

User Manual 30" Ultra Widescreen 2560 x 1600 LCD



AP-M30

Aluminum front bezel

NAP-M30

Front NEMA4 / IP65



OP-M30

Universal Mounting Open Frame

FC CE

Designed and manufactured by Austin Hughes

Legal Information

First English printing, October 2002

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

Safety Instructions

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labeled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - Repair or attempted repair by anyone not authorized by us.
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuation or failure.
 - Use of supplies or parts not meeting our specifications.
 - Normal wear and tear.
 - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Contents

< Part. 1 > AP-M30 / NAP-M30

1.1	Package Content	P.1
1.2	Structure Diagram & Dimension	P.2 - 3
1.3	Mounting Hardware & Installation	P.4 - 5

< Part. 2 > OP-M30

2.1	Package Content	P.6
2.2	Structure Diagram & Dimension	P.7 - 8
2.3	Mounting Hardware & Installation	P.9

< Part. 3 > Specifications / OSD / Remote Controller

3.1	Product Specifications	P.10 - 11
3.2	On-screen Display Operation (OSD)	P.12 - 13
3.3	Picture In Picture (PIP) / Picture By Picture (PBP)	P.14 - 15
3.4	Remote Controller (RC-2)	P.16

< Part. 4 > Options

4.1	Option Table	P.17
4.2	48V or 24VDC power	P.18
4.3	MIL-type or lockable connector	P.19

Before Installation

- It is very important to mount the equipment in a suitable cabinet or on a stable surface.
- Make sure the place has a good ventilation, is out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.

Unpacking

The equipment comes with the standard parts shown in package content. Check and make sure they are included and in good condition. If anything is missing, or damaged, contact the supplier immediately.

How To Clean Your LCD Monitor



Caution :

- To avoid the risk of electric shock, make sure your hands are dry before unplugging your monitor from or plugging your monitor into an electrical outlet.
- When you clean your monitor, do not press down on the LCD screen. Pressing down on the screen can scratch or damage your display. Pressure damage is not covered under warranty.
- Use only cleansers made specifically for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the finish.
- Do not spray any kind of liquid directly onto the screen or case of your monitor. Spraying liquids directly onto the screen or case can cause damage which is not covered under warranty.
- Do not use paper towels or abrasive pads to clean your monitor. Using an abrasive pad or any wood based paper product such as paper towels can scratch your LCD screen.

Cleaning Your Monitor

To clean your LCD safely, please follow these steps :

- ① Disconnect the power cord.
- ② Gently wipe the surface using a clean, dry microfiber cloth. Use as little pressure as possible.

Cleaning Tough Marks and Smudges

To remove tough marks and smudges, please follow these steps :

- ① Disconnect the power cord.
- ② Spray a small amount of non-abrasive cleanser on a microfiber cloth.



Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.

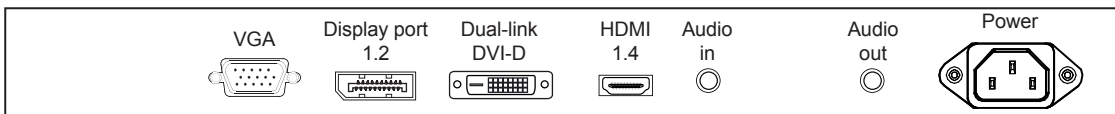
- ③ Gently wipe the surface. Use as little pressure as possible.
- ④ Wait until your monitor is completely dry before plugging it in and powering it up.

AP-M30 / NAP-M30

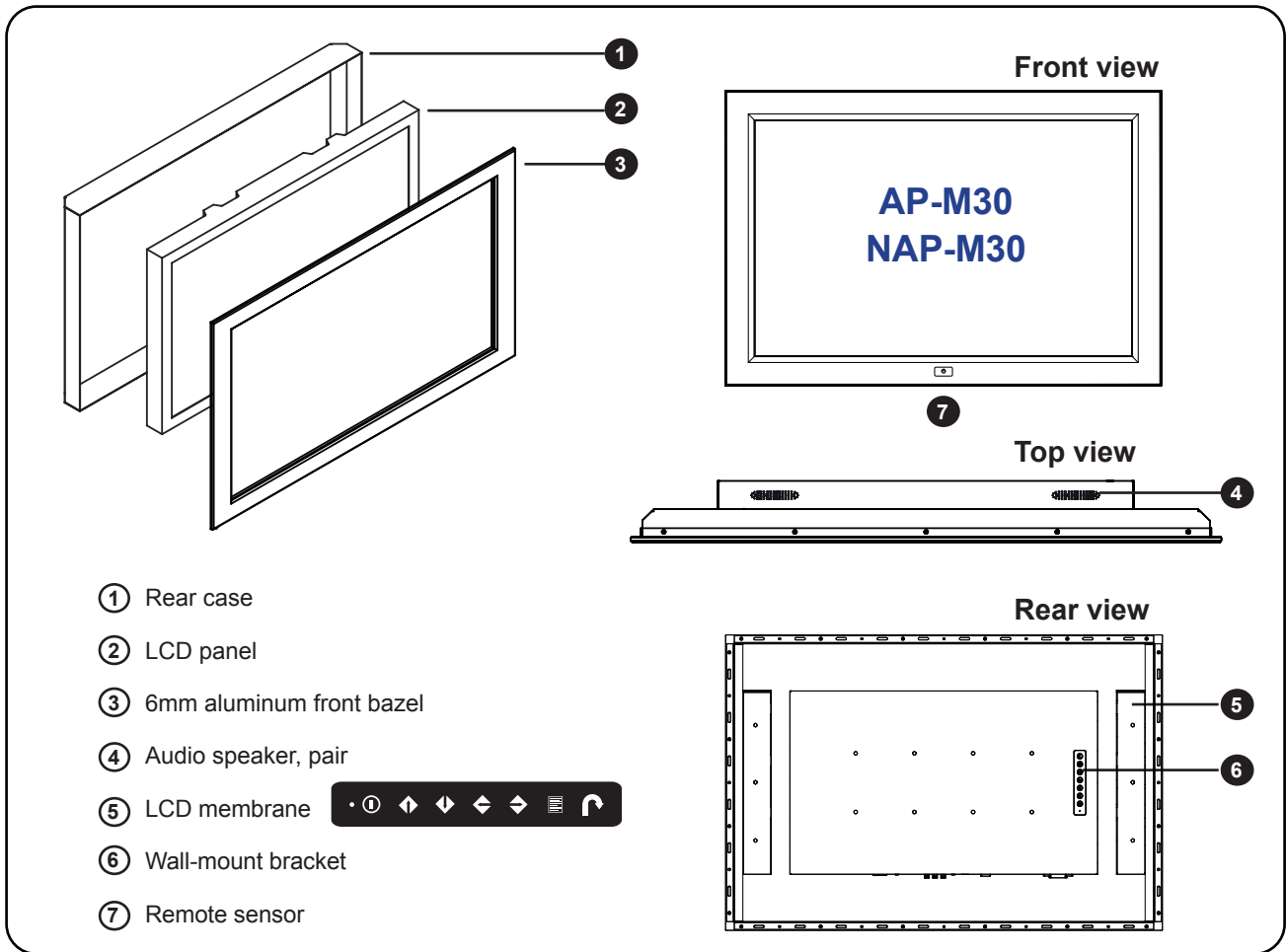


- 30" Ultra Widescreen LCD display X 1**
- 6ft DVI-D dual-link digital cable (male to male) X 1**
- Power cord X 1**
- Remote controller X 1**
- Wall-mount bracket set X 1**

Basic I/O

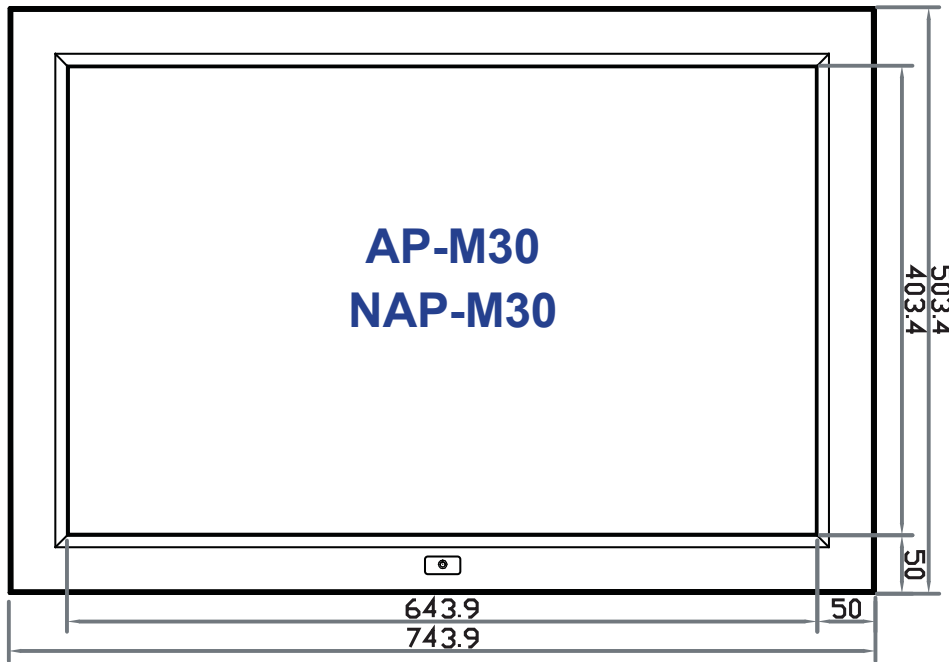


< 1.2 > Structure Diagram - AP / NAP-M30



Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
AP-M30	743.9 x 77.5 x 503.4 mm 29.3 x 3.1 x 19.8 inch	To be confirmed	17.9 kg 39.4 lbs	22.8 kg 50.2 lbs
NAP-M30	743.9 x 77.5 x 503.4 mm 29.3 x 3.1 x 19.8 inch	To be confirmed	21.9 kg 48.2 lbs	26.8 kg 59 lbs

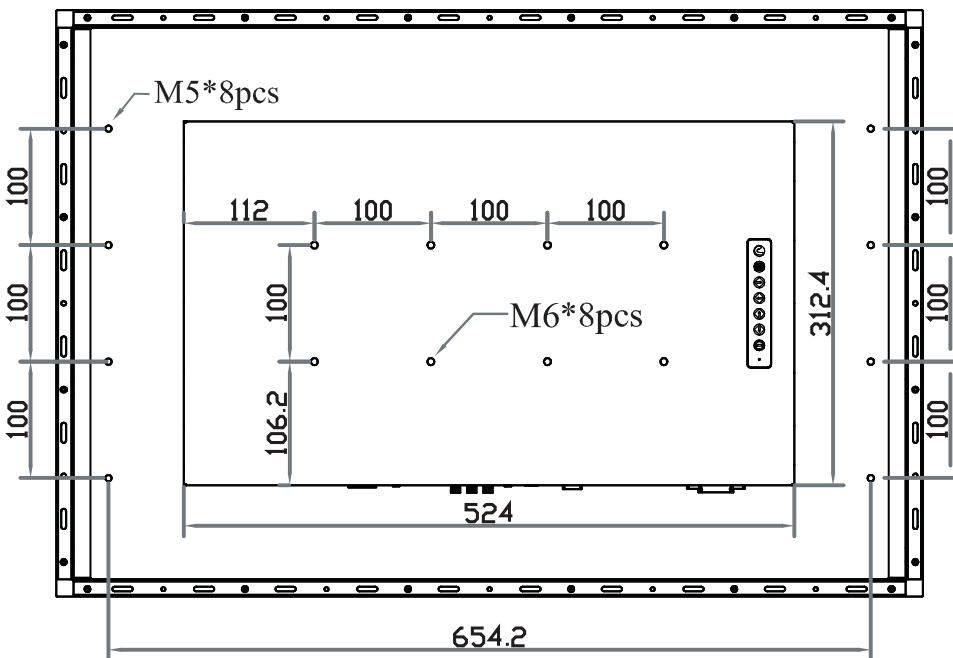
Front View



Side View

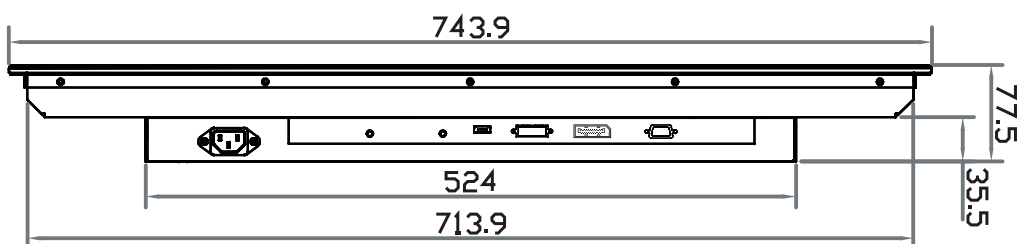


Rear View

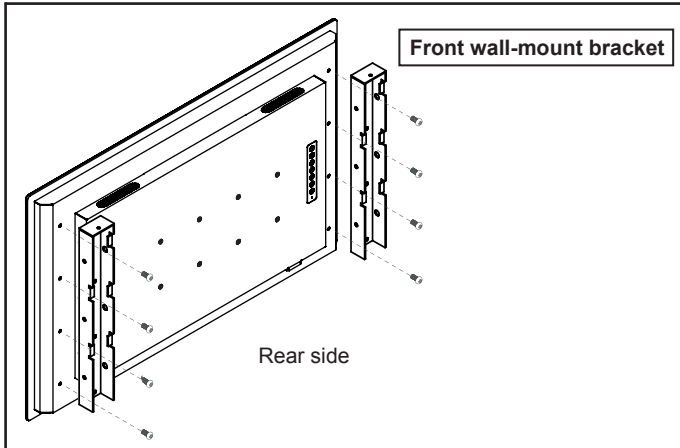


UNIT : mm
1mm = 0.03937 inch

Bottom View

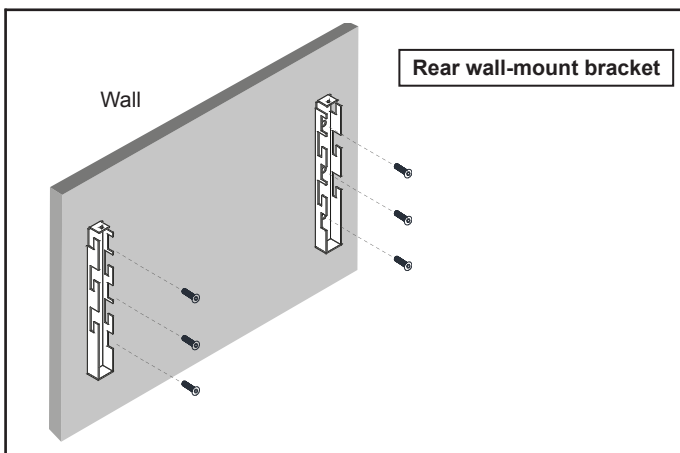


< 1.3 > Wall-mount Installation - AP / NAP-M30



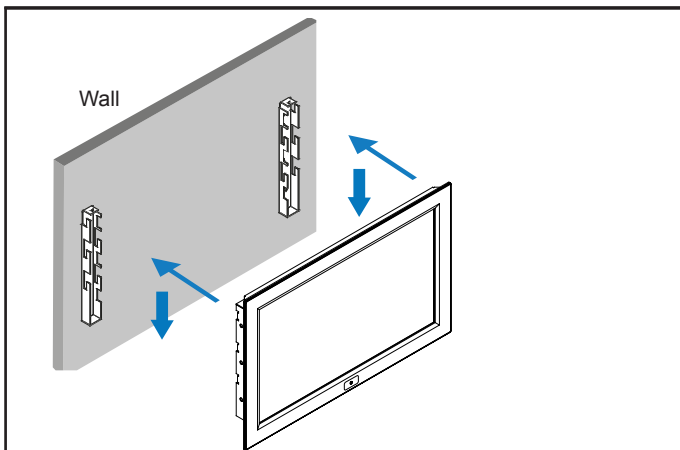
Step 1

- Install left & right front wall-mount brackets at the rear side of the LCD shown above.
- M5 screw x 8 pcs included (Left & right side).

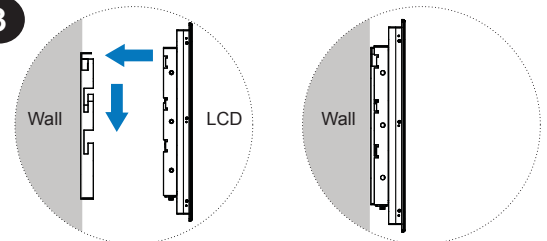


Step 2

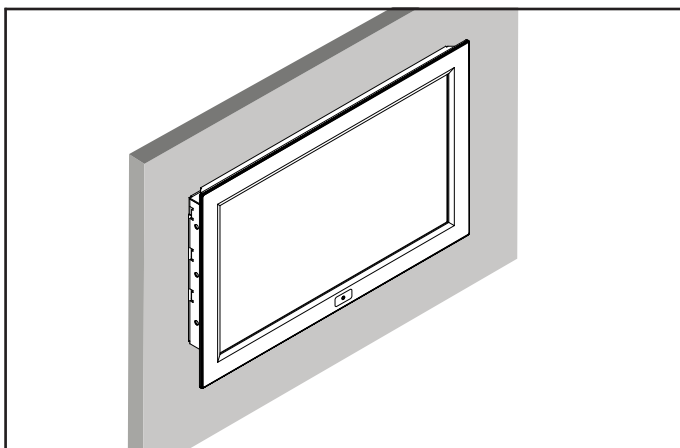
- Install left & right rear wall-mount brackets on the wall shown above.
 - 6 x M10 screws required (Left & right side).
- M10 screw sets are not provided.**



Step 3

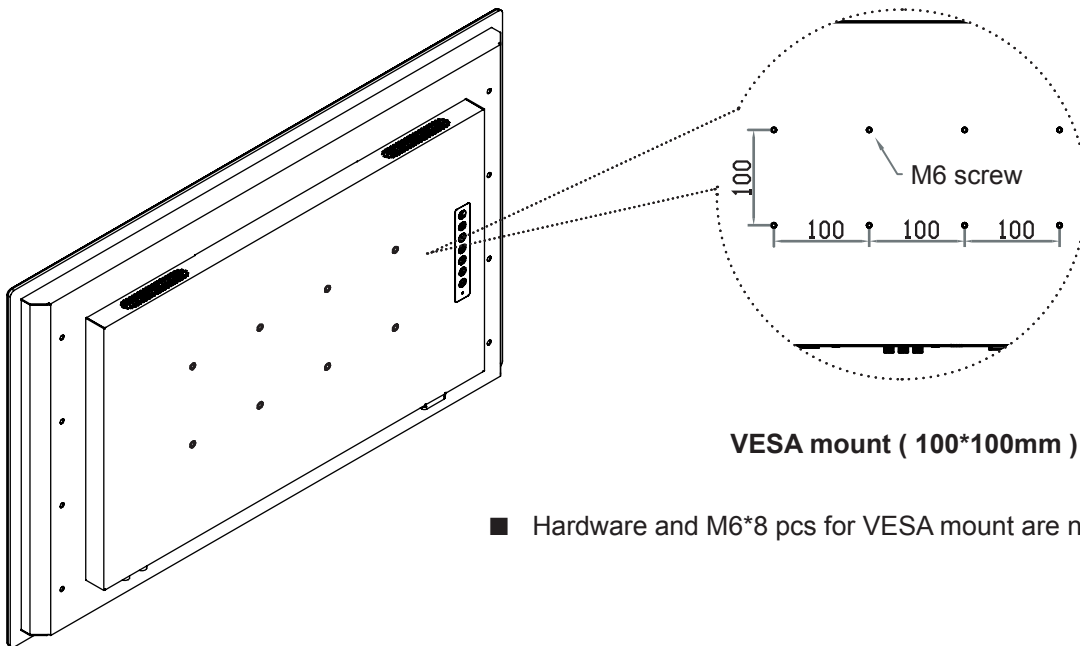


- Attach the LCD to the rear wall-mount brackets on the wall.



Step 4

Installation Completed.



< Part 2 >

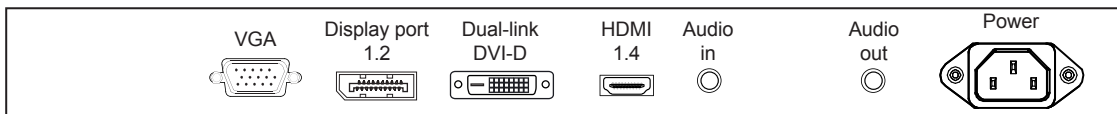
< 2.1 > Package Content - OP-M30

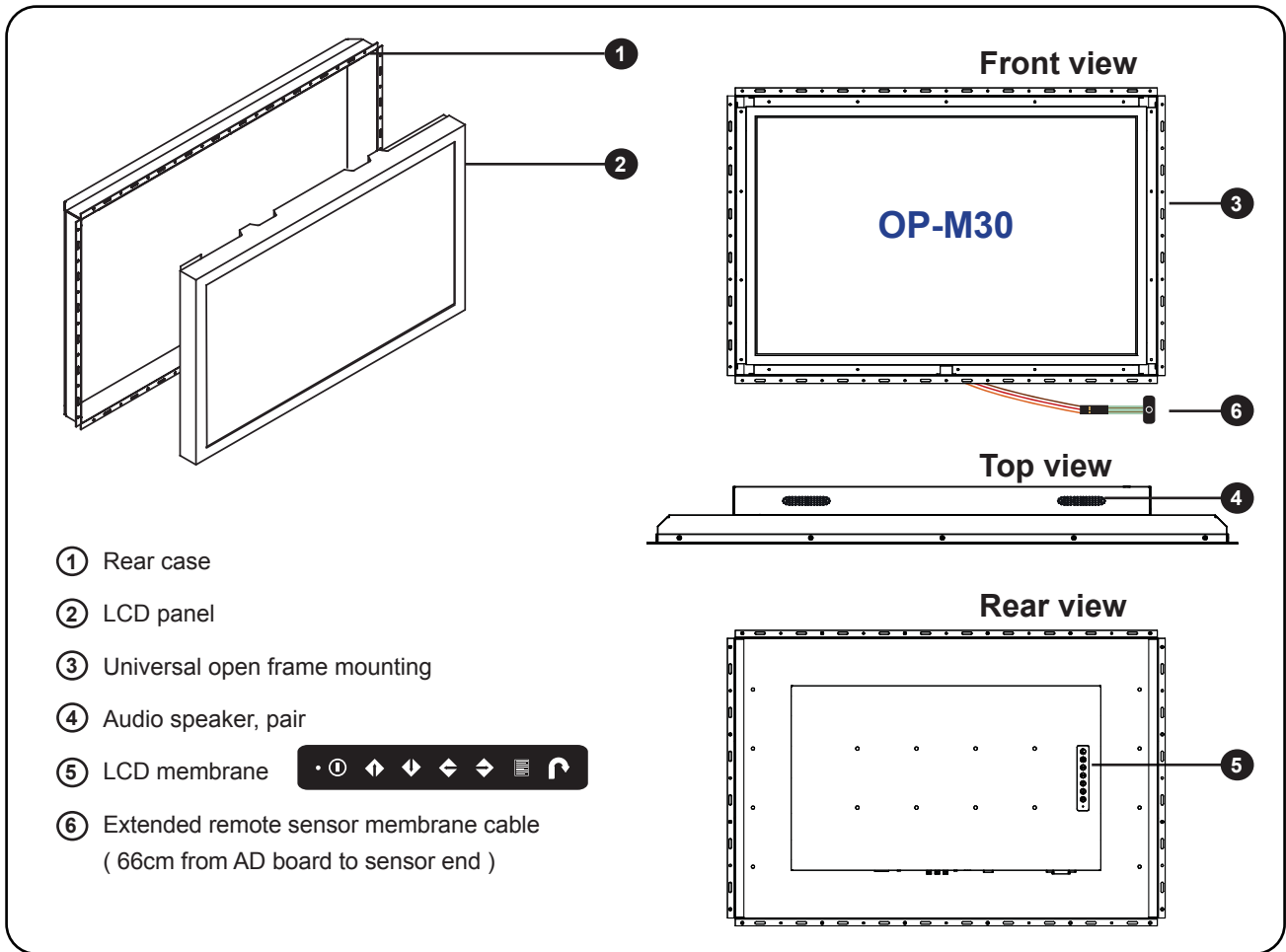
OP-M30



- 30" Ultra Widescreen LCD display X 1**
- 6ft DVI-D dual-link digital cable (male to male) X 1**
- Power cord X 1**
- Remote controller X 1**

Basic I/O

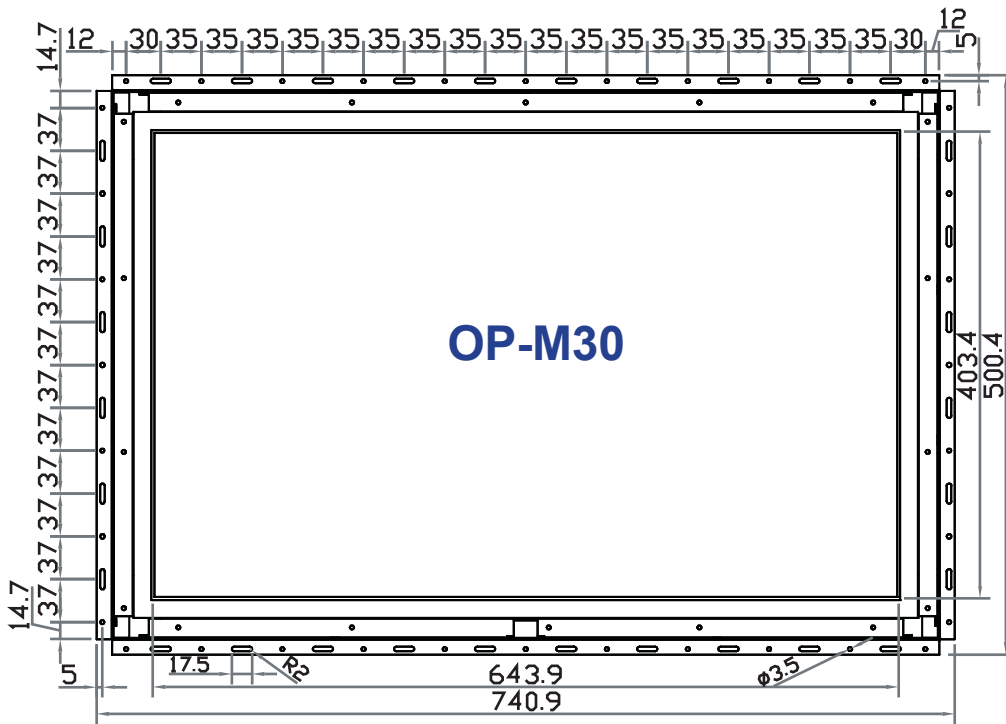




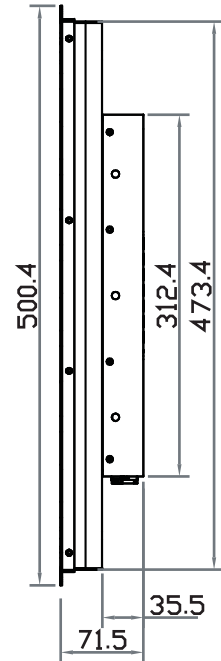
Model	Product Dimension (W x D x H)	Packing Dimension (W x D x H)	Net Weight	Gross Weight
OP-M30	740.9 x 71.5 x 500.4 mm 29.2 x 2.8 x 19.7 inch	To be confirmed	11.9 kg 26.2 lbs	14.8 kg 32.6 lbs

< 2.3 > Dimension - OP-M30

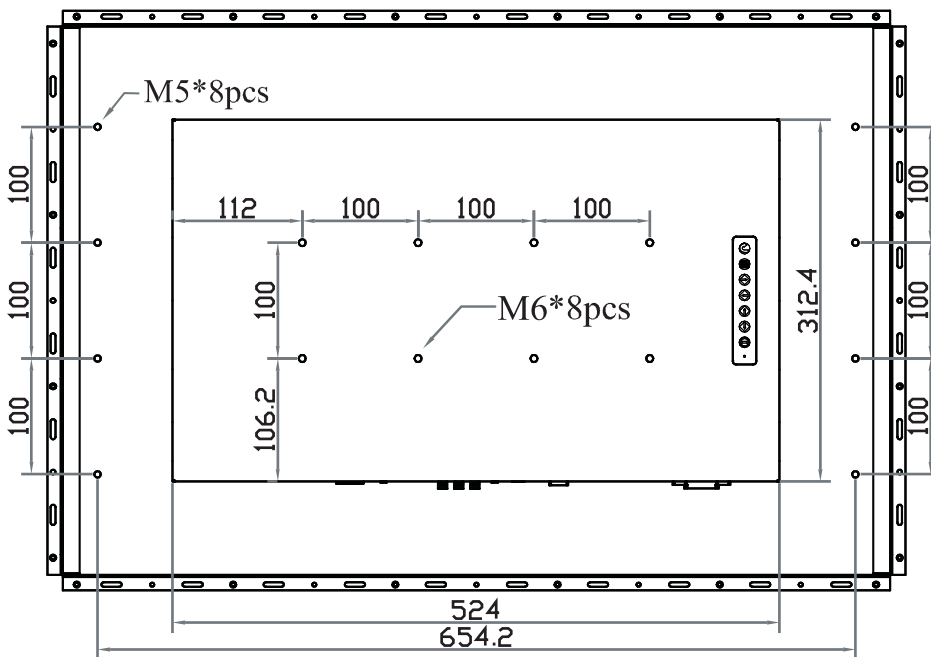
Front View



Side View

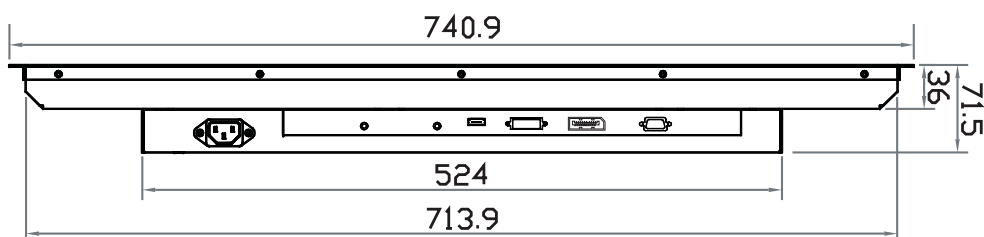


Rear View

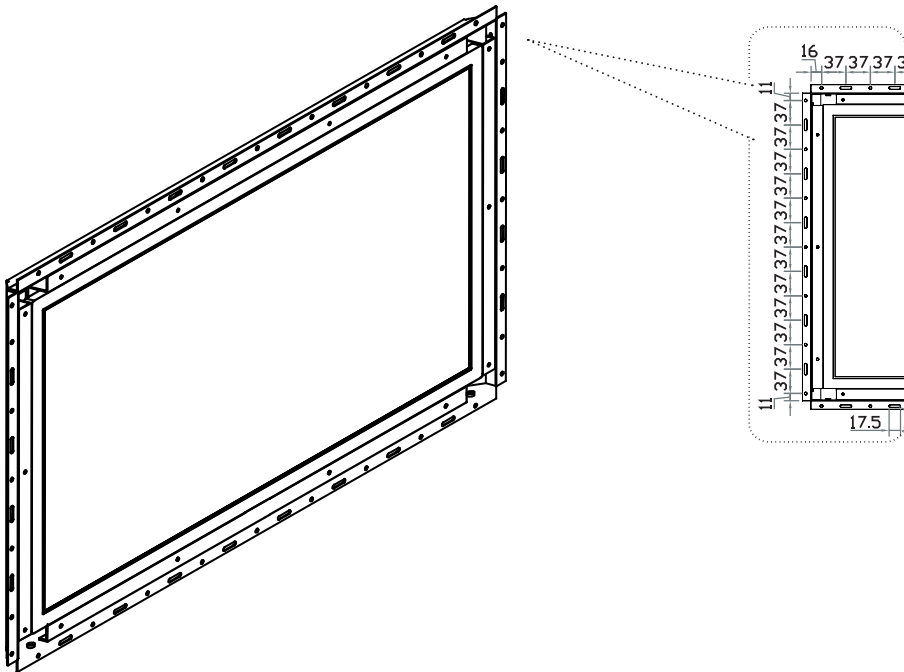


UNIT : mm
1mm = 0.03937 inch

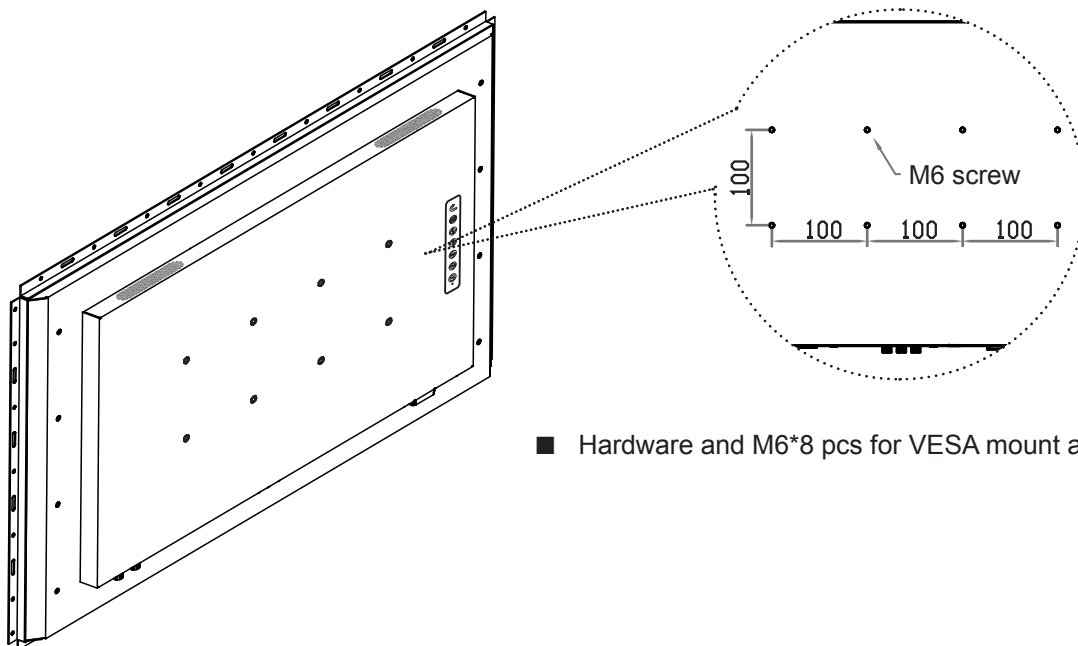
Bottom View



(I) Universal mount



(II) VESA mount (100*100mm)




■ Hardware and M6*8 pcs for VESA mount are not provided

< Part 3 >

< 3.1 > Product Specifications

Mechanical Design		AP / NAP-M30	OP-M30
	Front Panel	Black, RAL 9005	-
	Rear Casing	Black, RAL 9005	Black, RAL 9005
	VESA Mounting	100 x 100mm	100 x 100mm
	Other Mounting	Panel mount	Universal mount
	Protection	3mm protective glass	-

LCD Panel	Manufacturer	 LG	
	Panel Size (diagonal)	30-inch Widescreen TFT color LCD	
	Display pixel (dots x lines)	2560 x 1600	
	Brightness (typ.)	350	
	Contrast Ratio (typ.)	1000:1	
	Color	1.07 Billion, 10-bit	
	Viewing Angle (L/R/U/D)	89/89/89/89	
	Response Time (ms)	12	
	Dot pitch (mm)	0.2505	
	Display Area (mm)	641.28H x 400.8V	
	Surface treatment	Haze 10%, Hard-coating	
	Surface hardness	3H	
	Backlight Type	LED	
	MTBF (hrs)	30,000	

Video Connectivity	Digital	HDMI	HDMI 1.4
		DVI	Dual-link DVI
		Display port	Display port 1.2
	Analog	VGA	Analog 0.7Vp-p
	Plug & Play	DVI / VGA	VESA EDID structure 1.3
	Synchronization	VGA	Separate, Composite & SOG

Audio Connectivity	Audio Input	Connector	3.5mm stereo jack
		Impedance / Power level	30kΩ / 750mV
	Audio Output	Connector	3.5mm stereo jack
		Resistance / Power level	30kΩ / 2.8V
	Speaker	Dual Stereo Speaker	10W x 2

*When the audio output is connected, speaker output is OFF

Power	Power Supply	Range	Auto-sensing 100 to 240VAC, 50 / 60Hz
		Power Consumption	Screen display ON
	Power saving mode		5W or less
	Power button OFF		2W or less

< 3.1 > Product Specifications

30" Ultra Widescreen LCD Display

Regulatory	Safety	FCC & CE certified
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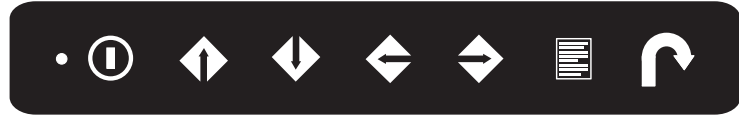
Environmental Conditions	Operating	Temperature	0 to 55°C degree
		Humidity	20~90%, non-condensing
	Storage	Temperature	-5 to 60°C degree
		Humidity	5~90%, non-condensing
		Shock	10G acceleration (11ms duration)
		Vibration	5~500Hz 1G RMS random





Physical Specification		AP-M30	NAP-M30	OP-M30
	Product (W x D x H)	mm	743.9 x 77.5 x 503.4	743.9 x 77.5 x 503.4
inch		29.3 x 3.1 x 19.8	29.3 x 3.1 x 19.8	29.2 x 2.8 x 19.7
Packing (W x D x H)	mm	To be confirmed	To be confirmed	To be confirmed
	inch	To be confirmed	To be confirmed	To be confirmed
Net Weight		17.9 kgs / 39.4 lbs	21.9 kgs / 48.2 lbs	11.9 kgs / 26.2 lbs
Gross Weight		22.8 kgs / 50.2 lbs	26.8 kgs / 59 lbs	14.8 kgs / 32.6 lbs

Applicable Format	DVI-D / VGA Input / Display Port Input	PC Signal	2560 x 1600 x 60Hz	
			1920 x 1200 x 60Hz	
			1920 x 1080 x 60Hz	
			1280 x 1024 x 60Hz	
			1280 x 720 x 60Hz	
			1024 x 768 x 60Hz	
			800 x 600 x 60Hz	
	HDMI Input	PC Signal	Same as VGA	
			Video Signal	1080p : 50 / 60Hz
				1080i : 50 / 60Hz
				720p : 50 / 60Hz
				480p : 60Hz
		576p : 50Hz		
		Audio Signal	2ch Linear PCM (32 / 44.1 / 48 KHz)	

< 3.2 > On-screen Display Operation (OSD)

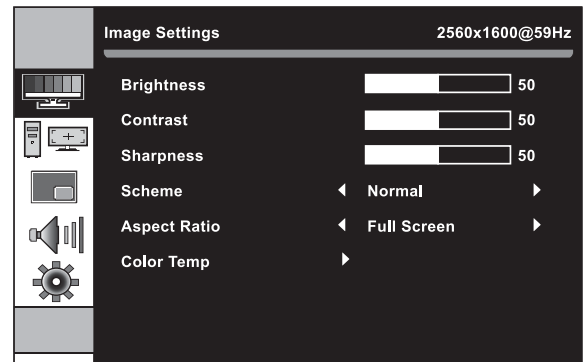
- Power light
- Green = On
- Flashing Green = Power saving
- Orange = Off



Membrane Switch	Function
	Power on / off LCD
	Display the OSD menu
	Scroll through menu options
	Exit the OSD screen Toggle analog, digital & video connection (DVI-D and video options only)

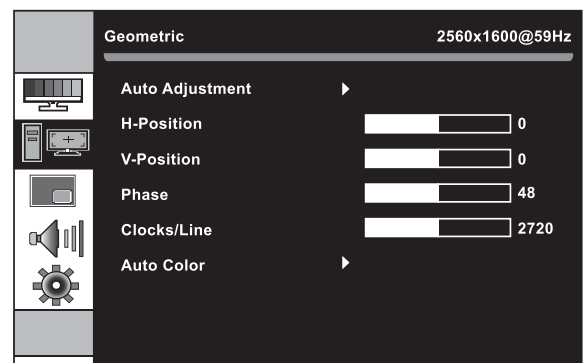
① Image Settings

- Brightness : Adjust background black level of the screen image
- Contrast : Adjust the difference between the image background (black level) and the foreground (white level)
- Sharpness : Adjust the image from weak to sharp
- Scheme : Normal / Vivid / Cinema / Game / Sport
- Aspect Ratio : Adjust the image size
- Color temp : User / 9300k / 6500k / 7500k



② Geometric

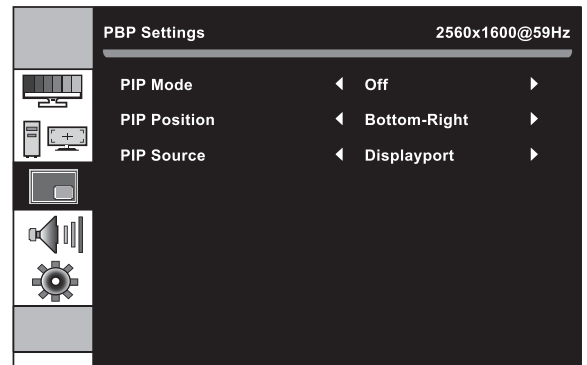
- Auto Adjust : Automatically adjust sizes, centers and fine tunes the video signal to eliminate waviness and distortion.
- H-Position : Align the screen image left or right
- V-Position : Align the screen image up or down
- Phase : Adjust the phase value
- Clocks/Line : Adjust the clock value
- Auto color : Automatically adjust colors



< 3.2 > On-screen Display Operation (OSD) 30" Ultra Widescreen LCD Display

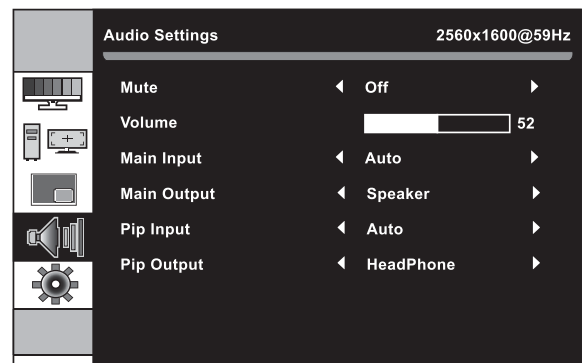
③ PBP Settings

- PIP Mode : Adjust picture in picture setting
- PIP Position : Enter into PIP position
- PIP Source : Enter into the Sub source and sound source



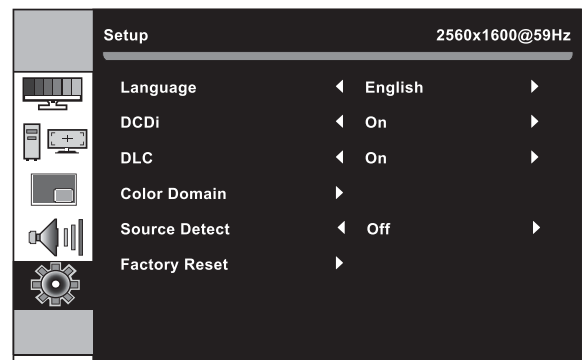
④ Audio Settings

- Mute : Turn off the surrounding sound
- Volume : Adjust the volume of sound
- Main Input : Set the value of treble and bass sound
- Main output : Set the main sound output
- Pip Input : Set the value of PIP sound input
- Pip Output : Set the PIP sound output



⑤ Setup

- Language : Select the language in which the OSD menu is displayed - English
- DCDi : Turn on the DCDi
- DLC : Turn on the DLC
- Color Domain : Adjust the RGB color domain
- Source Detect : Turn off the auto detection of image signal source
- Factory Reset : Return the adjustment back to factory setting



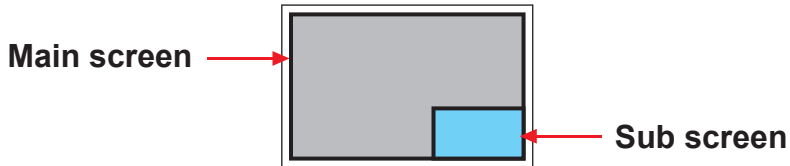
< 3.3 > How to Use Picture In Picture (PIP) / Picture By Picture (PBP)

< 3.3.1 > Picture in Picture (PIP)

Mode

Display the Sub screen in the Main screen.

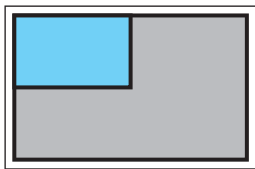
PBP Setting → PIP Mode → off / small / small 16:10 / large / large 16:10 / POP 4:3 / POP



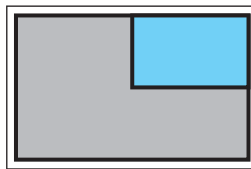
Position

Adjust the position of the Sub screen (top left, bottom left, top right, bottom right)

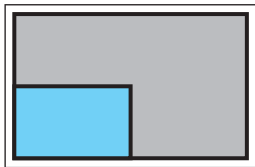
PBP Setting → PIP Position → top left / top right / bottom left / bottom right



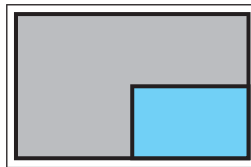
top left



top right



bottom left



bottom right

Size

Adjust the size of the Sub screen

PBP Setting → PIP Mode → small > small 16:10 > large > large 16:10 > POP 4:3 > POP > off

< 3.3.2 > Picture By Picture (PBP)

Mode

Display the Sub screen next to the Main screen.

PBP Setting → PIP Mode → POP



< 3.3.3 > PIP / PBP Source

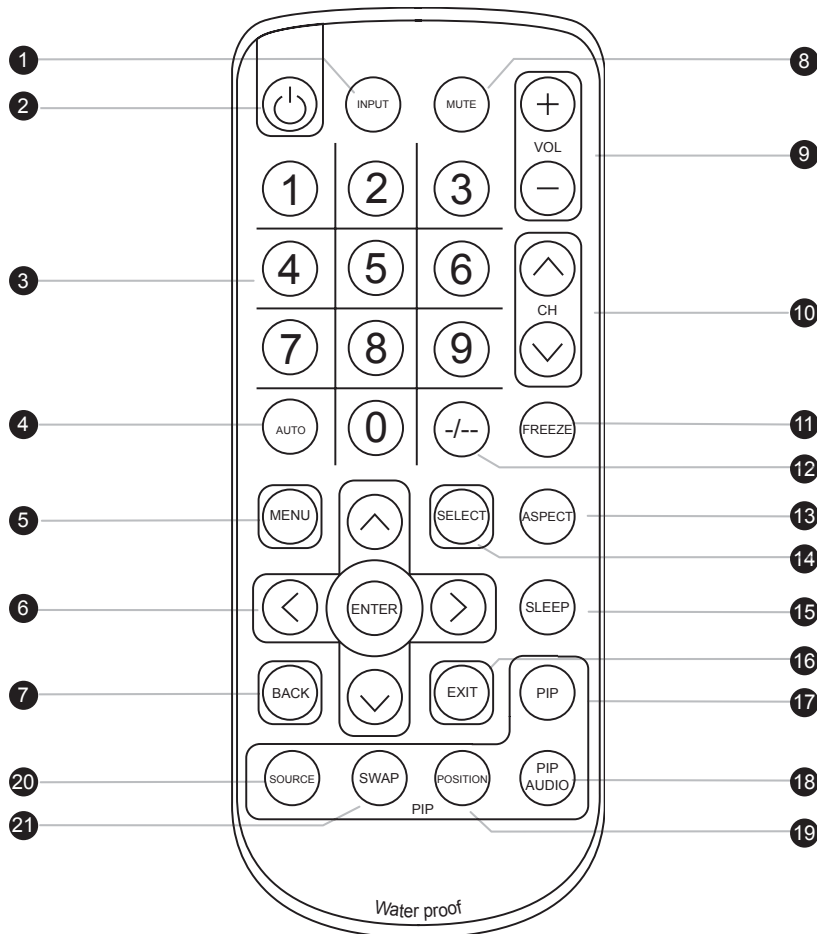
To select an input signal for PIP / PBP Sub screen.

PBP Setting → PIP Source → VGA / DVI / HDMI / DP

The PIP / PBP is operable in the following table :

Main \ Sub	VGA	DVI-D	HDMI	Display Port
VGA	X	O	O	O
DVI	O	X	X	O
HDMI	O	X	X	O
Display Port	O	O	O	X

< 3.4 > Remote Controller (RC-2)

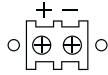


①	INPUT	Select the source
②		Switches on or off the TV
③	0 - 9	[Reserved for future use]
④	AUTO	[Reserved for future use]
⑤	MENU	Display the menu on the screen or go to the previous menu
⑥	▲ / ▼ / ◀ / ▶ / ENTER	Go to the upper menu or select the previous value / Go to the next menu or select the next value / Decrease the setting value / Increase the setting value or enter to the select item setting Enter to the select item settings or excude the setting
⑦	BACK	[Reserved for future use]
⑧	MUTE	Turn on or off the speaker
⑨	Vol + / -	Increase or decrease the speaker volume
⑩	CH + / -	[Reserved for future use]
⑪	FREEZE	[Reserved for future use]
⑫	- / --	[Reserved for future use]
⑬	ASPECT	[Reserved for future use]
⑭	SELECT	[Reserved for future use]
⑮	SLEEP	[Reserved for future use]
⑯	EXIT	Exit the menu or cancel
PIP functions		
⑰	PIP	Picture in picture
⑱	PIP AUDIO	[Reserved for future use]
⑲	POSITION	To set the screen position in PIP mode
⑳	SOURCE	PIP Source
㉑	SWAP	Swap screen in PIP mode

< 4.1 > Option Table

Options	AP / NAP	OP
MIL-type / lockable connector	✓	✓
DC Power	✓	✓

< 4.2 > Options : DC Power





Model	24V	48V
Input rating		
Input voltage:	24-Volt	48-Volt
Input range:	18 ~ 36V	36 ~ 75V
Input current		
- No load	50 mA	50 mA
- Full load	7022 mA	3511 mA
Output rating		
Output voltage:	24-Volt	24-Volt
Output current:	6.25A	6.25A
Efficiency	89%	89%

< 4.3 > Options : MIL-type or Lockable Connector 30” Ultra Widescreen LCD Display

	Input	Part no.	MIL Standard
MIL - type Connector	DC Power *** (Male)	MS3470W8-33P 	MIL - DTL - 26482
	VGA *** (Male)	MS3470W14-15P 	MIL - DTL - 26482

*** There are several additional MIL DC and VGA connector types with varying design characteristics to meet cost considerations and to provide users with the most design flexibility possible. For more information, please contact us.

	Input	Part no.	Standard
Lockable Connector	DC Power (Male)	YM-Ext-461CP001 	D-type 3W3
	USB	LUSB - A111 - 00 	-

*** MIL - type or Lockable connectors above can be integrated with our LCD displays. Sale service just for connectors not provided.

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