 1-4. Do not use a screw is longer than 7.0mm (Mandatory)

- You must use the side screw holes when mounting the panel.
- The side screw holes are M4.0 Tap, Torque 4 ~ 5Kgf.cm, pitch 0.7mm
- The screw hole depth of module is 7.0mm (Max)
- If a screw is longer than 7.0mm, it may cause damage to the LCD module
- It is advisable to only use spring washer-type screws.

1. 49XF2B(open frame) Installation guide

1-5. Please install a cooling system when exposed to direct sun light (Mandatory)

• For Example-Using a canopy may prevent the enclosure temperature increasing due to direct sunlight.

Canopy

Enclosure

49XF2B

Example
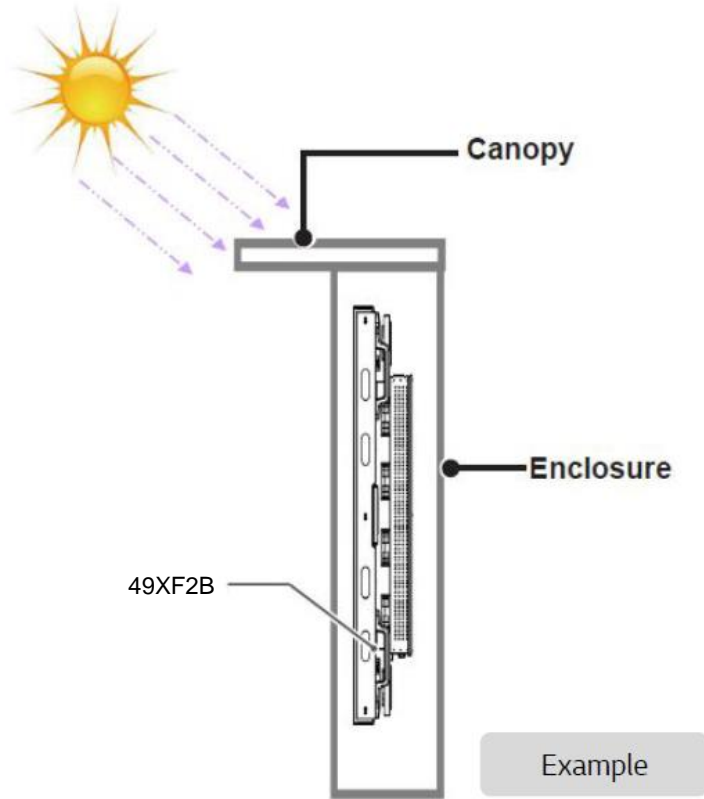
ⓘ NOTE

• To prevent sunlight, consider to attach a UV film on the glass

1-6. How to measure fan noise when it is installed indoors

- Avoid installing the product in indoor environment. It can cause noise issue
- If you are possible to measure the noise level of this product in indoor environment, please do it using the below picture as guidance
- If measurement value meet the specification, it shows that the product operating correctly

Canopy

Enclosure

1m   1m

Front   Back

Front	~55dB
Back	~65dB

‹Noise measurement spec›
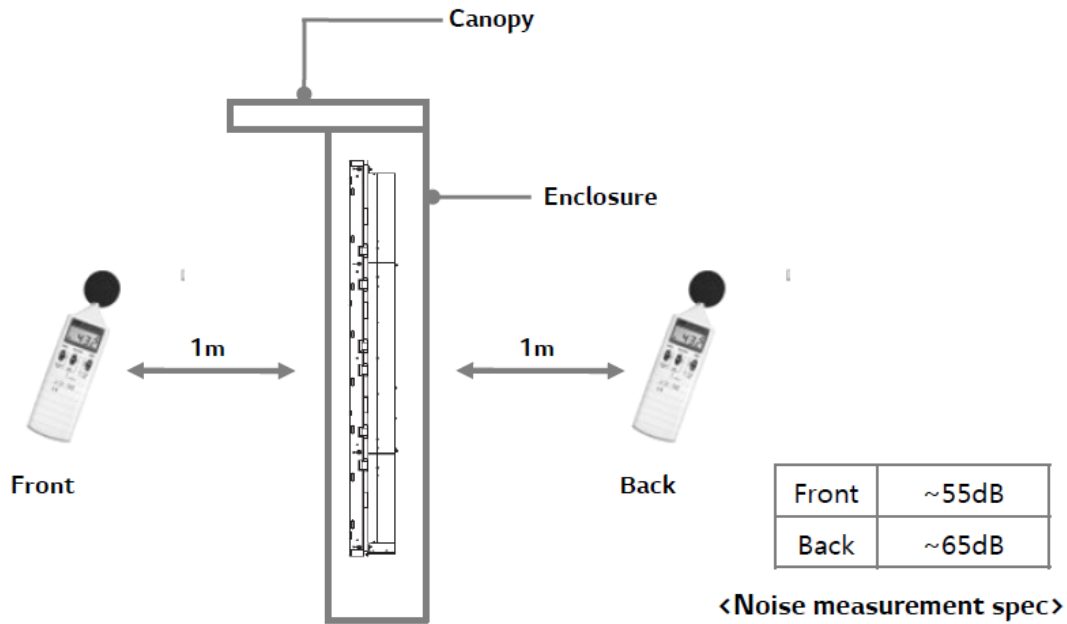
> ⚠️ **NOTE**
>
> • During the measurement, please turn off the Air Cooler in the enclosure

1. 49XF2B(open frame) Installation guide

1-7. Be careful not to damage the cable when installing within an enclosure

- When designing the enclosure, please ensure that there is enough space in order to prevent the Expansion PCB cable being damaged and ensure that it is installed carefully
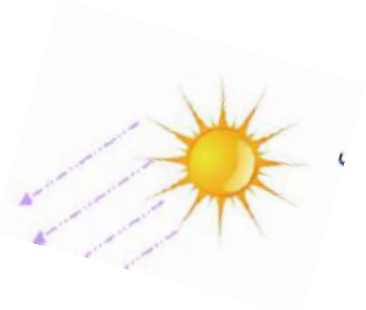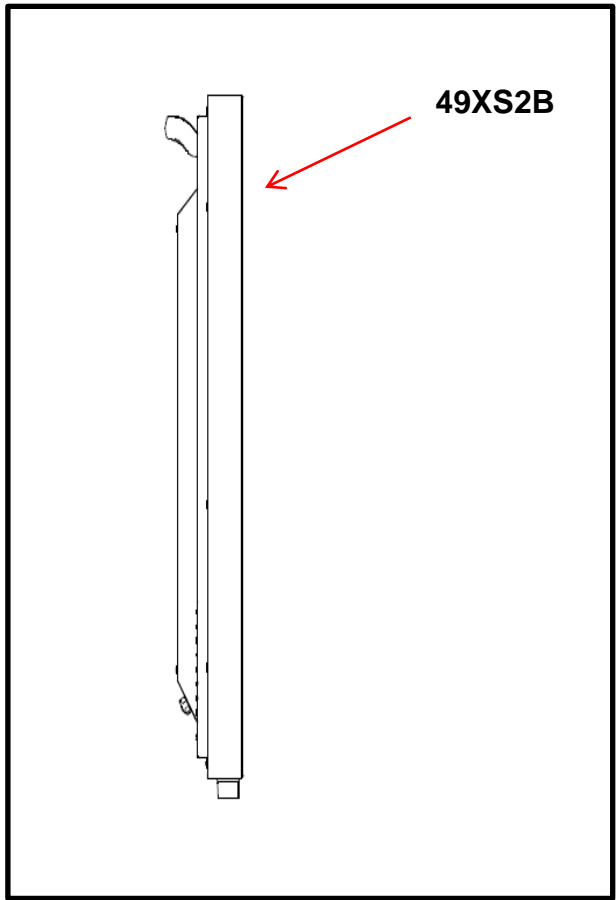
Enclosure

Expansion PCB (Accessory)

※ Length of extension cable: 1,600mm
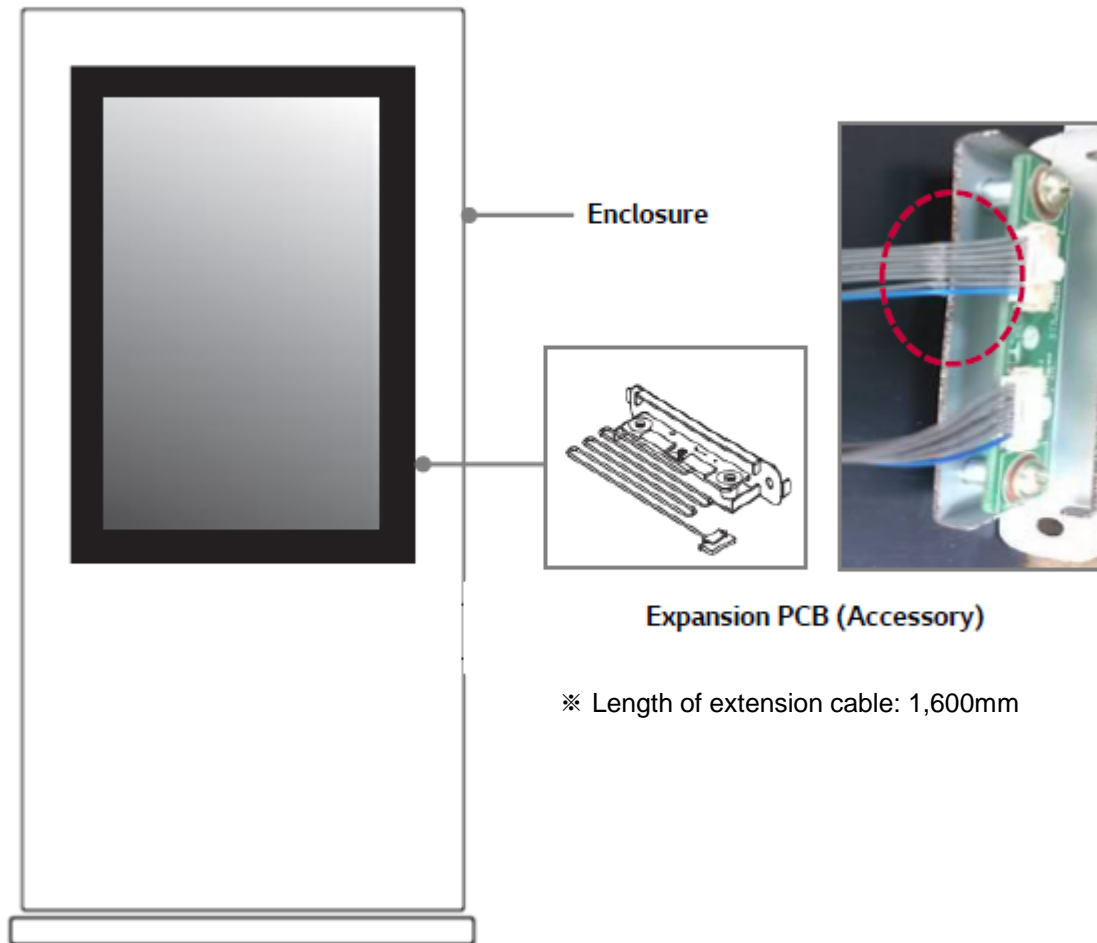
2. 49XS2B(Window facing) Installation guide

2-1. Keep temperature 0℃~45℃ (without direct sunshine)
0℃~35℃ (with direct sunshine)

When designing the enclosure, the temperature inside the enclosure must be maintained above degree(℃)
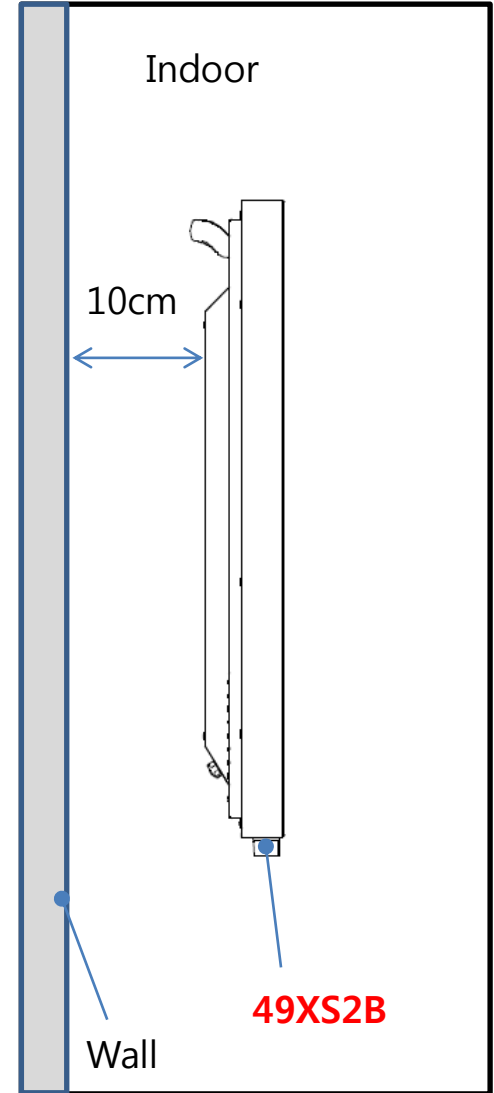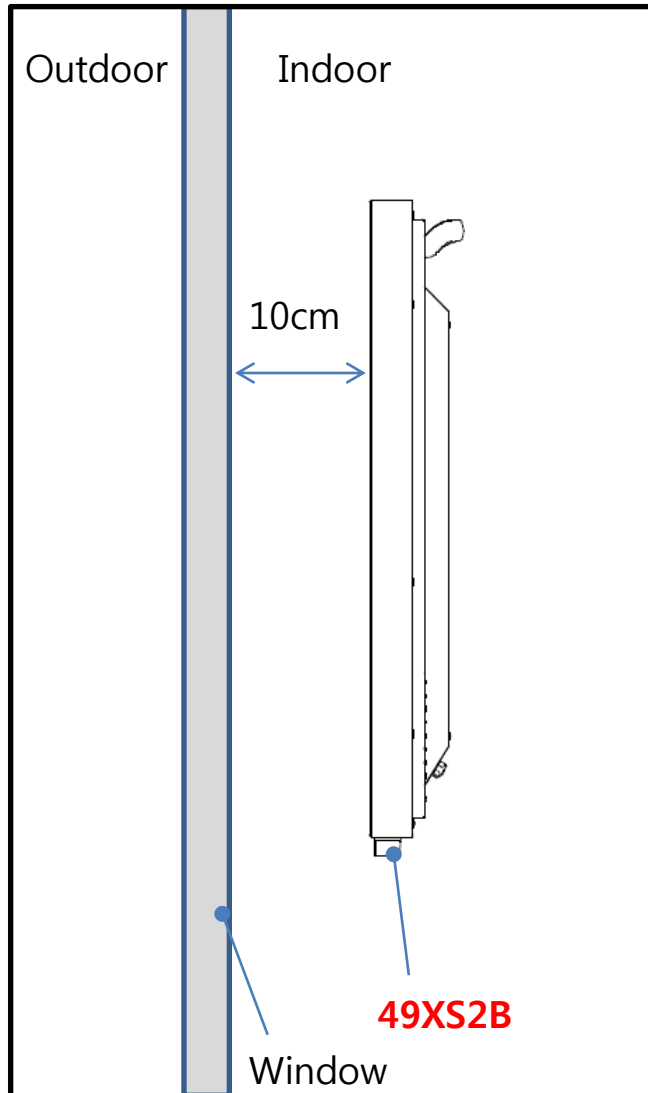
49XS2B

2. 49XS2B(Window facing) Installation guide
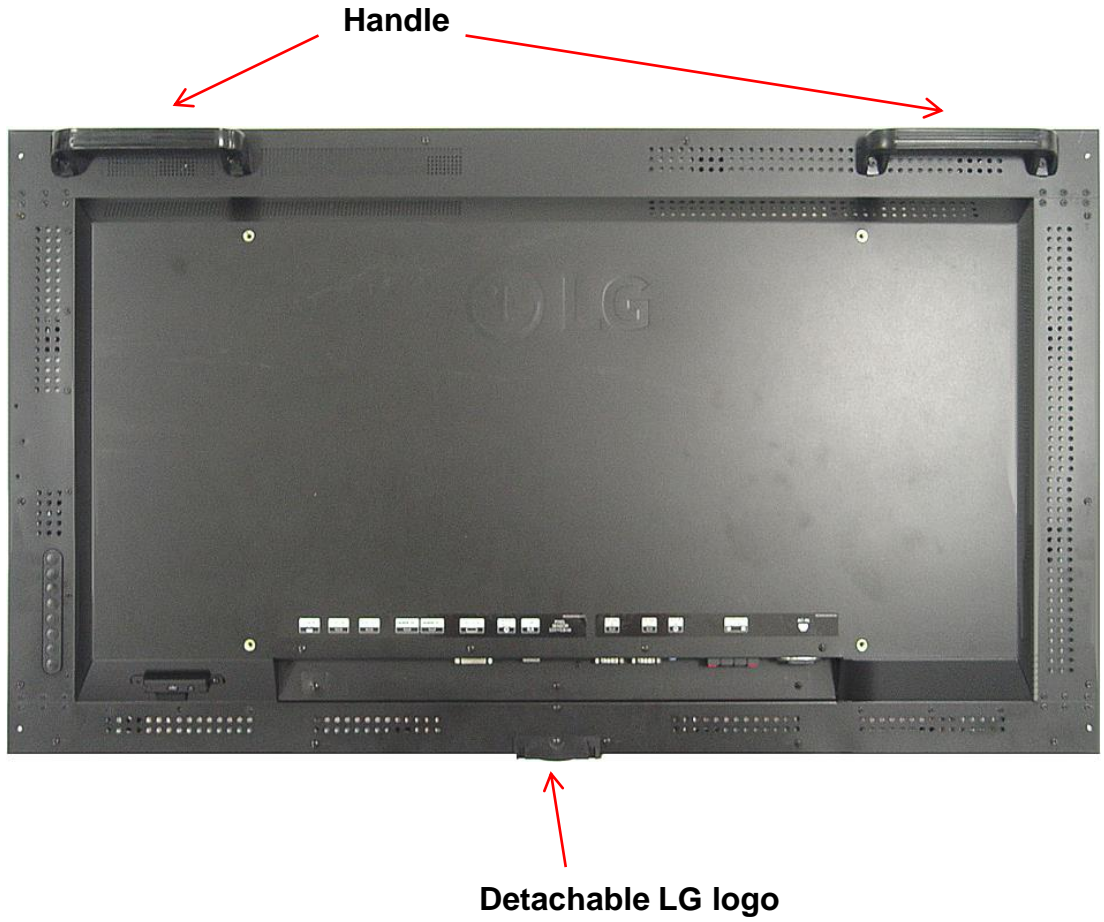
2-2. Window facing installation guide
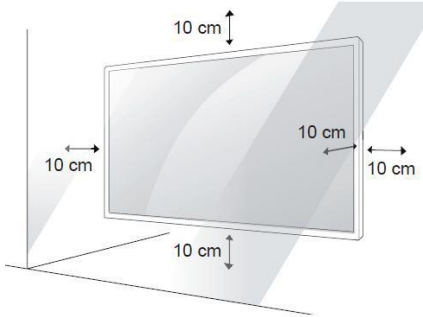
- You must have space over 10cm
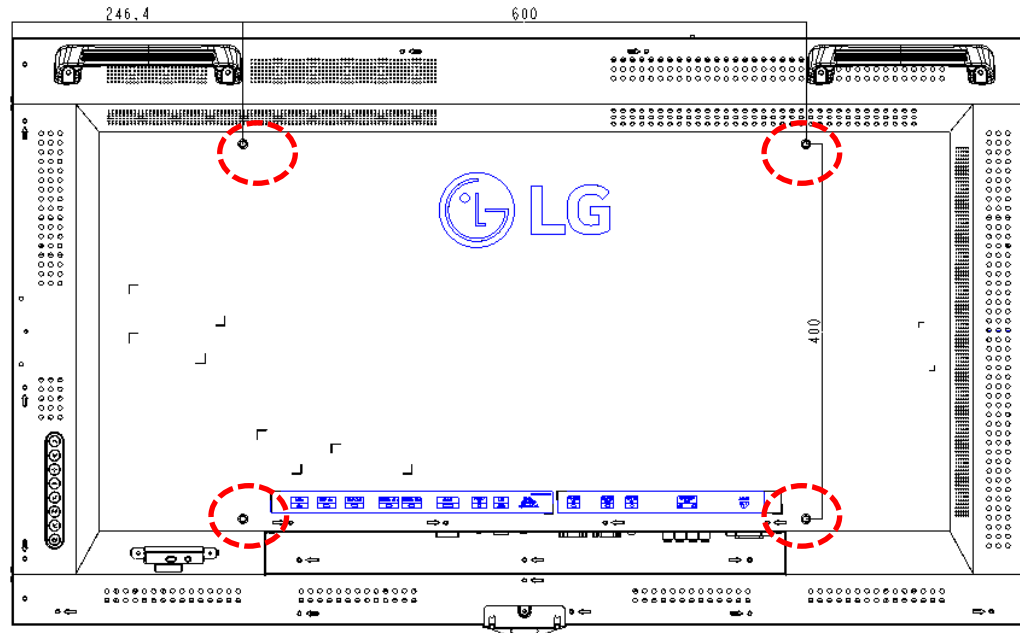- If possible, avoid direct sunshine.

Outdoor | Indoor

10cm

49XS2B

Window

Indoor

10cm

49XS2B

Wall

2-3. Do not disassemble Handle (Mandatory)

Handle

Detachable LG logo

2. 49XS2B(Window facing) Installation guide

2- 4. Do not use a screw is longer than 30mm (Mandatory)


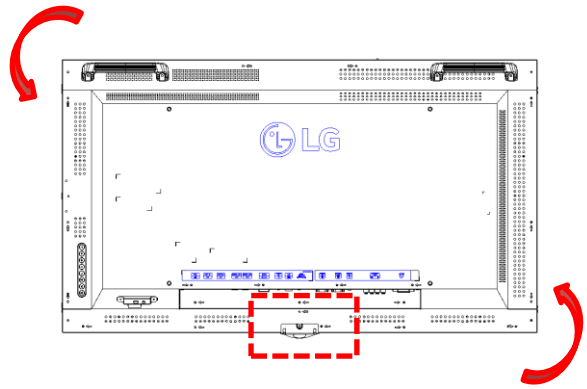◯ Wall mount screw hole

• Example : Spring washer type

- ■ You must use the side screw holes when mounting model.
- ■ The Mounting screw holes are M6.0 Tap, Torque 10 ~ 12Kgf.cm, pitch 1.25mm
- ■ The screw hole depth of module is 30mm (Max)
- ■ If a screw is longer than 30mm, it may cause damage to the LCD module
- ■ It is advisable to only use spring washer-type screws.
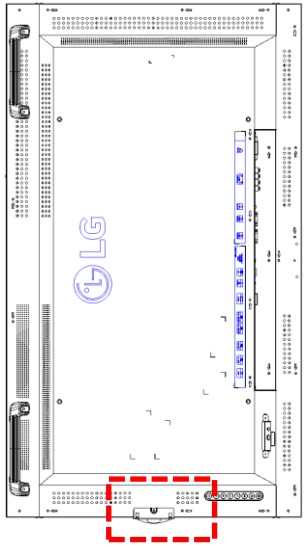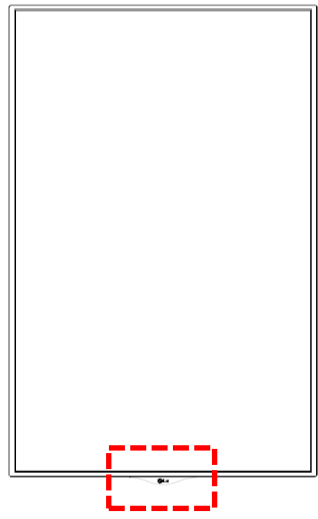- ■ When you do mounting, don't use a movable fixtures.

2- 5. Portrait
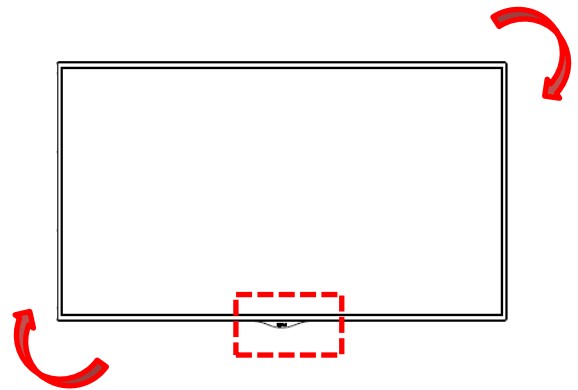
[Front view]

[Back view]

Detachable LG logo