

80-inch class Multi Touch Screen LED Display

## TH-80LFB70U

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

#### ■ DISPLAY

|                                    |                                |
|------------------------------------|--------------------------------|
| Screen Size (Diagonal)             | 80.0 inch (2,032 mm)           |
| Panel Type/Backlight               | LCD VA panel/E-LED             |
| Aspect Ratio                       | 16:9                           |
| Effective Display Area (W x H)     | 69.7" x 39.2" (1,771 x 996 mm) |
| Number of Pixels (H x V)           | 1,920 x 1,080 pixel            |
| Brightness                         | 350 cd/m <sup>2</sup>          |
| Contrast Ratio                     | 5000:1                         |
| Response Time                      | 4 ms (G to G)                  |
| Viewing Angle(Horizontal/Vertical) | 176 degrees/176 degrees        |
| Panel Life*                        | approx. 50,000 hours           |

\*An approximate time until the panel brightness decreases to half of its original value.

#### ■ TOUCH PANEL

|                    |                                    |
|--------------------|------------------------------------|
| Detection Method   | Infrared blocking detection method |
| PC Connection Port | USB (Compliance with 3.0)          |

#### ■ CONNECTION TERMINAL

|                         |  |  |
|-------------------------|--|--|
| VIDEO IN                | BNC x 1  | 1.0 Vp-p (75Ω)   |
| AUDIO IN (L/R)          | Stereo mini jack (M3) x 1 (Shared with COMPONENT/RGB IN)   | 0.5 Vrms   |
| COMPONENT/RGB IN        | BNC x 1 set  | Y/G : 1.0 Vp-p (75Ω)<br>Pb/Cb/B : 0.7 Vp-p (75Ω)<br>Pr/Cr/R : 0.7 Vp-p (75Ω)   |
| AUDIO IN (L/R)          | Stereo mini jack (M3) x 1 (Shared with VIDEO IN)           | 0.5 Vrms   |
| HDMI IN                 | HDMI TYPE A connector x 2                                  |  |
| DVI-D IN                | DVI-D 24pin (Digital) x 1                                  | Copliance with DVI Revision 1.0, Compatible with HDCP 1.1  |
| AUDIO IN (L/R)          | Stereo mini jack (M3) x 1 (Shared with PC IN)              | 0.5 Vrms   |
| PC IN                   | Mini D-sub 15pin (female) x 1<br>Plug & Play (VESA DDC 2B) | Y/G : with sync 1.0 Vp-p (75Ω)<br>: without sync 0.7 Vp-p (75Ω)<br>Pb/Cb/B : 0.7 Vp-p (75Ω)<br>Pr/Cr/R : 0.7 Vp-p (75Ω)<br>HD/VD : 1.0 - 5.0 Vp-p (high impedance) |
| AUDIO IN (L/R)          | Stereo mini jack (M3) x 1 (Shared with DVI-D IN)           | 0.5 Vrms   |
| PC OUT                  | Mini D-sub 15pin x 1                                       | R : 0.7 Vp-p (75Ω)<br>G : 0.7 Vp-p (75Ω)<br>B : 0.7 Vp-p (75Ω)<br>HD/VD : 3.5 - 5.0 Vp-p   |
| Function Slot : SLOT2.0 | 1 (Vacant)   |  |
| USB A                   | TYPE A USB connector x 1 (For Memory Viewer)               |  |
| USB B                   | TYPE B USB connector x 1 (For Touch panel)                 |  |
| External Speaker        | 8Ω, 20 W [10 W + 10 W] (10 %THD)                           |  |

#### ■ CONTROL

|              |  |
|--------------|--|
| SERIAL       | D-sub 9pin (male) x 1 (EXTERNAL CONTROL TERMINAL), RS-232C Compatible  |
| DIGITAL LINK | RJ45 x 1 (Shared with LAN)   |
| LAN          | RJ45 x 1, 100BASE-TX, Compatible with PLink (Shared with DIGITAL LINK) |

#### ■ ELECTRICAL

|                     |                         |
|---------------------|-------------------------|
| Power Requirements  | 110-127 V AC, 50/60 Hz. |
| Power Consumption   | 350 W                   |
| Power Off Condition | approx. 0.3 W           |
| Stand-by Condition  | approx. 0.5 W           |

#### ■ AUDIO

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

#### ■ MECHANICAL

|                               |   |
|-------------------------------|---|
| Dimensions (W x H x D)        | 73.6" x 43.1" x 4.1" (1,868 x 1,093 x 104 mm)   |
| Bezel Width                   | approx. 1.7" (43 mm)  |
| Carton Dimensions (W x H x D) | 81.7" x 52.0" x 16.0" (2,075 x 1,319 x 404 mm)  |
| Weight                        | approx. 185.2 lbs. (84 kg)  |
| Gross Weight                  | approx. 227 lbs. (103 kg)   |
| Cabinet Material/Color        | Aluminum/Black  |
| Pitch for Wall-Hanging        | VESA Compliant 15.8" x 15.8" (400 x 400mm) (Installed by: M8 screws/ Screw hole depth 0.9" - 2.2" [20 - 55 mm]) |
| Protection Glass Thickness    | approx. 0.16" (4 mm)/Anti Glare   |

#### ■ ENVIRONMENTAL

|                       |             |                                 |
|-----------------------|-------------|---------------------------------|
| Operating Environment | Temperature | : 32°F to 104°F (0°C to 40°C)   |
|                       | Humidity    | : 20% to 80% (Non condensation) |
| Storage Environment   | Temperature | : -4°F to 140°F (-20°C to 60°C) |
|                       | Humidity    | : 20% to 80% (Non condensation) |

#### ■ BUILT-IN WIRELESS LAN FUNCTION

|                     |  |
|---------------------|--|
| Standard            | 2.4 GHz: IEEE802.11b/g/n, 5.0 GHz: IEEE802.11a/n   |
| Infrastructure Mode | WPA2-PSK (TKIP/AES), WPA-PSK (TKIP/AES), WEP (64-bit/128-bit), WPA-EAP/WPA2-EAP (PEAP [MS-CHAPv2/GTC]/EAP-FAST [MS-CHAPv2/GTC]/EAP-TTLS [MD5/MS-CHAPv2], 128-bit/64-bit) |

|          |              |
|----------|--------------|
| UPC Code | 885170179318 |
|----------|--------------|

**MAIN FEATURE**

|                             |  |
|-----------------------------|--|
| Easy Whiteboard Functions   | Yes  |
| Memory Viewer               | <ul style="list-style-type: none"> <li>Picture<br/>Extension :JPG, JPEG, BMP<br/>Format :Maximum resolution 8,000 x 8,000<br/>Bit numbers (Bit depth): up to 24 bit</li> <li>Video<br/>Extension :mov, avi, mp4, mpg, mpeg, wmv<br/>Video format :Maximum 1,920 x 1,080/30fps<br/>Video bitrate :up to 40M bps<br/>Audio format :Maximum 48 kHz 2ch<br/>Audio bitrate :up to 384k bps</li> </ul> |
| Wireless Connections        | Yes  |
| DIGITAL LINK                | Yes  |
| Secondary Display           | Yes  |
| Picture in Picture          | Yes  |
| Digital Zoom                | Yes  |
| 1:1Pixel Mode               | Yes  |
| Auto Set Up                 | Yes  |
| Power Management            | Yes  |
| Power Management (PC/DVI-D) | Yes  |
| Input Lock                  | Yes  |
| Button/Input lock           | Yes  |
| Remote-control User Level   | Yes  |
| No Signal Power Off         | Yes  |
| Orientation                 | Landscape  |
| Input Search                | Yes  |

**INCLUDED ACCESSORIES**

- AC cord (78.74" (2 m)) - Remote Control Transmitter
- Batteries for the Remote Control Transmitter (R6 (UM) Size x 2)
- Software CD-ROM (Whiteboard software/Wireless Manager software/Operating Instruction) x 1 - USB Cable (78.74" (2 m)) x 1
- Pen x 4 - Eraser x 1 - Pen Stand x 1 - Operating Instruction book

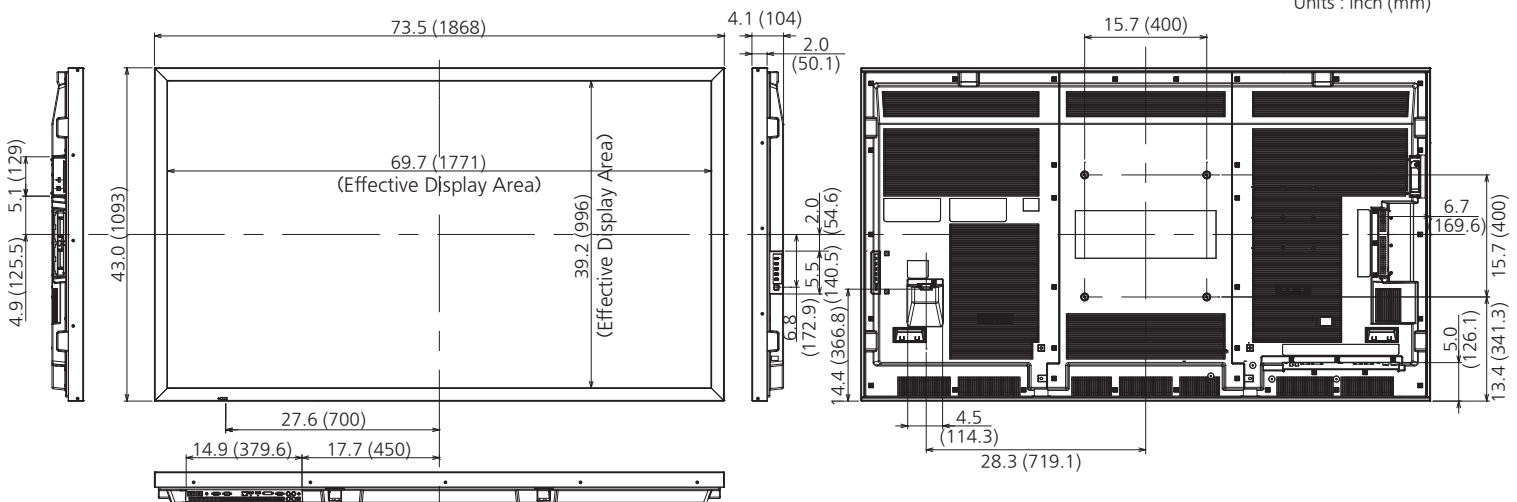
**OPTIONAL ACCESSORIES**

|                                  |             |
|----------------------------------|-------------|
| Mobile Stand                     | TY-ST80LF70 |
| Wall-hanging Bracket (Vertical)  | TY-WK70PV50 |
| Pedestal                         | TY-ST65P20  |
| Dual Video Board                 | TY-FB9BD    |
| DVI-D Terminal Board             | TY-FB11DD   |
| Dual HDMI Terminal Board         | TY-FB10HMD  |
| HD-SDI Terminal Board            | TY-FB9HD    |
| HD-SDI with Audio Terminal Board | TY-FB10HD   |
| Dual Link HD-SDI Terminal Board  | TY-FB11DHD  |
| Slot in PC                       | PLUGTHA54   |
| Digital Interface Box            | ET-YFB100G  |
| Easy Wireless Stick              | ET-UW100U   |

**STANDARD (CERTIFICATIONS)**

|                       |                                      |
|-----------------------|--------------------------------------|
| SAFETY REGULATIONS    | UL60065,<br>CAN/CSA-22.2 No 60065:03 |
| RADIATION REGULATIONS | FCC Part 15 Class-B, ICES-003        |

**DIMENSIONS**

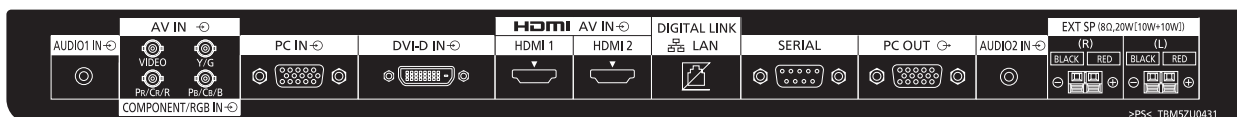


**CONNECTION TERMINAL**

SIDE



BACK



## ● Applicable Input Signals

\* Mark: Applicable input signal

|    | Signal name                | Horizontal frequency (kHz) | Vertical frequency (Hz) | COMPONENT / RGB IN / PC IN (Dot clock (MHz)) | DVI-D IN (Dot clock (MHz)) | HDMI |
|----|----------------------------|----------------------------|-------------------------|--|----------------------------|------|
| 1  | 525 (480) / 60i            | 15.73                      | 59.94                   | * (13.5)                                     | * (27.0)                   | *    |
| 2  | 525 (480) / 60p            | 31.47                      | 59.94                   | * (27.0) *5                                  | * (27.0)                   | *    |
| 3  | 625 (575) / 50i            | 15.63                      | 50.00                   | * (13.5)                                     |                            |      |
| 4  | 625 (576) / 50i            | 15.63                      | 50.00                   |  | * (27.0)                   | *    |
| 5  | 625 (575) / 50p            | 31.25                      | 50.00                   | * (27.0)                                     |                            |      |
| 6  | 625 (576) / 50p            | 31.25                      | 50.00                   |  | * (27.0)                   | *    |
| 7  | 750 (720) / 60p            | 45.00                      | 60.00                   | * (74.25)                                    | * (74.25)                  | *    |
| 8  | 750 (720) / 50p            | 37.50                      | 50.00                   | * (74.25)                                    | * (74.25)                  | *    |
| 9  | 1,125 (1,080) / 60p        | 67.50                      | 60.00                   | * (148.5) *1                                 | * (148.5)                  | *    |
| 10 | 1,125 (1,080) / 60i        | 33.75                      | 60.00                   | * (74.25) *1                                 | * (74.25)                  | *    |
| 11 | 1,125 (1,080) / 50p        | 56.26                      | 50.00                   | * (148.5) *1                                 | * (148.5)                  | *    |
| 12 | 1,125 (1,080) / 50i        | 28.13                      | 50.00                   | * (74.25) *1                                 | * (74.25)                  | *    |
| 13 | 1,125 (1,080) / 24sF       | 27.00                      | 48.00                   | * (74.25) *2                                 |                            |      |
| 14 | 1,125 (1,080) / 30p        | 33.75                      | 30.00                   | * (74.25) *1                                 | * (74.25)                  |      |
| 15 | 1,125 (1,080) / 25p        | 28.13                      | 25.00                   | * (74.25) *1                                 | * (74.25)                  |      |
| 16 | 1,125 (1,080) / 24p        | 27.00                      | 24.00                   | * (74.25) *1                                 | * (74.25)                  | *    |
| 17 | 1,250 (1,080) / 50i        | 31.25                      | 50.00                   | * (74.25) *3                                 |                            |      |
| 18 | 2,048 × 1,080 / 24sF *7    | 27.00                      | 48.00                   |  |                            |      |
| 19 | 2,048 × 1,080 / 24p *7     | 27.00                      | 24.00                   |  |                            |      |
| 20 | 640 × 400 @70 Hz           | 31.46                      | 70.07                   | * (25.17)                                    |                            |      |
| 21 | 640 × 480 @60 Hz           | 31.47                      | 59.94                   | * (25.18) *6                                 | * (25.18)                  | *    |
| 22 | 640 × 480 @72 Hz           | 37.86                      | 72.81                   | * (31.5)                                     |                            |      |
| 23 | 640 × 480 @75 Hz           | 37.50                      | 75.00                   | * (31.5)                                     |                            |      |
| 24 | 640 × 480 @85 Hz           | 43.27                      | 85.01                   | * (36.0)                                     |                            |      |
| 25 | 800 × 600 @56 Hz           | 35.16                      | 56.25                   | * (36.0)                                     |                            |      |
| 26 | 800 × 600 @60 Hz           | 37.88                      | 60.32                   | * (40.0)                                     | * (40.0)                   | *    |
| 27 | 800 × 600 @72 Hz           | 48.08                      | 72.19                   | * (50.0)                                     |                            |      |
| 28 | 800 × 600 @75 Hz           | 46.88                      | 75.00                   | * (49.5)                                     |                            |      |
| 29 | 800 × 600 @85 Hz           | 53.67                      | 85.06                   | * (56.25)                                    |                            |      |
| 30 | 852 × 480 @60 Hz           | 31.47                      | 59.94                   | * (33.54) *6                                 | * (34.24)                  | *    |
| 31 | 1,024 × 768 @50 Hz         | 39.55                      | 50.00                   |  | * (51.89)                  | *    |
| 32 | 1,024 × 768 @60 Hz         | 48.36                      | 60.00                   | * (65.0)                                     | * (65.0)                   | *    |
| 33 | 1,024 × 768 @70 Hz         | 56.48                      | 70.07                   | * (75.0)                                     |                            |      |
| 34 | 1,024 × 768 @75 Hz         | 60.02                      | 75.03                   | * (78.75)                                    |                            |      |
| 35 | 1,024 × 768 @85 Hz         | 68.68                      | 85.00                   | * (94.5)                                     |                            |      |
| 36 | 1,066 × 600 @60 Hz         | 37.64                      | 59.94                   | * (53.0)                                     | * (53.0)                   | *    |
| 37 | 1,152 × 864 @60 Hz         | 53.70                      | 60.00                   |  | * (81.62)                  | *    |
| 38 | 1,152 × 864 @75 Hz         | 67.50                      | 75.00                   | * (108.0)                                    |                            |      |
| 39 | 1,280 × 768 @60 Hz         | 47.70                      | 60.00                   | * (80.14)                                    |                            |      |
| 40 | 1,280 × 800 @60 Hz (1)     | 49.31                      | 59.91                   | * (71.0)                                     | * (71.0)                   | *    |
| 41 | 1,280 × 800 @60 Hz (2)     | 49.70                      | 59.81                   | * (83.5)                                     | * (83.5)                   | *    |
| 42 | 1,280 × 960 @60 Hz         | 60.00                      | 60.00                   | * (108.0)                                    |                            |      |
| 43 | 1,280 × 960 @85 Hz         | 85.94                      | 85.00                   | * (148.5)                                    |                            |      |
| 44 | 1,280 × 1,024 @60 Hz       | 63.98                      | 60.02                   | * (108.0)                                    | * (108.0)                  | *    |
| 45 | 1,280 × 1,024 @75 Hz       | 79.98                      | 75.03                   | * (135.0)                                    |                            |      |
| 46 | 1,280 × 1,024 @85 Hz       | 91.15                      | 85.02                   | * (157.5)                                    |                            |      |
| 47 | 1,366 × 768 @50 Hz         | 39.55                      | 50.00                   |  | * (69.92)                  | *    |
| 48 | 1,366 × 768 @60 Hz         | 48.36                      | 60.00                   | * (86.71)                                    | * (87.44)                  | *    |
| 49 | 1,400 × 1,050 @60 Hz       | 65.22                      | 60.00                   |  | * (122.61)                 | *    |
| 50 | 1,440 × 900 @60 Hz (1)     | 55.47                      | 59.90                   | * (88.75)                                    | * (88.75)                  | *    |
| 51 | 1,440 × 900 @60 Hz (2)     | 55.93                      | 59.89                   | * (106.5)                                    | * (106.5)                  | *    |
| 52 | 1,600 × 1,200 @60 Hz       | 75.00                      | 60.00                   | * (162.0)                                    | * (162.0)                  | *    |
| 53 | 1,600 × 1,200 @65 Hz       | 81.25                      | 65.00                   | * (175.5)                                    |                            |      |
| 54 | 1,920 × 1,080 @60 Hz       | 67.50                      | 60.00                   | * (148.5) *4                                 | * (148.5)                  | *    |
| 55 | 1,920 × 1,200 @60 Hz       | 74.04                      | 59.95                   |  | * (154.0)                  | *    |
| 56 | Macintosh13" (640 × 480)   | 35.00                      | 66.67                   | * (30.24)                                    |                            |      |
| 57 | Macintosh16" (832 × 624)   | 49.72                      | 74.54                   | * (57.28)                                    |                            |      |
| 58 | Macintosh21" (1,152 × 870) | 68.68                      | 75.06                   | * (100.0)                                    |                            |      |

\* 1: Based on SMPTE 274M standard.

\* 2: Based on SMPTE RP211 standard.

\* 3: Based on SMPTE 295M standard.

\* 4: The input signal is recognized as 1,125 (1,080) / 60p.

\* 5: When selected the RGB format and 525p signal input to the PC IN terminal, it is recognized as VGA 60Hz signal.

\* 6: When inputted VGA 60Hz format signal from the other than PC IN terminal, it is recognized as 525p signal.

\* 7: Based on SMPTE 292M and 372M standards. These signals can be received when the Dual Link HD-SDI Terminal Board (TY-FB11DHD) is installed.

Note: Signals without above specification may not be displayed properly.