



65-inch Class FULL HD LCD Display

## TH-65LFE8E

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

#### ■ DISPLAY PANEL

Screen Size (Diagonal)	65-inch (1638 mm)
Panel type	VA / Edge-LED
Aspect ratio	16:9
Effective Display Area (W x H)	1428 x 803 mm
Number of pixels (H x V)	1920 x 1080 pixels
Brightness	350 cd/m <sup>2</sup> (Typ)
Contrast Ratio	5000:1
Response Time	6.5 ms (G to G)
Viewing Angle (Horizontal / Vertical)	176° / 176° (CR ≥ 20)
Panel Life Time*1	approx. 50000 hours (typ)

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

#### ■ CONNECTION TERMINAL

VIDEO IN	4-Pole Mini Jack (M3) x 1	1.0 V [p-p] (75 Ω) 0.5 V [rms]
HDMI IN	HDMI Type A Connector x 2 (VIERA LINK is not supported)	Linear PCM (Sampling frequency : 48 kHz/44.1 kHz/32 kHz)
DVI-D IN	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 V [p-p] (75 Ω) : without sync 0.7 V [p-p] (75 Ω) P <sub>B</sub> /C <sub>B</sub> /B : 0.7 V [p-p] (75 Ω) P <sub>R</sub> /C <sub>R</sub> /R : 0.7 V [p-p] (75 Ω) HD/VD : 1.0 - 5.0 V [p-p] (high impedance)
SERIAL IN	D-sub 9pin x 1, RS-232C Compatible	
LAN	RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink	
IR TRANSMITTER IN / OUT	Mini Jack (M3) x 1 / x 1	
AUDIO IN	Stereo Mini Jack (M3) x 1 (Shared with DVI-D IN and PC IN)	0.5 V [rms]
AUDIO OUT	Stereo Mini Jack (M3) x 1 Variable (-∞ - 0 dB) (1 kHz 0 dB Input, 10 kΩ Load)	0.5 V [rms]
USB	USB 2.0 Type A connector x 1 DC 5 V/1A (USB 3.0 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.

#### ■ AUDIO

Built in Speaker	20 W [10 W +10 W]
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#### ■ ELECTRICAL

Power Requirements	220 - 240 V AC 50 Hz/60 Hz
Power Consumption	160 W
On Mode Average Power Consumption*	115 W
Power Off Condition	approx. 0.3 W
Stand-by Condition	approx. 0.5 W
Apparent power	160 (VA)

\*Based on IEC 62087 Ed.2 measurement method

#### ■ MECHANICAL

Dimensions (W x H x D)	1451 x 829 x 62 mm
Weight	approx. 36.2 kg
Bezel Color	Black
Bezel Width	T/R/L:7.5 mm, B:10.5 mm
Carton Dimensions (W x H x D)	1667 x 1052 x 280 mm
Gross Weight	approx. 47.0 kg
Cabinet Material / Color	Metal /Black
Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (Installed by: M8 screws /Screw hole depth 20 mm)

#### ■ INSTALLATION

Orientation	Landscape / Portrait
Tilting Angle	0 - 20 degrees with landscape setting

\*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.

**MAIN FEATURE**

Digital Zoom	Yes
Multi Display	Yes
Power ON Screen Delay	Yes
1:1 Pixel mode	Yes
Auto setup	Yes
Screen Saver	Yes
PC Power Management	Yes
DVI-D Power Management	Yes
HDMI Power Management	Yes
Input Lock	Yes
Button Lock	Yes
Remote-control User Level	Yes
Input Search	Yes
USB Media Player	Yes
Data Cloning	Yes
Early Warning Software compatible	Yes
Multi Monitoring & Control Software compatible	Yes
Operating Time*	16 h/day

\*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 movie images.

**OPTIONAL ACCESSORIES**

Pedestal Stand	TY-ST65PE8
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**STANDARD (CERTIFICATIONS)**

SAFETY REGULATIONS	IEC60950-1
RADIATION REGULATIONS	EN55022:2010 Class A, EN55024:2010,EN61000-3-2 :2006+A1:2009+A2:2009 class D, EN61000-3-3:2013

**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

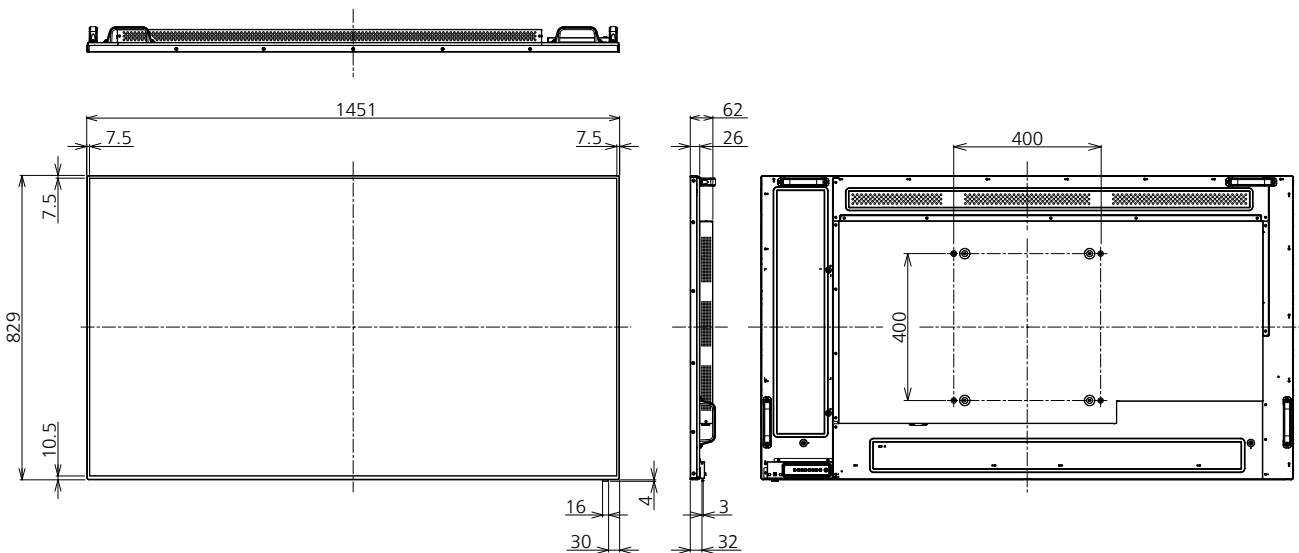
\*When operated directly in front of receptor.

**INCLUDED ACCESSORIES**

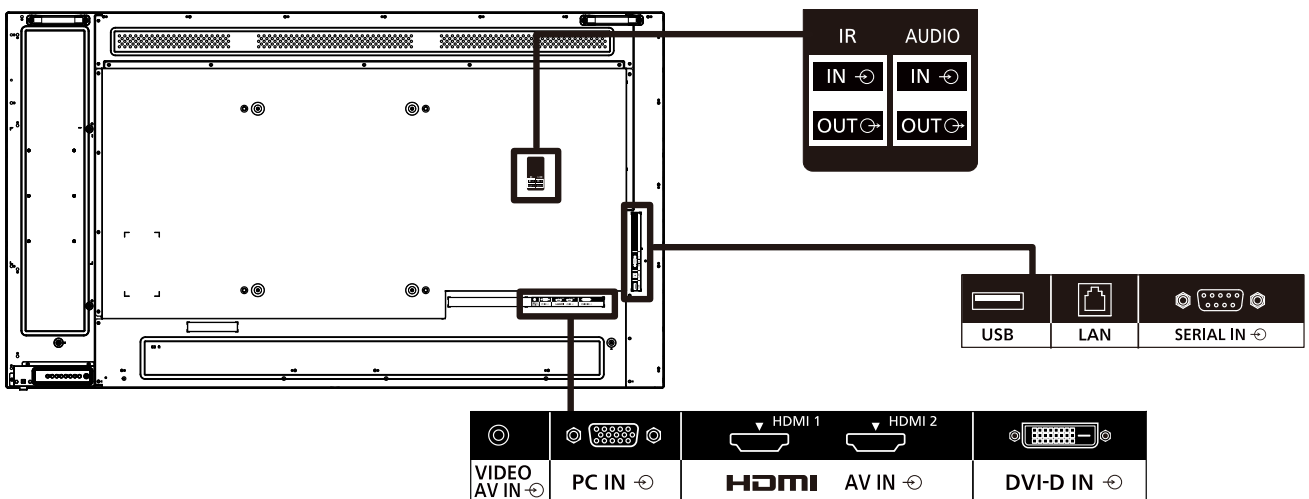
- AC cord (1.8 m) - Remote Control - Batteries (AAA size) x 2
- Clamper x 3 - CD-ROM / User Manual - Operating instruction book

**DIMENSIONS**

Cautions: This drawing is not a scale  
Units : mm



**CONNECTION TERMINAL**



\* Specifications and appearance are subject to change without notice.

## List of correspondence signals

V : VIDEO  
R : D-sub RGB  
Y : YCbCr/YPbPr

D : DVI-D  
H : HDMI

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

### Picture signal form

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 480i	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 480i*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 480	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

### PC signal form

Correspondence signal	Resolution (dot)	Scan rate		Dot clock rate (MHz)	Input format
		Horizontal (kHz)	Vertical (Hz)		
VESA400	640 x 400	31.47	70.09	25.18	R/Y/D/H
		31.50	85.08	31.50	R/Y/D/H
VGA	640 x 480	31.47	59.94	25.18	R/Y/D/H
		35.00	66.67	30.24	R/Y/D/H
		37.86	72.81	31.50	R/Y/D/H
		37.50	75.00	31.50	R/Y/D/H
		43.27	85.01	36.00	R/Y/D/H
SVGA	800 x 600	35.16	56.25	36.00	R/Y/D/H
		37.88	60.32	40.00	R/Y/D/H
		48.08	72.19	50.00	R/Y/D/H
		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
XGA	1024 x 768	39.55	50.00	51.89	D/H
		48.36	60.00	65.00	R/Y/D/H
		56.48	70.07	75.00	R/Y/D/H
		60.02	75.03	78.75	R/Y/D/H
		65.55	81.63	86.00	R/Y/D/H
WSVGA	1066 x 600	68.68	85.00	94.50	R/Y/D/H
		37.64	59.94	53.00	D/H
MXGA	1152 x 864	53.70	60.00	81.62	D/H
		63.99	70.02	94.20	R/Y/D/H
		67.50	75.00	108.00	R/Y/D/H
		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
		39.55	49.94	65.18	R/Y/D/H
		47.70	60.00	80.14	R/Y/D/H
1280 x 768	1280 x 768	47.78	59.87	79.50	R/Y/D/H
		41.20	50.00	68.56	R/Y/D/H
		49.31	59.91	71.00	R/Y/D/H
1280 x 800	1280 x 800	49.70	59.81	83.50	R/Y/D/H
		60.00	60.00	108.00	R/Y/D/H
		85.94	85.00	148.50	R/Y
SXGA	1280 x 1024	63.98	60.02	108.00	R/Y/D/H
		79.98	75.02	135.00	R/Y/D/H
		91.15	85.02	157.50	R/Y/D/H
1360 x 768	1360 x 768	47.71	60.02	85.50	D/H
		47.70	60.00	84.72	D/H
		47.72	59.80	84.75	D/H
1366 x 768	1366 x 768	39.55	50.00	69.92	D/H
		48.39	60.03	86.71	R/Y/D/H
		48.00	60.00	72.00	R/Y/D/H
		39.56	49.89	69.00	R/Y/D/H
		47.71	59.79	85.50	R/Y/D/H
SXGA+	1400 x 1050	65.22	60.00	122.61	D/H
		82.20	75.00	155.85	R/Y/D/H
WXGA+	1440 x 900	55.47	59.90	88.75	R/Y/D/H
		55.92	60.00	106.47	R/Y/D/H
1600 x 900	1600 X 900	46.30	50.00	97.05	D/H
		60.00	60.00	108.00	D/H
		55.99	59.95	118.25	D/H
		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 <sup>3</sup>	75.00	60.00	162.00	R/Y/D/H
1920 x 1080	1920 x 1080 <sup>4</sup>	66.59	59.93	138.50	R/Y/D/H
		67.50	60.00	148.50	R/Y/D/H
WUXGA	1920 x 1200 <sup>3</sup>	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.

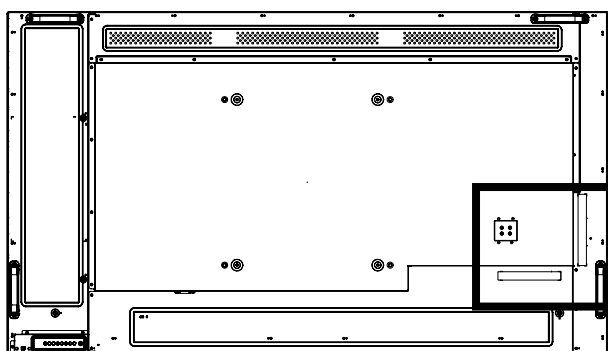
\*2: Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

\*3: Displayed with image elements thinned out in the image processing circuit.

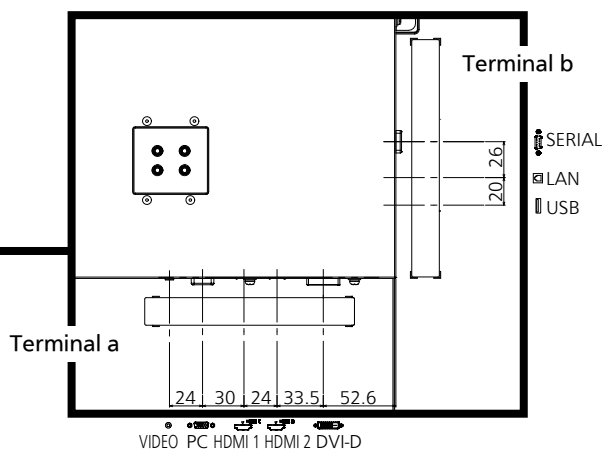
\*4: Based on VESA CVT-RB (Reduced Blanking) standard

**Drawing of terminals**

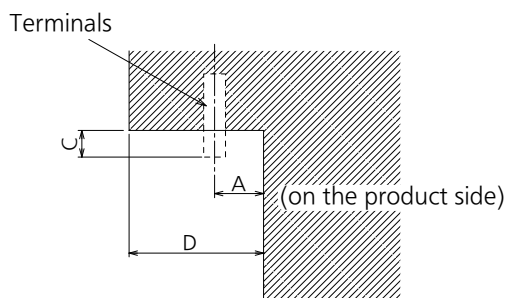
View from back



Magnified figure of terminal



Sectional view of terminal a  
(VIDEO/PC/HDMI/DVI)

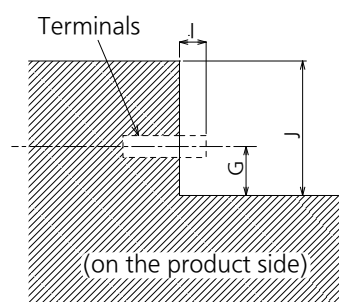


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	VIDEO	PC	HDMI	DVI
A	13.9	14.7	11.9	13.4
C	1.7	5.3	-0.8	5.6
D	35.7			

Sectional view of terminal b  
(USB/LAN/SERIAL)



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	USB	LAN	SERIAL
G	12.4	13.4	14.7
I	-0.8	-0.2	5.3
J	35.7		

\*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.