86-inch Class 4K UHD LCD Display
TH-86EQ1W

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

**DISPLAY PANEL**
- Screen Size (Diagonal): 86-inch (2174 mm)
- Panel type / Backlight: IPS / Edge-LED
- Aspect ratio: 16:9
- Effective Display Area (W x H): 1895 x 1065 mm
- Resolution (H x V): 3840 x 2160
- Brightness: 350 cd/m² (Typ)
- Contrast Ratio: 1200:1 (Typ)
- Dynamic Contrast Ratio: 50000:1
- Max. Display Colors: Approx. 1.07 Billion
- Response Time: 8.0 ms (Typ) (G to G)
- Viewing Angle (Horizontal / Vertical): 178° / 178° (CR≧10)
- Panel Life Time*: Approx. 50000 hours
- Panel Surface Treatment: Anti-glare type (Haze 28%)

*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 (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
  - Compatible with HDCP 2.2
- VIDEO (AV) IN: Audio/Video 4-pole mini jack (M3) x 1
  - Video: 1.0 Vp-p (75 Ω)
  - 0.5 Vms
- 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/C/B: with sync 0.7 V [p-p] (75 Ω)
  - PR/CR/R: without sync 0.7 V [p-p] (75 Ω)
  - HD/VD: 1.0 - 5.0 V [p-p] (high impedance)
- SERIAL IN: D-sub8 pin x 1, RS-232C Compatible
- IR TRANSMITTER IN/OUT: Stereo Mini Jack (M3) x 1/x1
- AUDIO IN: Stereo Mini Jack (M3) x 1 ( Shared with AV IN, DVI-D IN and PC IN)
  - Y/G: 0.5 V [rms]
- AUDIO OUT: Stereo Mini Jack (M3) x 1 (Shared with AV IN, DVI-D IN and PC IN)
  - Variable (-∞ - 0 dB) (1 kHz 0 dB Input, 10 kΩ Load)
  - 0.5 V [rms]
- LAN: RJ45 x 1 / compatible with PJLink®
  - RJ45 10BASE-T/100BASE-TX/1000BASE-T
- USB: Type A Connector x 1, DC 5 V/2A (USB 3.0 is supported)

**AUDIO**
- Built in Speaker: 20W (10W+10W)

**ELECTRICAL**
- Power Requirements: AC 110 - 240 V 50 Hz / 60 Hz
- Power Consumption: 363 W
- On Mode Average Power Consumption*: 231 W
- Power Off Condition: Approx. 0.3 W
- Stand-by Condition: Approx. 0.5 W
- Apparent power: 387 VA

*Based on IEC 62087 Ed.2 measurement method

**MECHANICAL**
- Dimension (W x H x D) including handles: 1928 x 1099 x 86 mm (75.91" x 43.27" x 3.39")
- Weight: Approx. 66 kg (145.5 lbs)
- Bezel Color: Black
- Bezel Width: T/R/L/B 15.2 mm (0.60")
- Cabinet Dimensions (W x H x D): 2214 x 1427 x 373 mm (87.56 x 56.19 x 14.69")
- Gross Weight: Approx. 89 kg (196.3 lbs)
- Cabinet Material: Front: Metal / Back: Metal
- Pitch for Wall-Hanging: VESA Compliant 600 x 400 mm (23.62" x 15.8") (Installed by: M8 screws / Screw hole depth 16 mm (0.63"))

**INSTALLATION**
- Orientation: Landscape / Portrait
- Tilt angle: Landscape 0-20 degrees forward / backward
  - Portrait 0-20 degrees forward / backward

*Please contact your sales representative with regard to the tilt angle before installation.
*1 When you install the product upright, be sure to make the power lamp of the main body come to the upper side.

**ENVIRONMENTAL**
- Operating Environment: Temperature: 0°C to 40°C (32°F to 104°F) / Humidity: 20% to 80% (No condensation)
- Storage Environment: Temperature: -20°C to 60°C (-4°F to 140°F) / Humidity: 20% to 80% (No condensation)

*1 For up to 1400 (4593 ft) altitude
*2 For between 1400 m (4593 ft) and 2800 m (9186 ft) 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.
86-inch Class 4K UHD LCD Display

**MAIN FEATURE**
- USB Media Player: Yes
- Failover/Failback: Yes
- Data Cloning: Yes
- Digital Zoom: Yes
- Multi display settings: Yes
- Power ON Screen Delay: Yes
- 1:1 Pixel mode: Yes
- Screen Saver: Yes
- Power Management: HDMI/PC/DVI-D
- Power save: Yes
- Button Lock: Yes
- Controller user level: Yes
- Input search / Input detection: Yes
- 6-segment color management: Yes
- Picture mode: Yes
- Dynamic contrast: Yes
- Color enhancement: Yes
- Refine enhancer: Yes
- Gradation smoother: Yes
- Dynamic backlight control: Yes
- Frame Creation: Yes
- Set up timer: Yes
- AMX D.D.: Yes
- Crestron Connected™: Yes
- WEB Browser control: Yes
- PiLink: Yes
- Image settings: Yes
- HDMI CEC Compatible: Yes
- Memory Viewer: Yes
- Playlist Editing Function: Yes
- Local Dimming: Yes
- Operating time*: 24h / day

* Specifications and appearance are subject to change without notice.

**STANDARD (CERTIFICATIONS)**

**SAFETY REGULATIONS**
- UL60950-1, 2nd Edition,2014-10-14
- Mexico: NOM-019-SCFI-1998 (IEC60950-1
- BeAB approval
- AS/NZS Deviation

**RADIATION REGULATIONS**
- FCC 47 CFR, Part 15, Subpart B Class A
- ANSi C63.4-2014 (ICE-003)
- CEN5032:2012,AC:2013 (CLASS A)
- ENS5024:2010, ENS61000-3-3:2014,
- EN61000:3-3:2013
- AS/NZS C09P32:2013
- RCM Mark

**REMOTE CONTROL TRANSMITTER**
- Power Requirements: DC 3 V (2 x AAA Size batteries)
- Operating distance: approx. 7 m (23 ft)*
- Weight: approx. 63 g (2.2 oz) including batteries
- Dimensions (W x H x D): 192 x 48 x 20 mm (7.6” x 1.9” x 0.8”)

*When operated directly in front of receptor.

**INCLUDED ACCESSORIES**
- Remote Control
- Batteries (AAA size) x 2
- 4-pole mini plug conversion cable
- AC cord (approx. 2.0 m (79”))
- Clamper x 3
- USB Memory cover x 1
- Operating Instruction Book

**COMPATIBLE SOFTWARE**
- Multi Monitoring & Control Software: Ver.2.1 or later
- CMS Content Management Software: Ver.3.2 or later
- Video Wall Manager: Ver.1.9 or later

**OPTIONAL ACCESSORIES**
- Wall-Hanging Bracket: TY-WK98PV1*
- Early Warning Software**: ET-SWA100 / 105series
- Basic license / 3-year license
- (Depending on the license type, the symbol at the end of the part number is different.)

* The availability varies depending on the country.

**DIMENSIONS**

Units: mm (inch)

**CONNECTION TERMINAL**

Cautions: This drawing is not a scale

* * Specifications and appearance are subject to change without notice.
## List of correspondence signals

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

#### Specific HDMI signals inside the plug and play compatible signal table are as follows.

1: 4K/60p, 2: 4K/30p, 3: 2K

<table>
<thead>
<tr>
<th>Correspondence signal</th>
<th>Resolution (dot)</th>
<th>Scan rate</th>
<th>Dot clock rate (MHz)</th>
<th>Format</th>
<th>Plug and play compatible signal*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC/NTSC4.43/</td>
<td>720 x 480i</td>
<td>15.73</td>
<td>59.94</td>
<td>V</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>PAL/PAL-N/SECAM</td>
<td>720 x 576i</td>
<td>15.63</td>
<td>50.00</td>
<td>V</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>480i/60i</td>
<td>720 x 480i</td>
<td>15.73</td>
<td>59.94</td>
<td>Y</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>480i/50i</td>
<td>720 x 576i</td>
<td>15.63</td>
<td>50.00</td>
<td>Y</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>4096 x 2160/60p</td>
<td>4096 x 2160</td>
<td>15.73</td>
<td>59.94</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
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<tr>
<td>480i/60i</td>
<td>720 x 483</td>
<td>31.47</td>
<td>59.94</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
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<tr>
<td>480i/50i</td>
<td>720 x 576</td>
<td>31.25</td>
<td>50.00</td>
<td>Y/D/H</td>
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<tr>
<td>720 x 576i</td>
<td>1280 x 720</td>
<td>37.50</td>
<td>50.00</td>
<td>Y/D/H</td>
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<tr>
<td>1080/60p</td>
<td>1920 x 1080</td>
<td>33.75</td>
<td>60.00</td>
<td>Y/D/H</td>
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<tr>
<td>1080/50p</td>
<td>1920 x 1080</td>
<td>28.13</td>
<td>50.00</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1080/24p</td>
<td>1920 x 1080</td>
<td>33.00</td>
<td>60.00</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1080/25p</td>
<td>1920 x 1080</td>
<td>28.13</td>
<td>25.00</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1080/30p</td>
<td>1920 x 1080</td>
<td>33.75</td>
<td>30.00</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1080/50p</td>
<td>1920 x 1080</td>
<td>65.25</td>
<td>50.00</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>2K/24p</td>
<td>2048 x 1080</td>
<td>27.00</td>
<td>50.00</td>
<td>Y/D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>2K/25p</td>
<td>2048 x 1080</td>
<td>28.12</td>
<td>25.00</td>
<td>D/H</td>
<td>✓ ✓ ✓ ✓</td>
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<tr>
<td>2K/30p</td>
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<td>33.75</td>
<td>30.00</td>
<td>D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>2K/48p</td>
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<td>56.25</td>
<td>48.00</td>
<td>D/H</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>720 x 576i</td>
<td>1280 x 720</td>
<td>31.25</td>
<td>50.00</td>
<td>74.25</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1080/60i</td>
<td>1920 x 1080</td>
<td>33.75</td>
<td>60.00</td>
<td>74.25</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1080/50i</td>
<td>1920 x 1080</td>
<td>28.13</td>
<td>50.00</td>
<td>74.25</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1280 x 720i</td>
<td>1920 x 1080</td>
<td>33.00</td>
<td>60.00</td>
<td>74.25</td>
<td>✓ ✓ ✓ ✓</td>
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<tr>
<td>1360 x 768/60p</td>
<td>1360 x 768</td>
<td>47.72</td>
<td>59.87</td>
<td>79.50</td>
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<td>1360 x 768/50p</td>
<td>1360 x 768</td>
<td>47.72</td>
<td>60.00</td>
<td>84.50</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>1360 x 768/60p</td>
<td>1360 x 768</td>
<td>47.72</td>
<td>60.00</td>
<td>84.75</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
</tbody>
</table>

*1 HDMI, *2 DVI-D/PC
## 86-inch Class 4K UHD LCD Display

### Correspondence

<table>
<thead>
<tr>
<th>Resolution (dot)</th>
<th>Horizontal (kHz)</th>
<th>Vertical (Hz)</th>
<th>Dot clock rate (MHz)</th>
<th>Format 1</th>
<th>Plug and play compatible signal 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1366 x 768/50</td>
<td>1366 x 768</td>
<td>39.55</td>
<td>50.00</td>
<td>69.92</td>
<td>D/H</td>
</tr>
<tr>
<td>1366 x 768/60</td>
<td>1366 x 768</td>
<td>48.39</td>
<td>60.03</td>
<td>86.71</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1366 x 768/60</td>
<td>1366 x 768</td>
<td>48.00</td>
<td>60.00</td>
<td>72.00</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1366 x 768/50</td>
<td>1366 x 768</td>
<td>39.56</td>
<td>49.89</td>
<td>69.00</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1366 x 768/50</td>
<td>1366 x 768</td>
<td>39.56</td>
<td>49.89</td>
<td>69.00</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1400 x 1050/60</td>
<td>1400 x 1050</td>
<td>65.22</td>
<td>60.00</td>
<td>122.61</td>
<td>D/H</td>
</tr>
<tr>
<td>1400 x 1050/75</td>
<td>1400 x 1050</td>
<td>62.20</td>
<td>75.00</td>
<td>155.85</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1440 x 900/60</td>
<td>1440 x 900</td>
<td>55.47</td>
<td>59.90</td>
<td>88.75</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1440 x 900/60</td>
<td>1440 x 900</td>
<td>55.92</td>
<td>60.00</td>
<td>106.47</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1600 x 900/50</td>
<td>1600 x 900</td>
<td>46.30</td>
<td>50.00</td>
<td>97.05</td>
<td>D/H</td>
</tr>
<tr>
<td>1600 x 900/60</td>
<td>1600 x 900</td>
<td>60.00</td>
<td>60.00</td>
<td>108.00</td>
<td>D/H</td>
</tr>
<tr>
<td>1600 x 900/60</td>
<td>1600 x 900</td>
<td>55.99</td>
<td>59.95</td>
<td>118.25</td>
<td>D/H</td>
</tr>
<tr>
<td>1600 x 900/60</td>
<td>1600 x 900</td>
<td>55.92</td>
<td>60.00</td>
<td>119.00</td>
<td>D/H</td>
</tr>
<tr>
<td>1600 x 1200/60</td>
<td>1600 x 1200</td>
<td>75.00</td>
<td>60.00</td>
<td>162.00</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1680 x 1050/60</td>
<td>1680 x 1050</td>
<td>65.29</td>
<td>59.95</td>
<td>146.25</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1920 x 1080/60</td>
<td>1920 x 1080</td>
<td>66.59</td>
<td>59.93</td>
<td>138.50</td>
<td>R/D/H</td>
</tr>
<tr>
<td>1920 x 1080/60</td>
<td>1920 x 1080</td>
<td>67.50</td>
<td>60.00</td>
<td>148.50</td>
<td>D/H</td>
</tr>
<tr>
<td>1920 x 1200/60</td>
<td>1920 x 1200</td>
<td>74.04</td>
<td>59.95</td>
<td>154.00</td>
<td>R/D/H</td>
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<tr>
<td>1920 x 2160/60</td>
<td>1920 x 2160</td>
<td>133.29</td>
<td>59.99</td>
<td>277.25</td>
<td>H</td>
</tr>
<tr>
<td>1920 x 2160/60</td>
<td>1920 x 2160</td>
<td>135.00</td>
<td>60.00</td>
<td>297.00</td>
<td>H</td>
</tr>
<tr>
<td>2560 x 1080/50</td>
<td>2560 x 1080</td>
<td>82.37</td>
<td>49.95</td>
<td>286.00</td>
<td>H</td>
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<tr>
<td>2560 x 1080/60</td>
<td>2560 x 1080</td>
<td>98.71</td>
<td>59.97</td>
<td>268.50</td>
<td>H</td>
</tr>
<tr>
<td>3840 x 1080/60</td>
<td>3840 x 1080</td>
<td>66.63</td>
<td>59.97</td>
<td>266.50</td>
<td>H</td>
</tr>
</tbody>
</table>

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

*2: Alphabets inside the Format column represent as it follows.

- V: CVS (AV IN)
- R: D-sub RGB (PC IN)
- Y: YCBC/YPBPR (PC IN)
- D: DVI-D (DVI-D IN)
- H: HDMI (HDMI 1, HDMI 2)

*3: Based on VESA CTV-RB (Reduced Blanking) standard

*4: Signals with ● in the plug and play compatible signal column is the signal described in the EDID (extended display identification data) of the display. For the signals without ● in the plug and play compatible signal column, the resolution may not be selected on the computer even if the display is supporting it.

### Note

- The signal format distinguished automatically will be sometimes indication different from an actual input signal.
- When 1080/30PsF signal and 1080/25PsF signal are input, they are processed as 1080/60i signal and 1080/50i signal, and then displayed.
Drawing of terminals

View from back

Magnified figure of terminal a

Magnified figure of terminal b

Sectional view of terminal a
(AUDIO OUT / AUDIO IN / VIDEO AV IN / SERIAL IN / PC IN / DVI-D IN)

Sectional view of terminal b
(USB / LAN / IR IN / IR OUT / HDMI 1 / HDMI 2)

Terminal a
86EQ1W Terminal (Bottom)
Units: mm (inch)

<table>
<thead>
<tr>
<th></th>
<th>AUDIO IN/OUT</th>
<th>SERIAL IN</th>
<th>PC IN</th>
<th>DVI-D IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15.3 (0.6)</td>
<td>15.1 (0.59)</td>
<td>15 (0.59)</td>
<td>13.8 (0.54)</td>
</tr>
<tr>
<td>B</td>
<td>1.7 (0.06)</td>
<td>5.3 (0.2)</td>
<td>5.3 (0.2)</td>
<td>5.6 (0.22)</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td>33 (1.3)</td>
</tr>
</tbody>
</table>

Terminal b
86EQ1W Terminal (Side)
Units: mm (inch)

<table>
<thead>
<tr>
<th></th>
<th>USB</th>
<th>LAN</th>
<th>IR IN/OUT</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>13.5 (0.53)</td>
<td>12.3 (0.48)</td>
<td>14.5 (0.57)</td>
<td>11.3 (0.44)</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td>1.7 (0.06)</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td>33 (1.3)</td>
<td></td>
</tr>
</tbody>
</table>

*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.