

55-inch Class FULL HD LCD Display

## TH-55LFE8U

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

#### ■ DISPLAY PANEL

|                                       |                               |
|---------------------------------------|-------------------------------|
| Screen Size (Diagonal)                | 54.6-inch (1387 mm)           |
| Panel type                            | IPS / Direct-LED              |
| Aspect ratio                          | 16:9                          |
| Effective Display Area (W x H)        | 47.6" x 26.8" (1209 x 680 mm) |
| Number of pixels (H x V)              | 1920 x 1080 pixels            |
| Brightness                            | 350 cd/m <sup>2</sup> (Typ)   |
| Contrast Ratio                        | 1200:1                        |
| Response Time                         | 9 ms (G to G)                 |
| Viewing Angle (Horizontal / Vertical) | 178° / 178° (CR ≥ 20)         |
| Panel Life Time* <sup>1</sup>         | approx. 50000 hours (typ)     |

\*<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

|                         |  |   |
|-------------------------|--|---|
| VIDEO IN                | 4-Pole Mini Jack (M3) x 1  | 1.0 V [p-p] (75 Ω)<br>0.5 V [rms]   |
| HDMI IN                 | HDMI Type A Connector x 2<br>(VIERA LINK is not supported)                       | Linear PCM<br>(Sampling frequency : 48 kHz/44.1 kHz/32 kHz)   |
| DVI-D IN                | DVI-D 24-pin x 1   | Compliance with DVI Revision 1.0<br>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)<br>: without sync 0.7 V [p-p] (75 Ω)<br>P <sub>B</sub> /C <sub>B</sub> /B : 0.7 V [p-p] (75 Ω)<br>P <sub>R</sub> /C <sub>R</sub> /R : 0.7 V [p-p] (75 Ω)<br>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<br>(Shared with DVI-D IN and PC IN)                    | 0.5 V [rms]   |
| AUDIO OUT               | Stereo Mini Jack (M3) x 1<br>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.)               |   |

#### ■ AUDIO

|                  |                                    |
|------------------|------------------------------------|
| Built in Speaker | 10 W (Full range : 80 × 30 mm × 2) |
| Line Out         | 20 W [10 W + 10 W]                 |

#### ■ ELECTRICAL

|                                    |                             |
|------------------------------------|-----------------------------|
| Power Requirements                 | 110 - 127 V AC, 50 Hz/60 Hz |
| Power Consumption                  | 170 W                       |
| On Mode Average Power Consumption* | 130 W                       |
| Power Off Condition                | approx. 0.3 W               |
| Stand-by Condition                 | approx. 0.5 W               |
| Apparent power                     | 170 (VA)                    |

\*Based on IEC 62087 Ed.2 measurement method

#### ■ MECHANICAL

|                               |   |
|-------------------------------|---|
| Dimensions (W x H x D)        | 48.8" x 28.0" x 2.5" (1239 x 712 x 62 mm)   |
| Weight                        | approx. 35.3 lbs. (16.0 kg)   |
| Bezel Color                   | Black   |
| Bezel Width                   | T/R/L:0.5" (12.6 mm), B:0.6" (14.5 mm)  |
| Carton Dimensions (W x H x D) | 53.7" x 34.0" x 7.3" (1365 x 864 x 185 mm)  |
| Gross Weight                  | approx. 53.0 lbs. (24.0 kg)   |
| Cabinet Material / Color      | Plastic/Black   |
| Pitch for Wall-Hanging        | VESA Compliant 15.8" x 15.8" (400 x 400 mm) (Installed by: M6 screws /Screw hole depth 0.63" (16 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 | : 32°F to 104°F (0°C to 40°C)* <sup>1</sup> : 32°F to 95°F (0°C to 35°C)* <sup>2</sup> |
|                       | Humidity    | : 20% to 80% (No condensation)   |
|                       | Altitude    | : 0 to 9186 ft (0 to 2800 m)   |
| Storage Environment   | Temperature | : -4°F to 140°F (-20°C to 60°C)  |
|                       | Humidity    | : 20% to 80% (No condensation)   |

\*<sup>1</sup> : for up to 4593 ft (1400 m) altitude \*<sup>2</sup> : 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.

|          |              |
|----------|--------------|
| UPC Code | 885170240865 |
|----------|--------------|

**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 |

**STANDARD (CERTIFICATIONS)**

|                       |  |
|-----------------------|--|
| SAFETY REGULATIONS    | UL60950-1  |
| RADIATION REGULATIONS | FCC 47 CFR, Part 15, Subpart B Class A, ICES-003 |

**REMOTE CONTROL TRANSMITTER**

|                        |  |
|------------------------|--|
| Power Requirements     | DC 3 V<br>(2 x AAA Size batteries)           |
| Operating distance     | approx. 23 ft (7 m)*                         |
| Weight                 | approx. 2.2 oz (63 g)<br>including batteries |
| Dimensions (W x H x D) | 1.7" x 4.1" x 0.8"<br>(44 x 105 x 20.5 mm)   |

\*When operated directly in front of receptor.

**INCLUDED ACCESSORIES**

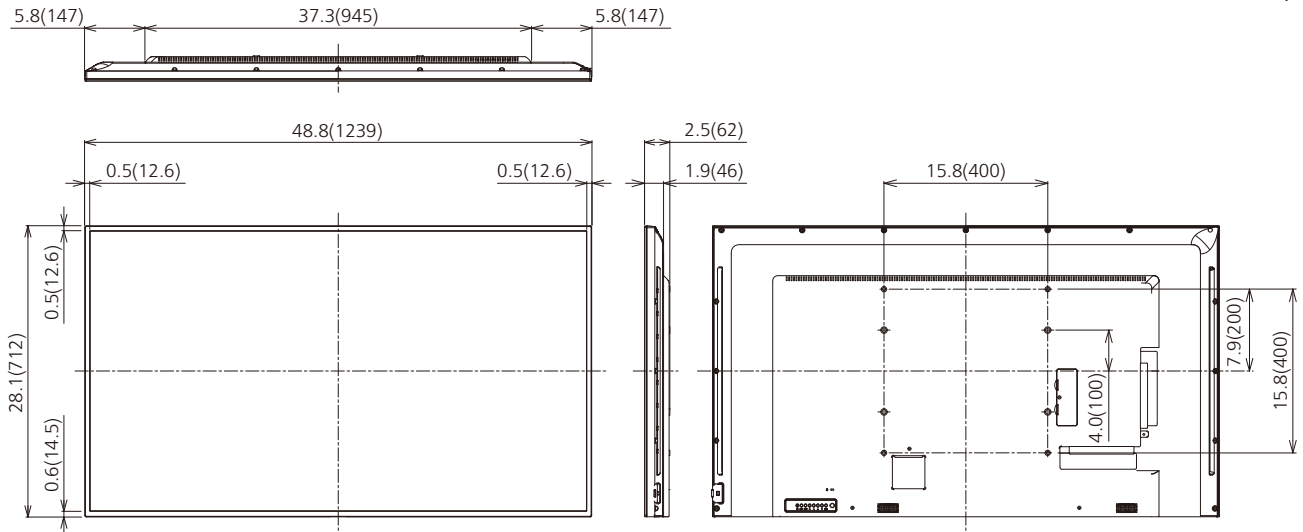
- AC cord (71" (1.8 m))
- Remote Control
- Batteries (AAA size) x 2
- Clamper x 3
- CD-ROM / User Manual
- Operating instruction book

**OPTIONAL ACCESSORIES**

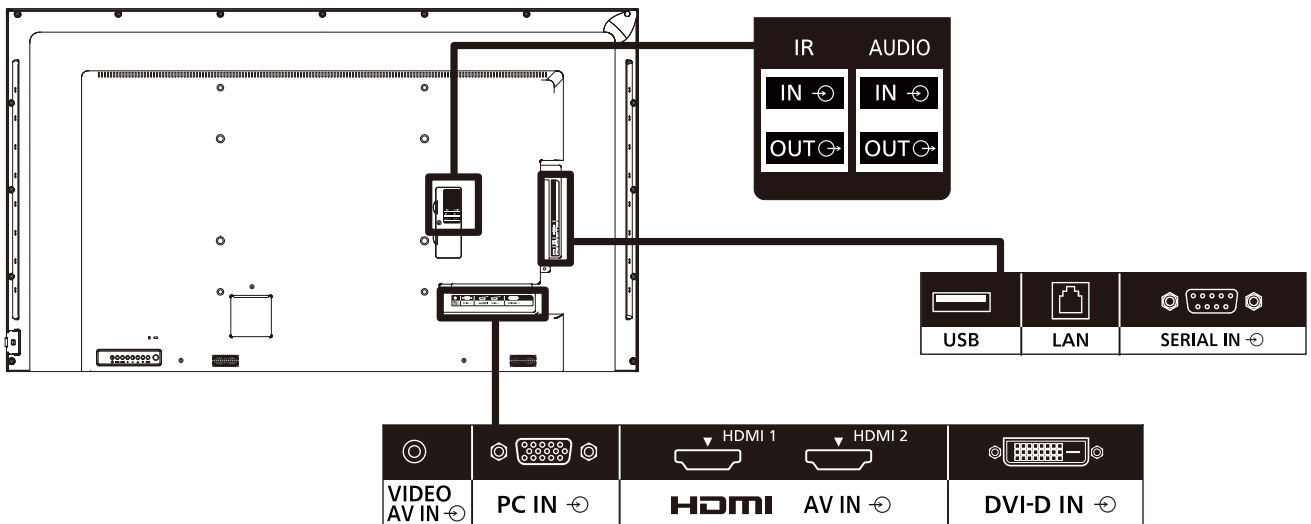
|                |            |
|----------------|------------|
| Pedestal Stand | TY-ST43PE8 |
|----------------|------------|

**DIMENSIONS**

Cautions: This drawing is not a scale  
Units : inches (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      |
|                       |                          | 68.68            | 85.00         | 94.50                | R/Y/D/H      |
| WSVGA                 | 1066 x 600               | 37.64            | 59.94         | 53.00                | D/H          |
|                       |                          | 53.70            | 60.00         | 81.62                | D/H          |
| MXGA                  | 1152 x 864               | 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       | 44.76         | 60.00                | 74.48        |
| 1280 x 768            | 1280 x 768               | 39.55            | 49.94         | 65.18                | R/Y/D/H      |
|                       |                          | 47.70            | 60.00         | 80.14                | R/Y/D/H      |
|                       |                          | 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      |
|                       |                          | 49.31            | 59.91         | 71.00                | R/Y/D/H      |
|                       |                          | 49.70            | 59.81         | 83.50                | R/Y/D/H      |
| MSXGA                 | 1280 x 960               | 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