

55-inch Class Ultra Narrow Bezel LCD Display

## TH-55LHV8U

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

#### ■ DISPLAY PANEL

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Screen Size (Diagonal)                | 54.6-inch (1387 mm)               |
| Panel Type / Backlight                | IPS / Direct LED                  |
| Aspect ratio                          | 16:9                              |
| Effective Display Area (W x H)        | 47.6" x 26.7" (1209.6 x 680.4 mm) |
| Resolution (H x V)                    | 1920 x 1080                       |
| Brightness                            | 500 cd/m <sup>2</sup> (Typ)       |
| Contrast Ratio                        | 1400:1 (typ)                      |
| Dynamic Contrast Ratio                | 500000:1                          |
| Viewing Angle (Horizontal / Vertical) | 178° / 178° (CR ≥ 10)             |
| Max. Display Colors                   | approx. 1.07 Billion              |
| Response Time                         | 12 ms (typ) (G to G)              |
| Panel Life* <sup>1</sup>              | approx. 60000 hours (typ)         |
| Panel Surface Treatment               | Anti-glare type (Haze 10%)        |

\*<sup>1</sup> 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)<br>Compatible with HDCP 1.4  |
| COMPONENT IN            | BNC x 1 set   | Y : BNC Contact Plug with sync 1.0 V [p-p] (75 Ω)<br>P <sub>B</sub> /C <sub>B</sub> : BNC Contact Plug without sync 0.7 V [p-p] (75 Ω)<br>P <sub>R</sub> /C <sub>R</sub> : BNC Contact Plug without sync 0.7 V [p-p] (75 Ω)  |
| AUDIO IN                | Pin Jack (L+R) x 1 (Shared with VIDEO IN)                               | 0.5 Vrms   |
| VIDEO IN                | BNC x 1 set (Shared with COMPONENT IN Y)                                | 1.0 Vp-p (75 Ω)  |
| AUDIO IN                | Pin Jack (L+R) x 1 (Shared with COMPONENT IN)                           | 0.5 Vrms   |
| DVI-D IN                | DVI-D 24-pin x 1 (Female)   | Compliance with DVI Revision 1.0<br>Compatible with HDCP 1.4   |
| AUDIO IN                | Stereo Mini Jack (M3) x 1 (Shared with PC IN)                           | 0.5 Vrms   |
| DVI-I (DVI-D / VGA) OUT | DVI-I 29-pin x 1 (Female)   | Compliance with DVI Revision 1.0<br>Compatible with HDCP 1.4<br>RGB : 0.7 V [p-p] (75 Ω), H/CS/V : TTL (2.2 KΩ),<br>SOG : 1 V [p-p] (75 Ω)   |
| PC IN                   | Mini D-Sub 15-pin x 1 (Female)  | Compatible with DD2CB<br>Y/G : with sync 1.0 V [p-p] (75 Ω)<br>: without sync 0.7 V [p-p] (75 Ω)<br>P <sub>B</sub> /C <sub>B</sub> /B : without sync 0.7 V [p-p] (75 Ω)<br>P <sub>R</sub> /C <sub>R</sub> /R : without sync 0.7 V [p-p] (75 Ω)<br>HD/VD : 1.0 - 5.0 V [p-p] (high impedance) |
| AUDIO IN                | Stereo Mini Jack (M3) x 1 (Shared with DVI-D IN)                        | 0.5 Vrms   |
| DisplayPort IN / OUT    | DisplayPort x 1 / x 1 (DP1.2 support, HDCP1.3 Compatible)               |  |
| SERIAL IN / OUT         | 2.5 mm Stereo Mini Jack x 1 / x 1                                       |  |
| LAN                     | RJ45 x 1, 10BASE-T / 100BASE-TX,<br>Compatible with PLink™              |  |
| IR IN / OUT             | Stereo Mini Jack (M3) x 1 / x 1   |  |
| AUDIO OUT               | Stereo Mini Jack (M3) x 1   | 0.5 V [rms]  |
| USB                     | USB 2.0 Type A connector x 1 DC 5 V / 500 mA (USB3.0 is not supported.) |  |

#### ■ AUDIO

|        |                                    |
|--------|------------------------------------|
| EXT SP | 8 Ω ,20 W [10 W + 10 W] (10 % THD) |
|--------|------------------------------------|

#### ■ ELECTRICAL

|                                    |                          |
|------------------------------------|--------------------------|
| Power Requirements                 | 110 - 127 V, 50 Hz/60 Hz |
| Power Consumption                  | 320 W                    |
| On Mode Average Power Consumption* | 218 W                    |
| Power Off Condition                | approx. 0 W              |
| Stand-by Condition                 | approx. 0.5 W            |
| Apparent power                     | 330 VA                   |

\*Based on IEC 62087 Ed.2 measurement method

#### ■ MECHANICAL

|                               |  |
|-------------------------------|--|
| Dimension (W x H x D)         | 47.8" x 27.0" x 3.8" (1213.4 x 684.2 x 95.0 mm)                |
| Weight                        | approx. 66.1 lbs. (30.0 kg)                                    |
| Carton Dimensions (W x H x D) | 60.8" x 38.4" x 11.9" (1544 x 973 x 301 mm)                    |
| Gross Weight                  | approx. 86.0 lbs. (39 kg)                                      |
| Cabinet Material / Color      | Metal / Black  |
| Bezel Width                   | L/T : approx. 0.089" (2.25 mm), R/B : approx. 0.050" (1.25 mm) |
| Pitch for Wall-Hanging        | VESA Compliant 15.8" x 15.8" (400 x 400 mm)                    |

#### ■ INSTALLATION

|               |                       |
|---------------|-----------------------|
| Orientation   | Landscape / Portrait* |
| Tilting Angle | Vertical only         |

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

\* When installing it vertically, please install it in the clockwise direction.

|          |              |
|----------|--------------|
| UPC Code | 885170314726 |
|----------|--------------|

**MAIN FEATURE**

|  |   |
|--|---|
| Daisy Chain*1                                    | DisplayPort*2, DVI-D*3, VGA — DVI-I*3, Serial, IR |
| Multi Screen                                     | ○ (NxM, up to 10 x 10)                            |
| Multimedia files playback function               | ○   |
| Multi display settings                           | ○   |
| Power on screen delay                            | ○   |
| Auto setting                                     | ○   |
| Screensaver                                      | ○   |
| PC/DVI-D power management                        | ○   |
| Power save                                       | ○   |
| Button lock                                      | ○   |
| Controller user level                            | ○   |
| Input search                                     | ○   |
| Dynamic contrast                                 | ○   |
| Colour enhancement                               | ○   |
| Set up timer                                     | ○   |
| PJLink   | ○   |
| Early Warning Software compatible                | ○   |
| Multi Monitoring & Control Software compatible   | ○   |
| Operating Time*4                                 | 24h / 7d  |
| Pre Calibration                                  | Done  |
| 4K daisy chain via MST (Multi Stream Transport)  | ○   |
| 4K daisy chain via SST (Single Stream Transport) | ○   |

\*1 Please refer to the operating instruction for connection.  
 \*2 8 sets with HDCP, 25 sets without HDCP  
 \*3 8 sets with HDCP, 10 sets without HDCP  
 \*4 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.

**ENVIRONMENTAL**

|                       |             |   |
|-----------------------|-------------|---|
| Operating Environment | Temperature | : 32° F to 104° F (0°C to 40°C)*1<br>32° F to 95° F (0°C to 35°C)*2 |
|                       | Humidity    | : 20% to 80% (No condensation)                                      |
|                       | Altitude    | : 0 to 9186 feet (0 to 2800 m)                                      |
| Storage Environment   | Temperature | : -4° F to 140° F (-20°C to 60°C)                                   |
|                       | Humidity    | : 5% to 95% (No condensation)                                       |
|                       | Altitude    | : 0 to 29528 feet (0 to 9000 m)                                     |

\*1 : for up to 4593 ft (1400 m) altitude  
 \*2 : for between 4593 ft (1400 m) and 9186 ft (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    | UL 60950-1 2nd Edition, CAN/CSA-C22.2 No 60950-1-07 |
| RADIATION REGULATIONS | FCC 47 CFR, Part 15, Subpart B Class A ICES-003     |

**INCLUDED ACCESSORIES**

- Power supply cord (78.8" (2.0 m)) - Remote Control Transmitter
- Batteries (AAA/R03/UM4 type) x 2 - Clamper x 3
- CD-ROM/User manual - Operating instructions - IR receiver cable
- IR Daisy Chain Cable - RS232C Convert Cable
- RS-232C Daisy Chain Cable - DisplayPort cable

**REMOTE CONTROL TRANSMITTER**

|                        |   |
|------------------------|---|
| Power Requirements     | DC 3 V (2 x AAA/R03/UM4 type batteries)       |
| Operating distance     | approx. 23 ft (7 m)*                          |
| Weight                 | approx. 0.24 lbs. (105 g) including batteries |
| Dimensions (W x H x D) | 1.97" x 7.88" x 0.91" (50 x 200 x 22.9 mm)    |

\* When operated directly in front of receptor.

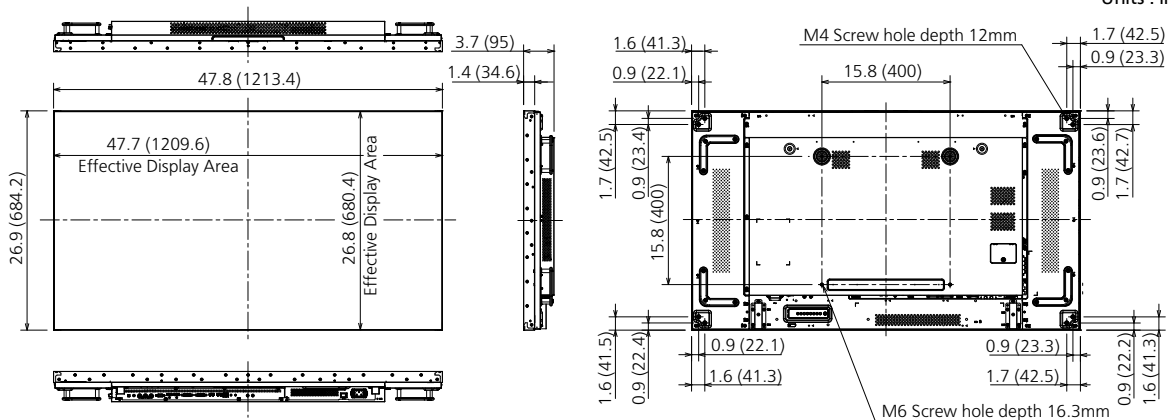
**OPTIONAL ACCESSORIES**

|                                     |   |
|-------------------------------------|---|
| Installation Mount                  | TY-VK55LV1<br>TY-VK55LV2 (Available from Autumn 2017) |
| Cover frame                         | TY-CF55VW50   |
| Auto Display Adjustment Upgrade Kit | TY-VUK10  |
| Early Warning Software              | ET-SWA100 series* (Some limitations exist.)           |

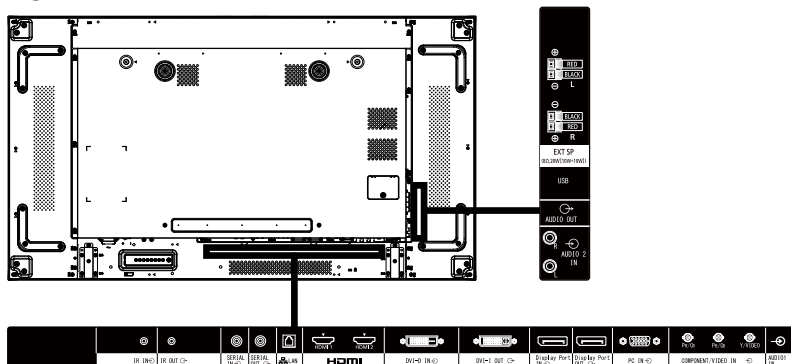
\* Suffix of the part number may differ depending on the license type.

Cautions: This drawing is not a scale  
 Units : inches (mm)

**DIMENSIONS**



**CONNECTION TERMINAL**



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

## INPUT MODE

### VGA Resolution:

| Standard Resolution | Active Resolution |         | Refresh Rate | Pixel Rate | Aspect Ratio | Stand for Mode           |
|---------------------|-------------------|---------|--------------|------------|--------------|--------------------------|
|                     | H Pixels          | V Lines |              |            |              |                          |
| VGA                 | 640               | 480     | 60 Hz        | 25.175 MHz | 4:3          | Video Graphic Array      |
|                     |                   |         | 72 Hz        | 31.5 MHz   |              |                          |
|                     |                   |         | 75 Hz        | 31.5 MHz   |              |                          |
| WVGA                | 720               | 400     | 70 Hz        | 33.75 MHz  | 16:9         | Wide Video Graphic Array |
| SVGA                | 800               | 600     | 60 Hz        | 40 MHz     | 4:3          | Super VGA                |
|                     |                   |         | 75 Hz        | 49.5 MHz   |              |                          |
| XGA                 | 1024              | 768     | 60 Hz        | 65 MHz     | 4:3          | Extended Graphic Array   |
|                     |                   |         | 75 Hz        | 78.75 MHz  |              |                          |
| WXGA                | 1280              | 768     | 60 Hz        | 79.5 MHz   | 5:3          | Wide XGA                 |
| WXGA                | 1280              | 800     | 60 Hz        | 79.5 MHz   | 16:10        | Wide XGA                 |
| SXGA                | 1280              | 1024    | 60 Hz        | 108 MHz    | 5:4          | Super XGA                |
| WXGA                | 1360              | 768     | 60 Hz        | 85.5 MHz   | 16:9         | Wide XGA                 |
| WXGA                | 1366              | 768     | 60 Hz        | 85.5 MHz   | 16:9         | Wide XGA                 |
| UXGA                | 1600              | 1200    | 60 Hz        | 162 MHz    | 4:3          | Ultra XGA                |
| HD1080              | 1920              | 1080    | 60 Hz        | 148.5 MHz  | 16:9         | HD1080                   |

### SDTV Resolution:

| Standard Resolution | Active Resolution |         | Refresh Rate | Pixel Rate | Aspect Ratio | Stand for Mode         |
|---------------------|-------------------|---------|--------------|------------|--------------|------------------------|
|                     | H Pixels          | V Lines |              |            |              |                        |
| 480i                | 720               | 480     | 29.97 Hz     | 13.5 MHz   | 4:3          | Modified NTSC Standard |
| 480p                |                   |         | 59.94 Hz     | 27 MHz     |              |                        |
| 576i                | 720               | 480     | 25 Hz        | 13.5 MHz   | 4:3          | Modified PAL Standard  |
| 576p                |                   |         | 50 Hz        | 27 MHz     |              |                        |

### HDTV Resolution:

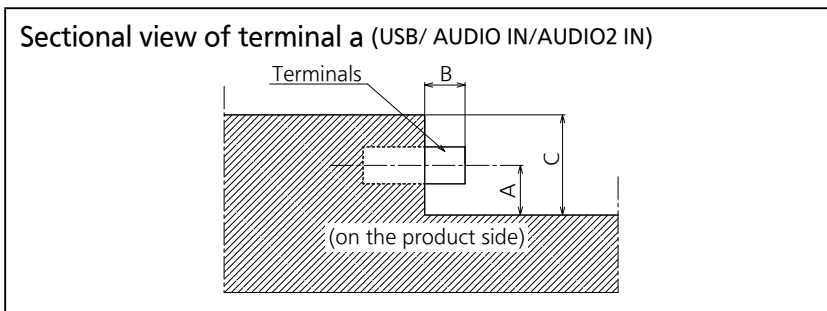
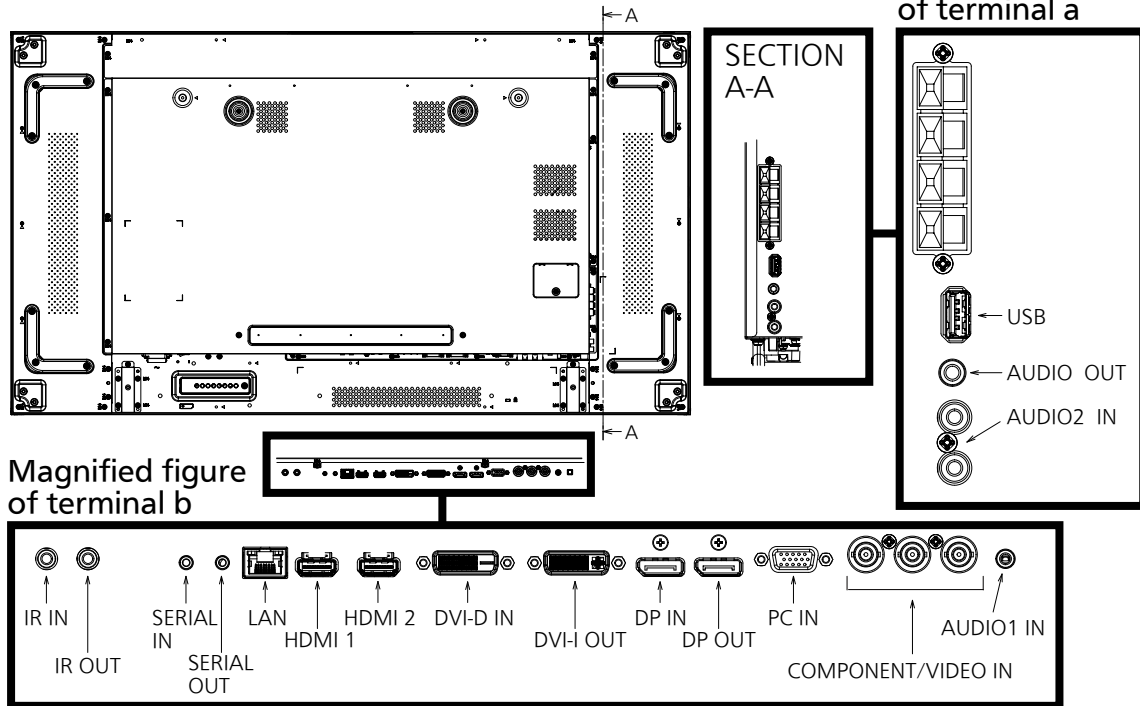
| Standard Resolution | Active Resolution |         | Refresh Rate | Pixel Rate | Aspect Ratio | Stand for Mode     |
|---------------------|-------------------|---------|--------------|------------|--------------|--------------------|
|                     | H Pixels          | V Lines |              |            |              |                    |
| 720P                | 1280              | 720     | 50 Hz        | 74.25 MHz  | 16:9         | Normally DVB Mode  |
|                     |                   |         | 60 Hz        |            |              |                    |
| 1080i               | 1920              | 1080    | 25 Hz        | 74.25 MHz  | 16:9         | Normally ATSC Mode |
|                     |                   |         | 30 Hz        |            |              |                    |
| 1080p               | 1920              | 1080    | 50 Hz        | 148.5 MHz  | 16:9         | Normally ATSC Mode |
|                     |                   |         | 60 Hz        |            |              |                    |

### 4K Resolution:

| Standard Resolution | Active Resolution |         | Refresh Rate | Pixel Rate | Aspect Ratio | Stand for Mode |
|---------------------|-------------------|---------|--------------|------------|--------------|----------------|
|                     | H Pixels          | V Lines |              |            |              |                |
| QFHD                | 3840              | 2160    | 30 Hz        | 297 Hz     | 16:9         | -              |

- The optimum PC text quality is provided by HD 1080 mode (1920 x 1080, 60 Hz).
- Your PC Display screen might appear different depending on the manufacturer (and your particular version of Windows).
- Check your PC instruction book for information about connecting your PC to a Display.
- If your PC offers vertical and horizontal frequency selection, choose 60 Hz (vertical) and 31.5 kHz (horizontal). In some cases, abnormal signals (such as stripes) might appear on the screen when the PC power is turned off, or disconnected. If so, press the [INPUT] button to enter the video mode. Also, make sure that the PC is connected.
- If the horizontal synchronous signals seem irregular in the RGB mode, check the PC power saving mode or cable connections.
- The Display settings table complies with the IBM / VESA standards, and is based on analogue input.
- The DVI support mode is the same as the PC support mode.
- The best vertical frequency timing for both modes is 60 Hz.

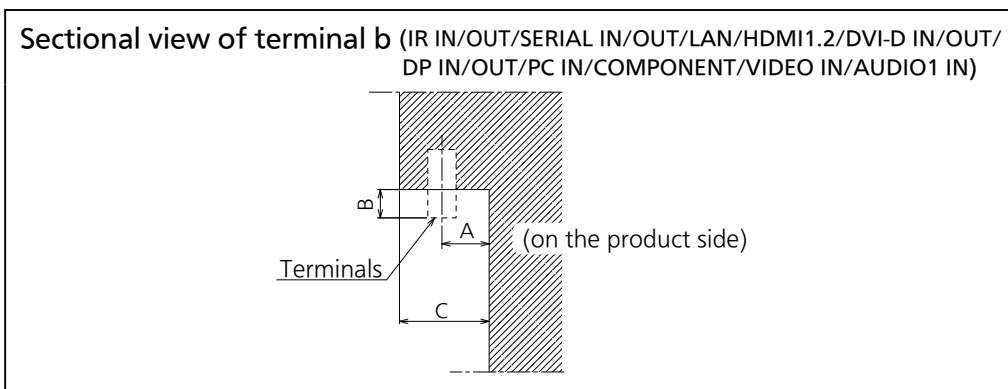
**Drawing of terminals**  
View from back



**Terminal a**  
55LFV8U Terminal (Side)

Units : inches (mm)

|   | USB       | AUDIO IN    | AUDIO2 IN   |
|---|-----------|-------------|-------------|
| A | 0.86 (22) | 0.9 (23)    | 0.88 (22.4) |
| B |           | 0.11 (2.7)  | 0.34 (8.7)  |
| C |           | 1.67 (42.6) |             |



**Terminal b**  
55LFV8U Terminal (Bottom)

Units : inches (mm)

|   | IR IN/OUT  | SERIAL IN/OUT | LAN         | HDMI 1.2    | DVI-D/DVI-I | DP IN/OUT   | PC IN       | COMPONENT/VIDEO IN | AUDIO1 IN  |
|---|------------|---------------|-------------|-------------|-------------|-------------|-------------|--------------------|------------|
| A | 0.9 (23)   | 0.84 (21.5)   | 0.83 (21.1) | 0.77 (19.7) | 0.84 (21.4) | 0.78 (19.9) | 0.89 (22.7) | 0.97 (24.6)        | 0.9 (23)   |
| B | 0.09 (2.2) | 0.05 (1.2)    |             |             | 0.23 (5.8)  |             | 0.21 (5.3)  | 0.46 (11.8)        | 0.11 (2.7) |
| C |            |               |             |             | 1.67 (42.6) |             |             |                    |            |

\*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.