



49-inch Class FULL HD LCD Display

TH-49AF1W

Product specification (design and specification subject to change without notice)

■ DISPLAY PANEL

Screen Size (Diagonal)	49-inch (1232 mm)
Panel type	IPS / Edge-LED
Aspect ratio	16:9
Effective Display Area (W x H)	1073 x 604 mm
Number of pixels (H x V)	1920 x 1080 pixels
Brightness	500 cd/m ² (typ)
Contrast Ratio	1300:1 (typ)
Dynamic Contrast	50000:1
Response Time	8 ms (G to G)
Viewing Angle (Horizontal / Vertical)	178° / 178° (CR ≥ 10)
Panel Surface Treatment	Anti glare (Haze 10%)
Panel Life Time*1	approx. 60000 hours (typ)

*1 : When the panel lifetime is at 50% of the brightness under the condition of 25 degrees Celsius (+/- 2 degrees Celsius).

■ OpenPort PLATFORM SYSTEM

OS	Android 4.4.3
CPU	Cortex-A9 1.0 GHz (Quad)
Memory	1 GB
Storage	8 GB (Total capacity of storage including OS)
Graphics	Vivante GC2000
Supported codec	Video: MPEG4, H.264/AVC, H.263, MotionJPEG, MPEG2, WMV, VP8 Audio: MP3, AAC, WMA, AMR, Ogg Vorbis

■ OpenPort PLATFORM CONNECTION TERMINAL

USB (OpenPort PLATFORM)	USB 2.0 Type A connector
Micro-USB	USB 2.0 Micro-B connector
microSD Card Slot	microSD/microSDHC x 1
LAN	RJ45 x 1 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PLink
Wireless LAN Module	IEEE 802.11a/b/g/n

■ CONNECTION TERMINAL

HDMI IN	HDMI Type A Connector x 2	Linear PCM (Sampling frequency : 48 kHz/44.1 kHz/32 kHz)
COMPONENT/RGB IN	BNC x 1 set	Y/G : BNC Contact Plug with sync 1.0 Vp-p (75 Ω) P _B /C _B /B : BNC Contact Plug without sync 0.7 Vp-p (75 Ω) P _R /C _R /R : BNC Contact Plug without sync 0.7 Vp-p (75 Ω)
AUDIO IN	Stereo Mini Jack (M3) x 1 (Shared with VIDEO IN)	0.5 Vrms
VIDEO IN	BNC x 1 (Shared with COMPONENT/RGB IN Y/G)	1.0 Vp-p (75 Ω)
AUDIO IN	Stereo Mini Jack (M3) x 1 (Shared with COMPONENT/RGB IN)	0.5 Vrms
DVI-D IN	DVI-D 24-pin x 1	Compliance with DVI Revision 1.0 Compatible with HDCP 1.1
AUDIO IN	Stereo Mini Jack (M3) x 1 (Shared with PC IN)	0.5 Vrms
DVI-D OUT	DVI-D 24-pin x 1	Compliance with DVI Revision 1.0 Compatible with HDCP 1.1
PC IN	Mini D-Sub 15-pin x 1 (Female)	Y/G : with sync 1.0 Vp-p (75 Ω) : without sync 0.7 Vp-p (75 Ω) P _B /C _B /B : without sync 0.7 Vp-p (75 Ω) P _R /C _R /R : without sync 0.7 Vp-p (75 Ω) HD/VD : 1.0 - 5.0 Vp-p (high impedance)
AUDIO IN	Stereo Mini Jack (M3) x 1 (Shared with DVI-D IN)	0.5 Vrms
SERIAL IN/OUT	D-sub 9pin x 1 / x 1, RS-232C Compatible	
IR IN / OUT	Stereo Mini Jack (M3) x 1 / x 1	
AUDIO OUT	Stereo Mini Jack (M3) x 1 Variable (-∞ - 0 dB) (1 kHz 0 dB Input, 10 k Ω Load)	0.5 Vrms
USB	USB 2.0 Type A connector x 1 DC 5 V/1A (USB3.0 is not supported.)	

*Due to the construction of terminal, some types of connecting cable or USB memory device cannot be used.

Be sure to make confirmation with reference to the detailed drawing of terminal in page 4.

■ SPEAKER

Built in Speaker	10 W (8 Ω, Full Range : 80 mm x 30 mm) x 2
Built in Speaker OUT	20 W [10 W + 10 W]

■ ELECTRICAL

Power Requirements	220 - 240 V AC 50 / 60 Hz
Power Consumption	175 W
On Mode Average Power Consumption*	130 W
Power Off Condition	approx. 0.3 W
Stand-by Condition	approx. 0.5 W (when OpenPort PLATFORM™ set to OFF, approx. 20 W when OpenPort PLATFORM™ set to ON)
Apparent power	200 VA

* : Based on IEC 62087 Ed.2 measurement method

■ MECHANICAL

Dimensions (W x H x D)	1093 x 623 x 72 mm
Dimensions (W x H x D) (Excluding handle part)	1093 x 623 x 57 mm
Weight	approx. 19.3 kg
Bezel Width / Color	T/R/L/B : 6.3 mm / Black
Carton Dimensions (W x H x D)	1308 x 846 x 203 mm
Gross Weight	approx. 26.0 kg
Cabinet Material / Color	Metal / Black
Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (Installed by: M6 screws / Screw hole depth 10 mm)

MAIN FEATURE

USB Media Player	Yes
Fail back & Fail over	Yes
Data Cloning	Yes
Early Warning Software compatible	Yes
Multi Monitoring & Control Software compatible	Yes
Operating Time	24h / 7d
Digital Zoom	Yes
Multi Display	Yes
Power ON Screen Delay	Yes
1:1 Pixel mode	Yes
Auto setup	Yes
Screen Saver	Yes
HDMI Power Management	Yes
PC Power Management	Yes
DVI-D Power Management	Yes
Input Lock	Yes
Button Lock	Yes
Remote-control User Level	Yes
Input Search	Yes

In case of running for a long time, the moving image is recommended to be displayed. If you display a still picture for an extended period, the image retention might remain on the screen. However, image retention can gradually disappear by displaying a moving images.

INCLUDED ACCESSORIES

- AC cord (2.0 m) - Remote Control - Batteries (AAA size) x 2
- Clamper x 3 - CD-ROM / User Manual - Operating instruction book

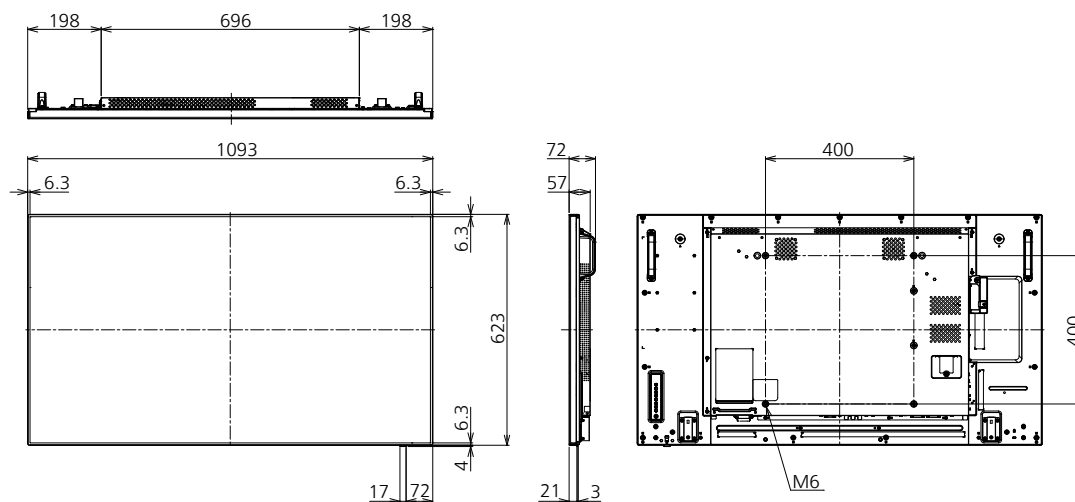
OPTIONAL ACCESSORIES

Pedestal Stand	TY-ST43PE8
Early Warning Software* ¹	ET-SWA100 series
Auto Display Adjustment Upgrade Kit* ²	TY-VUK10

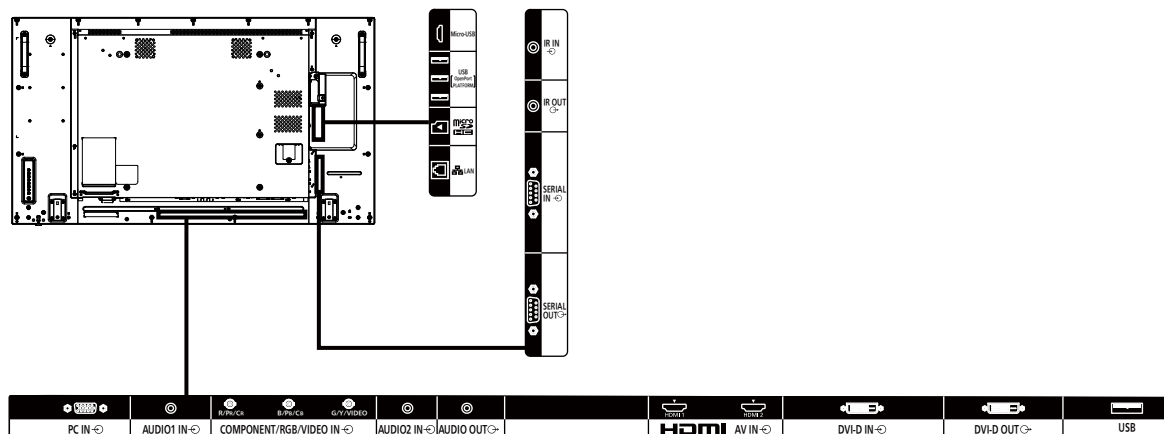
*1 The symbol at the end of item number differs depending on the type of license.

*2 This kit responds to Ver.1.2 and later versions.

DIMENSIONS



CONNECTION TERMINAL



INSTALLATION REQUIREMENT

Orientation	Landscape/Portrait (Angle adjustment 0-45 degrees for both left and right)
Tilting Angle	0-45 degrees forward/backward with landscape/portrait setting (Angle adjustment is not possible for forward/backward tilting installation.)

*Please contact your sales representative with regard to the tilt angle before installation.

ENVIRONMENTAL

Operating Environment	Temperature	: 0 °C to 40 °C * ¹ : 0 °C to 35 °C * ²
	Humidity	: 20% to 80% (No condensation)
	Altitude	: 0 to 2800 m
Storage Environment	Temperature	: -20 °C to 60 °C
	Humidity	: 20% to 80% (No condensation)

*1 : for up to 1400 m altitude

*2 : for between 1400 m and 2800 m altitude

Depending on the temperature or humidity conditions, uneven brightness may be observed. This is not a malfunction.

• This unevenness will disappear while applying current continuously. If not, consult the distributor.

STANDARD (CERTIFICATIONS)

SAFETY REGULATIONS	IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013
	EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 AS/NZS 60950.1:2011 Inc A1
RADIATION REGULATIONS	EN55022:2010+AC:2011 Class A
	EN55024:2010
	EN61000-3-2:2014
	EN61000-3-3:2013
	AS/NZS CISPR22:2009 + A1:2010

REMOTE CONTROL TRANSMITTER

Power Requirements	DC 3 V (2 x AAA Size batteries)
Operating distance	approx. 7 m*
Weight	approx. 63 g including batteries
Dimensions (W x H x D)	44 x 105 x 20.5 mm

*When operated directly in front of receptor.

Cautions: This drawing is not a scale

Units : mm

List of correspondence signals

V : VIDEO
R : D-sub RGB
Y : YC_BC_R/YP_BP_R

D : DVI-D
H : HDMI

The picture signal which can indicate a this machine is as it is the following table.

Correspondence signal	Resolution (dot)	Scan rate		Dot clock rate (MHz)	Input format
		Horizontal(kHz)	Vertical(Hz)		
NTSC/NTSC4.43/ PAL-M/PAL60	720 x 480i	15.73	59.94	-	V
PAL/PAL-N/SECAM	720 x 576i	15.63	50.00	-	V
525i (480i)	720 x 480	15.73	59.94	13.50	R/Y
625i (576i)	720 x 576i	15.63	50.00	13.50	R/Y
525i (480i)	720 (1440) x 480 ^{*2}	15.73	59.94	27.00	D/H
625i (576i)	720 (1440) x 576i ^{*2}	15.63	50.00	27.00	D/H
525p (480p)	720 x 483	31.47	59.94	27.00	R/Y/D/H
625p (576p)	720 x 576	31.25	50.00	27.00	R/Y/D/H
750 (720) /60p	1280 x 720	45.00	60.00	74.25	R/Y/D/H
750 (720) /50p	1280 x 720	37.50	50.00	74.25	R/Y/D/H
1125 (1080) /60i ^{*1}	1920 x 1080i	33.75	60.00	74.25	R/Y/D/H
1125 (1080) /50i	1920 x 1080i	28.13	50.00	74.25	R/Y/D/H
1125 (1080) /24p	1920 x 1080	27.00	24.00	74.25	R/Y/D/H
1125 (1080) /24PsF	1920 x 1080i	27.00	48.00	74.25	R/Y
1125 (1080) /25p	1920 x 1080	28.13	25.00	74.25	R/Y/D/H
1125 (1080) /30p	1920 x 1080	33.75	30.00	74.25	R/Y/D/H
1125 (1080) /60p	1920 x 1080	67.50	60.00	148.50	R/Y/D/H
1125 (1080) /50p	1920 x 1080	56.25	50.00	148.50	R/Y/D/H
VESA400	640 x 400	31.47	70.09	25.18	R/Y/D/H
	640 x 400	31.50	85.08	31.50	R/Y/D/H
VGA	640 x 480	31.47	59.94	25.18	R/Y/D/H
	640 x 480	35.00	66.67	30.24	R/Y/D/H
	640 x 480	37.86	72.81	31.50	R/Y/D/H
	640 x 480	37.50	75.00	31.50	R/Y/D/H
	640 x 480	43.27	85.01	36.00	R/Y/D/H
SVGA	800 x 600	35.16	56.25	36.00	R/Y/D/H
	800 x 600	37.88	60.32	40.00	R/Y/D/H
	800 x 600	48.08	72.19	50.00	R/Y/D/H
	800 x 600	46.88	75.00	49.50	R/Y/D/H
MAC16	832 x 624	49.72	74.55	57.28	R/Y/D/H
	852 x 480	31.47	59.94	34.24	D/H
XGA	1024 x 768	39.55	50.00	51.89	D/H
	1024 x 768	48.36	60.00	65.00	R/Y/D/H
	1024 x 768	56.48	70.07	75.00	R/Y/D/H
	1024 x 768	60.02	75.03	78.75	R/Y/D/H
	1024 x 768	65.55	81.63	86.00	R/Y/D/H
	1024 x 768	68.68	85.00	94.50	R/Y/D/H
WSVGA	1066 x 600	37.64	59.94	53.00	D/H
MXGA	1152 x 864	53.70	60.00	81.62	D/H
	1152 x 864	63.99	70.02	94.20	R/Y/D/H
	1152 x 864	67.50	75.00	108.00	R/Y/D/H
	1152 x 864	77.09	85.00	119.65	R/Y/D/H
MAC21	1152 x 870	68.68	75.06	100.00	R/Y/D/H
1280 x 720	1280 x 720	44.76	60.00	74.48	R/Y/D/H
1280 x 768	1280 x 768	39.55	49.94	65.18	R/Y/D/H
	1280 x 768	47.70	60.00	80.14	R/Y/D/H
	1280 x 768	47.78	59.87	79.50	R/Y/D/H
1280 x 800	1280 x 800	41.20	50.00	68.56	R/Y/D/H
	1280 x 800	49.31	59.91	71.00	R/Y/D/H
	1280 x 800	49.70	59.81	83.50	R/Y/D/H
MSXGA	1280 x 960	60.00	60.00	108.00	R/Y/D/H
	1280 x 960	85.94	85.00	148.50	R/Y
SXGA	1280 x 1024	63.98	60.02	108.00	R/Y/D/H
	1280 x 1024	79.98	75.02	135.00	R/Y/D/H
	1280 x 1024	91.15	85.02	157.50	R/Y/D/H
1360 x 768	1360 x 768	47.71	60.02	85.50	D/H
	1360 x 768	47.70	60.00	84.72	D/H
	1360 x 768	47.72	59.80	84.75	D/H
1366 x 768	1366 x 768	39.55	50.00	69.92	D/H
	1366 x 768	48.39	60.03	86.71	R/Y/D/H
	1366 x 768	48.00	60.00	72.00	R/Y/D/H
	1366 x 768	39.56	49.89	69.00	R/Y/D/H
	1366 x 768	47.71	59.79	85.50	R/Y/D/H
SXGA+	1400 x 1050	65.22	60.00	122.61	D/H
	1400 x 1050	82.20	75.00	155.85	R/Y/D/H
WXGA+	1440 x 900	55.47	59.90	88.75	R/Y/D/H
	1440 x 900	55.92	60.00	106.47	R/Y/D/H
1600 x 900	1600 x 900	46.30	50.00	97.05	D/H
	1600 x 900	60.00	60.00	108.00	D/H
	1600 x 900	55.99	59.95	118.25	D/H
	1600 x 900	55.92	60.00	119.00	D/H
WSXGA+	1680 x 1050	65.29	59.95	146.25	R/Y/D/H
UXGA	1600 x 1200 ^{*3}	75.00	60.00	162.00	R/Y/D/H
1920 x 1080	1920 x 1080 ^{*4}	66.59	59.93	138.50	R/Y/D/H
	1920 x 1080	67.50	60.00	148.50	R/Y/D/H
WUXGA	1920 x 1200 ^{*3}	74.04	59.95	154.00	R/Y/D/H

● The signal format distinguished automatically will be sometimes indication different from an actual input signal.

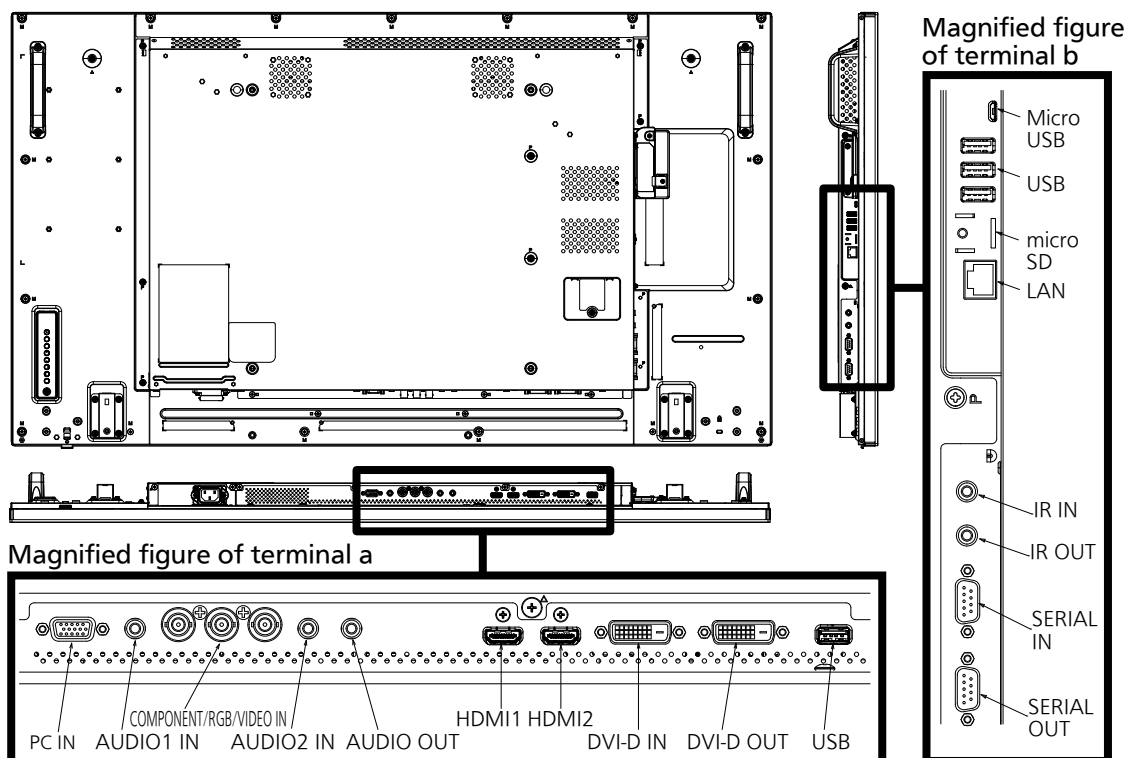
*1: When 1125 (1035) /60i signal is input, it is displayed as 1125 (1080) /60i signal. *3: Displayed with image elements thinned out in the image processing circuit.

*2: Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

*4: Based on VESA CVT-RB (Reduced Blanking) standard

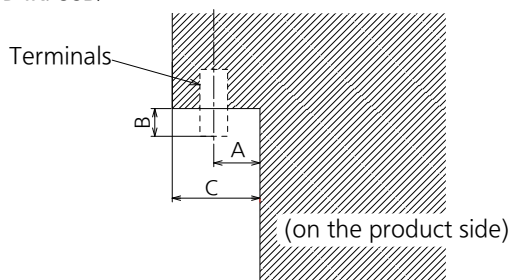
● Drawing of terminals

View from back



Sectional view of terminal a

(PC/AUDIO/COMPONENT/HDMI/DVI-D IN/USB)



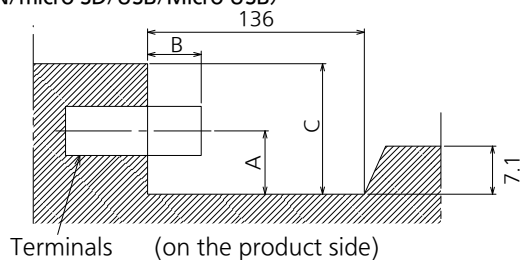
Terminal a 49AF1 Terminal (Bottom)

Units : mm

	PC	AUDIO	COMPONENT	HDMI	DVI-D IN	USB (terminal a)
A	17.1	17.3	18.9	14.2	15.8	14.8
B	4.3	1.7	10.8		4.7	
C	32					

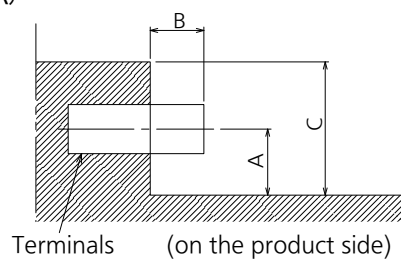
Sectional view of terminal b

(LAN/micro SD/USB/Micro USB)



Sectional view of terminal b

(SERIAL/IR)



Terminal b 49AF1 Terminal (Side)

Units : mm

	LAN	micro SD	USB (terminal b)	Micro USB	SERIAL	IR
A	15.7	10.3	16.6	10.6	14.0	14.0
B					4	1.5
C	35.8				28.9	

*Due to the construction of terminal, some types of connecting cable or USB memory device cannot be used.
Be sure to use connecting cable or USB memory device after confirmation in this drawing.

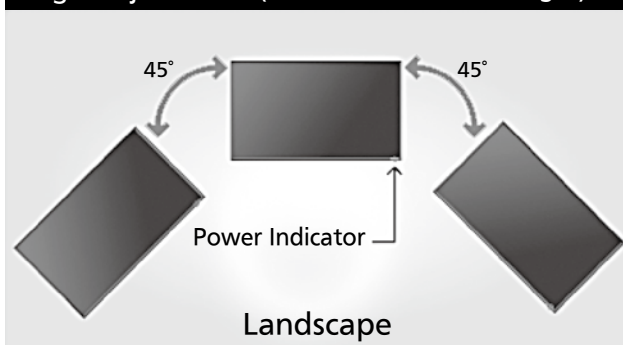
● Installation precautions

The AF1 Series is designed for use in either portrait or horizontal orientation with angle adjustment. Tilting installation up to 45 degrees forward or backward is also possible. You can install as shown the example figures.

Orientation	Landscape/Portrait (Angle adjustment 0 - 45 degrees for both left and right)
Tilting angle	0 - 45 degrees forward/backward with landscape/portrait setting (Angle adjustment is not possible for forward/backward tilting installation.)

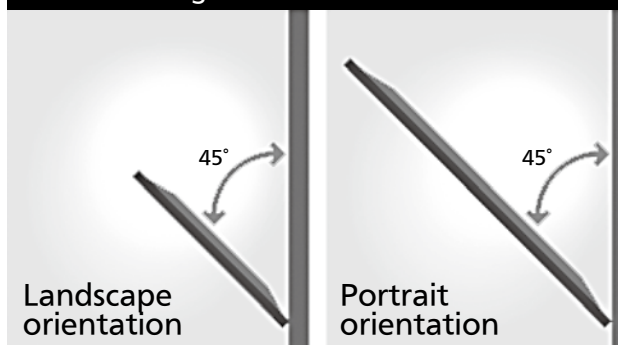
◆ Orientation

Angle adjustment (0-45° for both left and right)

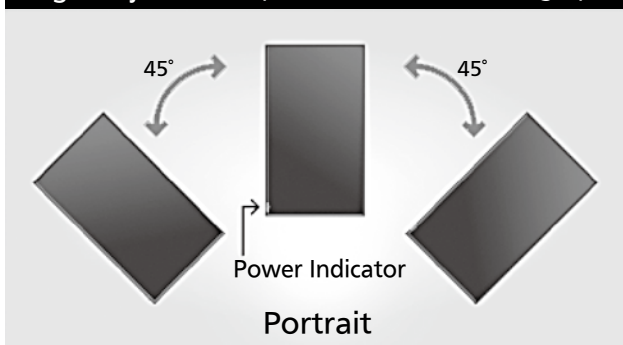


◆ Tilting angle

Forward tilting



Angle adjustment (0-45° for both left and right)



Backward tilting

