



## 55-inch Class FULL HD LCD Display TH-55LF80W

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

#### ■ DISPLAY PANEL

|                                       |                             |
|---------------------------------------|-----------------------------|
| Screen Size (Diagonal)                | 55-inch (1387 mm)           |
| Panel type                            | IPS / Edge-LED              |
| Aspect ratio                          | 16:9                        |
| Effective Display Area (W x H)        | 1209 x 680 mm               |
| Number of pixels (H x V)              | 1920 x 1080 pixels          |
| Brightness                            | 700 cd/m <sup>2</sup> (Typ) |
| Contrast Ratio                        | 1300:1                      |
| 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).

#### ■ CONNECTION TERMINAL

|                         |  |  |
|-------------------------|--|--|
| HDMI IN                 | HDMI Type A Connector x 2  | Linear PCM<br>(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)<br>P <sub>B</sub> /C <sub>B</sub> /B : BNC Contact Plug without sync 0.7 Vp-p (75 Ω)<br>P <sub>R</sub> /C <sub>R</sub> /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 Y/G)  | 1.0 Vp-p (75 Ω)<br>0.5 Vrms  |
| AUDIO IN                | Stereo Mini Jack (M3) x 1 (Shared with COMPONENT 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)<br>: without sync 0.7 Vp-p (75 Ω)<br>P <sub>B</sub> /C <sub>B</sub> /B : without sync 0.7 Vp-p (75 Ω)<br>P <sub>R</sub> /C <sub>R</sub> /R : without sync 0.7 Vp-p (75 Ω)<br>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                                       |  |
| LAN/DIGITAL LINK IN     | RJ45 x 1 100BASE-TX, Compatible with PLink                                     |  |
| IR TRANSMITTER 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.)              |  |

#### ■ SPEAKER

|                  |                  |
|------------------|------------------|
| Built in Speaker | 20 W [10 W+10 W] |
|------------------|------------------|

#### ■ ELECTRICAL

|                                    |                           |
|------------------------------------|---------------------------|
| Power Requirements                 | 220 - 240 V AC 50 / 60 Hz |
| Power Consumption                  | 190 W                     |
| On Mode Average Power Consumption* | 145 W                     |
| Power Off Condition                | approx. 0.3 W             |
| Stand-by Condition                 | approx. 0.5 W             |
| Apparent power                     | 200 VA                    |

\*Based on IEC 62087 Ed.2 measurement method

#### ■ MECHANICAL

|  |  |
|--|--|
| Dimensions (W x H x D)                         | 1229 x 699 x 72mm  |
| Dimensions (W x H x D) (Excluding handle part) | 1229 x 699 x 57mm  |
| Weight   | approx. 24.7 kg  |
| Bezel Color                                    | Black  |
| Bezel Width                                    | T/R/L/B : 6.3 mm   |
| Carton Dimensions (W x H x D)                  | 1444 x 922 x 223 mm  |
| Gross Weight                                   | approx. 32.0 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) |

#### ■ 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<br>(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.

**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    |
| DIGITAL LINK 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.

**STANDARD (CERTIFICATIONS)**

|                       |   |
|-----------------------|---|
| SAFETY REGULATIONS    | IEC60950-1  |
| RADIATION REGULATIONS | EN55022:2010 Class A<br>EN55024:2010<br>EN61000-3-2:2006+A1:2009+A2:2009 class D<br>EN61000-3-3:2013<br>AS/NZS CISPR22:2009<br>RCM Mark |

**REMOTE CONTROL TRANSMITTER**

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

\*When operated directly in front of receptor.

**INCLUDED ACCESSORIES**

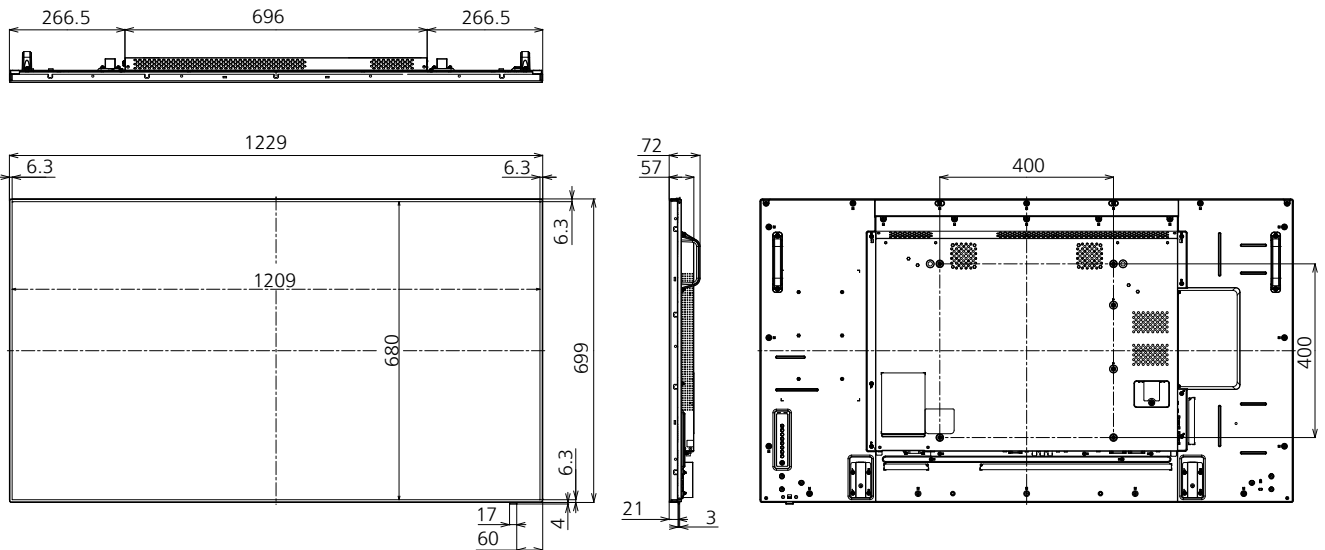
- AC cord (2.0 m) - Remote Control - Batteries (AAA size) x 2
- Clamper x 3 - Operating instruction book

**OPTIONAL ACCESSORIES**

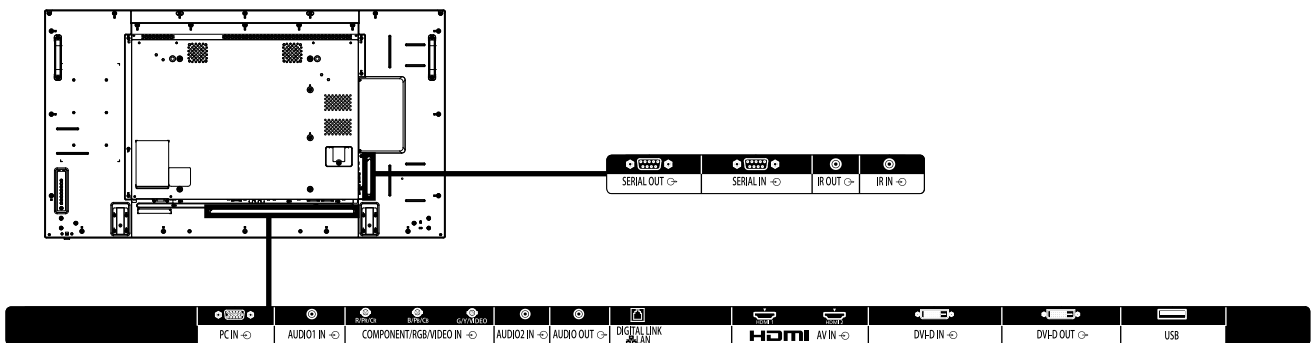
|                |            |
|----------------|------------|
| Pedestal Stand | TY-ST43PE8 |
|----------------|------------|

**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/YpPbPr  
 D : DVI-D  
 H : HDMI  
 DL : DIGITAL LINK

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

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

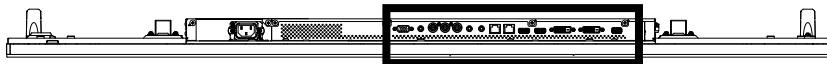
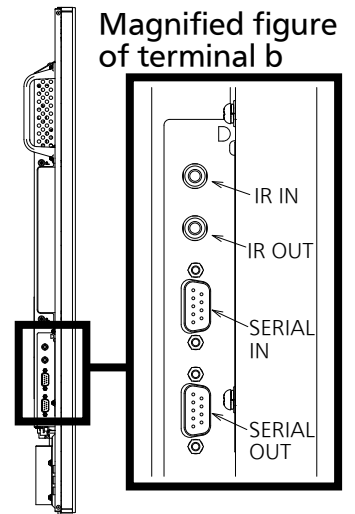
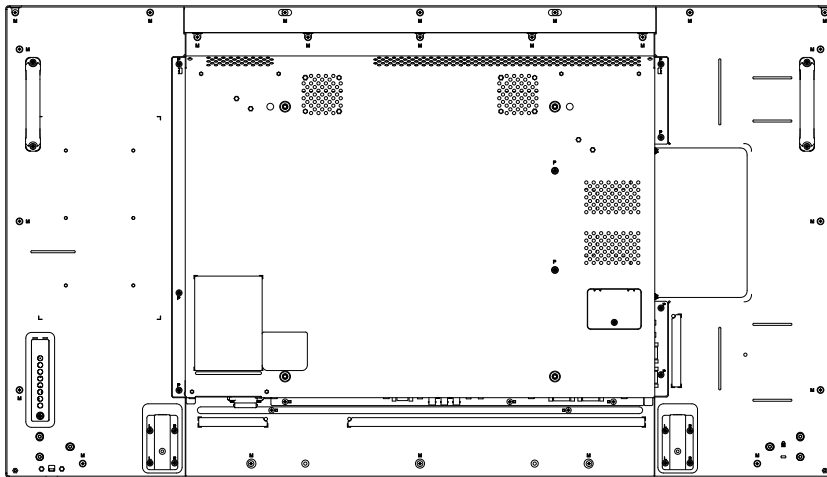
\*1: When 1125 (1035) /60i signal is input, it is displayed as 1125 (1080) /60i signal. \*3: Displayed with image elements thinned out in the image processing circuit.

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

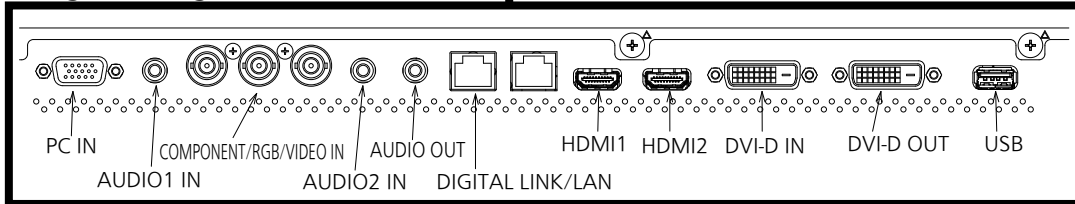
\*4: Based on VESA CVT-RB (Reduced Blanking) standard

**Drawing of terminals**

View from back

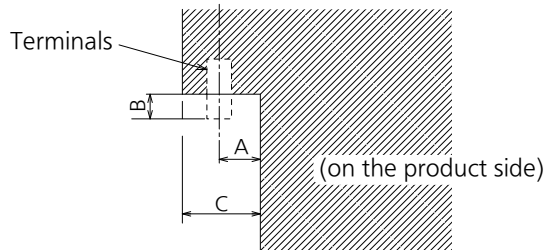


Magnified figure of terminal a



**Sectional view of terminal a**

(PC/AUDIO/COMPONENT/DIGITAL LINK/LAN/HDMI/DVI-D/USB)

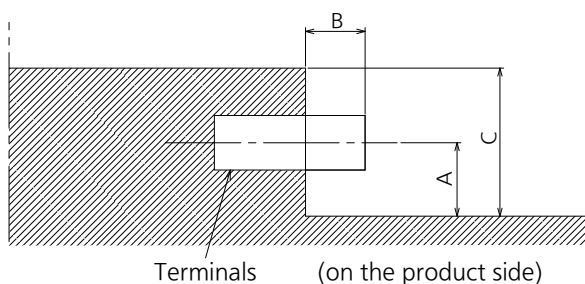


**Terminal a  
55LF8/80 Terminal (Bottom)**

Units : mm

|   | PC   | AUDIO | COMPONENT | DIGITAL LINK/LAN | HDMI | DVI-D | USB  |
|---|------|-------|-----------|------------------|------|-------|------|
| A | 17.1 | 17.3  | 18.9      | 15.2             | 14.2 | 15.8  | 14.8 |
| B | 4.3  | 1.7   | 10.8      |                  |      | 4.7   |      |
| C |      |       |           | 32.0             |      |       |      |

**Sectional view of terminal b (SERIAL/IR)**



**Terminal b  
55LF8/80 Terminal (Side)**

Units : mm

|   | SERIAL | IR  |
|---|--------|-----|
| A | 14.0   |     |
| B | 4.0    | 1.5 |
| C | 28.9   |     |

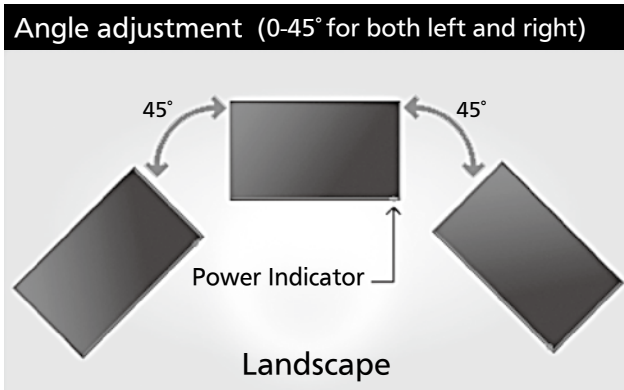
\*Due to the construction of terminal, some types of connecting cable or USB memory device cannot be used. Be sure to use connecting cable or USB memory device after confirmation in this drawing.

**● Installation precautions**

The LF80/8 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.

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

**◆ Orientation**



**◆ Tilting angle**

