



## 50-inch Class 4K UHD LCD TV TH-50CQ1U

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

#### ■ DISPLAY PANEL

|                                       |                               |
|---------------------------------------|-------------------------------|
| Screen Size (Diagonal)                | 49.5-inch (1257 mm)           |
| Panel type / Backlight                | VA / Direct-LED               |
| Aspect ratio                          | 16:9                          |
| Effective Display Area (W x H)        | 43.1" x 24.2" (1095 x 616 mm) |
| Resolution (H x V)                    | 3840 x 2160                   |
| Brightness (Typ)                      | 400 cd/m <sup>2</sup>         |
| Contrast Ratio (Typ)                  | 4000:1                        |
| Dynamic Contrast Ratio (Typ)          | 50000:1                       |
| Max. Display Colors                   | Approx. 1.06 Billion          |
| Response Time (Typ)                   | 8 ms (G to G)                 |
| Viewing Angle (Horizontal / Vertical) | 178° / 178° (CR≥20)           |
| Panel Life Time* <sup>1</sup> (Typ)   | Approx. 50000 hours           |
| Panel Surface Treatment               | Anti-glare type (Haze 2%)     |

\*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)<br>Compatible with HDCP 2.2  |
| PC IN                   | Mini D-Sub 15-pin (DDC2B) x 1   | 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 : TTL (high impedance) |
| SERIAL IN               | D-sub 9pin x 1, RS-232C Compatible  |   |
| AUDIO IN                | Stereo Mini Jack (M3) x 1<br>(PC IN only)   | 0.5 V [rms]   |
| AUDIO OUT               | Pin Jack (L / R) x 1<br>Variable (-∞ - 0 dB) (1 kHz 0 dB Input, 10 kΩ Load)   | 0.5 V [rms]   |
| LAN                     | RJ45 x 1<br>RJ45 10BASE-T/100BASE-TX  |   |
| USB                     | USB Type A Connector x 1, DC 5 V/0.5 A (USB 2.0 is supported)   |   |
| RF IN (ANTENNA / CABLE) | F connector x1<br>Standard Modulation Digital : ATSC Analog: NTSC<br>Digital : AIR / 8VSB CABLE / 16QAMor256QAM<br>Analog : Picture / AM Sound / FM |   |

#### ■ AUDIO

|                  |               |
|------------------|---------------|
| Built in Speaker | 20W (10W+10W) |
|------------------|---------------|

#### ■ ELECTRICAL

|                                    |                              |
|------------------------------------|------------------------------|
| Power Requirements                 | AC 110 - 127 V 50 Hz / 60 Hz |
| Power Consumption                  | 120 W                        |
| On Mode Average Power Consumption* | 94 W                         |
| Power Off Condition                | Approx. 0.5 W                |
| Stand-by Condition                 | Approx. 0.5 W                |
| Apparent power                     | 121 VA                       |

\*Based on IEC 62087 Ed.2 measurement method

#### ■ MECHANICAL

|  |  |
|--|--|
| Dimension (W x H x D) Not including remote controller sensor box | 44.3" x 25.5" x 3.1" (1124 x 647 x 77 mm)  |
| Dimension (W x H x D) Including remote controller sensor box     | 44.3" x 25.7" x 3.1" (1124 x 653 x 77 mm)  |
| Weight   | Approx. 29 lbs (13 kg)   |
| Bezel Color  | Black  |
| Bezel Width  | T/R/L 0.47" (11.9 mm) B 0.57" (14.4 mm)  |
| Carton Dimensions (W x H x D)                                    | 48.9" x 30.6" x 6.7" (1240 x 777 x 168 mm)   |
| Gross Weight   | Approx. 38 lbs (17 kg)   |
| Cabinet Material   | Front: Plastic / Back: Plastic   |
| Pitch for Wall-Hanging   | VESA Compliant 15.8" x 7.9" (400 x 200 mm) (Installed by: M6 screws / Screw hole depth 0.7" (17 mm)) |

#### ■ INSTALLATION

|               |                                    |
|---------------|------------------------------------|
| Orientation   | Landscape                          |
| Tilting Angle | Landscape : 0 - 20 degrees forward |

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

\*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 | : 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)   |
| Storage Environment   | Temperature | : -4°F to 140°F (-20°C to 60°C)  |
|                       | Humidity    | : 20% to 80% (No condensation)   |

\*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.

|          |              |
|----------|--------------|
| UPC Code | 885170367340 |
|----------|--------------|

**MAIN FEATURE**

|                                  |            |
|----------------------------------|------------|
| TV tuner (NTSC / ATSC)           | Yes        |
| USB Media File Playback Function | Yes        |
| Memory Viewer                    | Yes        |
| Auto setting                     | Yes        |
| No signal power off              | Yes        |
| Button lock                      | Yes        |
| RC control lock                  | Yes        |
| Dynamic contrast                 | Yes        |
| Dynamic backlight                | Yes        |
| SERIAL control (RS232C)          | Yes        |
| LAN control                      | Yes        |
| HDMI CEC Compatible              | Yes        |
| Operating Time*                  | 16 h / day |

\* 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 movie images.

**STANDARD (CERTIFICATIONS)**

|                       |   |
|-----------------------|---|
| SAFETY REGULATIONS    | ANSI / UL62368-1:2014<br>CAN / CSA C22.2 No. 62368-1-14               |
| RADIATION REGULATIONS | FCC 47 CFR, Part 15, Subpart B Class B<br>ANSI C63.4-2014<br>ICES-003 |

**REMOTE CONTROL TRANSMITTER**

|                        |   |
|------------------------|---|
| Power Requirements     | DC 3 V (AAA Size batteries x 2)           |
| Operating distance     | Approx. 23 ft (7 m)*                      |
| Weight                 | Approx. 3.2 oz (91 g) including batteries |
| Dimensions (W x H x D) | 1.9" x 1.1" x 7.5" (48 x 27 x 190 mm)     |

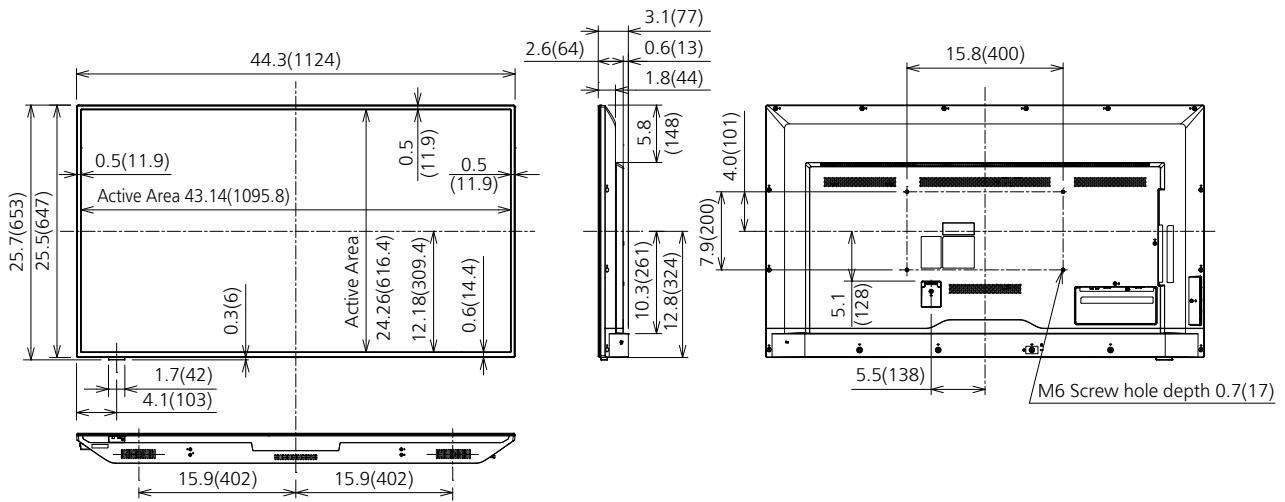
\*When operated directly in front of receptor.

**INCLUDED ACCESSORIES**

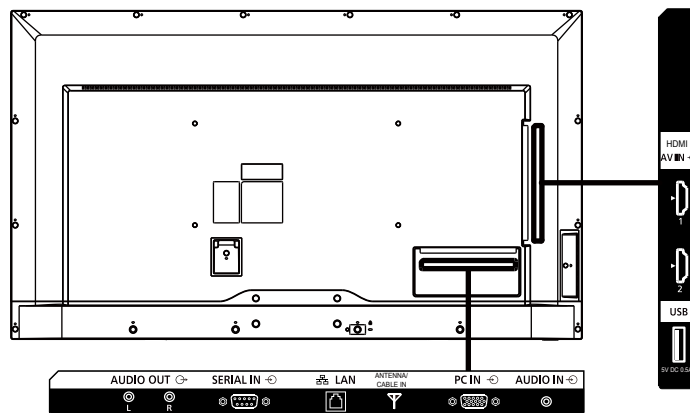
- Remote Control
- Batteries (AAA size) x 2
- AC cord (approx. 70.9" (1.8 m))
- Operating Instruction Book

**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

### Video Signal

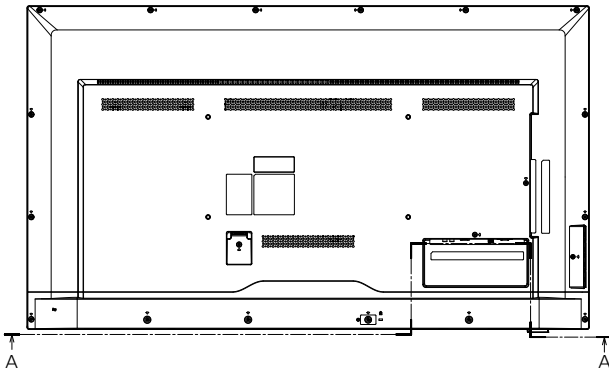
| HDMI         |                   |
|--------------|-------------------|
| Resolution   | Refresh rate (Hz) |
| 640 x 480p   | 60                |
| 720 x 480i   | 60                |
| 720 x 480p   | 60                |
| 720 x 576i   | 50                |
| 720 x 576p   | 50                |
| 1280 x 720p  | 50                |
|              | 60                |
| 1920 x 1080i | 50                |
|              | 60                |
| 1920 x 1080p | 24                |
|              | 25                |
|              | 30                |
|              | 50                |
|              | 60                |
| 3840 x 2160p | 24                |
|              | 25                |
|              | 30                |
|              | 50                |
|              | 60                |
| 4096 x 2160p | 24                |
|              | 25                |
|              | 30                |
|              | 50                |
|              | 60                |

### PC Signal

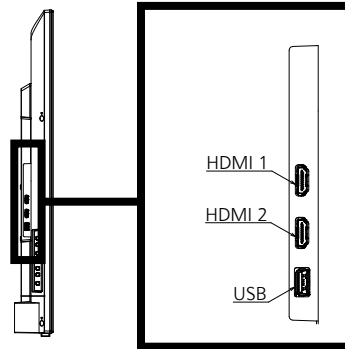
| PC / HDMI   |                   | ✓ : Support<br>- : Not Support |      |
|-------------|-------------------|--------------------------------|------|
| Resolution  | Refresh rate (Hz) | PC                             | HDMI |
| 640 x 480   | 60                | ✓                              | ✓    |
| 800 x 600   | 60                | ✓                              | ✓    |
| 720 x 400   | 70                | ✓                              | ✓    |
| 1024 x 768  | 60                | ✓                              | ✓    |
| 1280 x 720  | 60                | ✓                              | ✓    |
| 1280 x 800  | 60                | ✓                              | ✓    |
| 1280 x 960  | 60                | ✓                              | ✓    |
| 1280 x 1024 | 60                | ✓                              | ✓    |
|             | 75                | ✓                              | ✓    |
| 1360 x 768  | 60                | -                              | ✓    |
| 1400 x 1050 | 60                | -                              | ✓    |
| 1440 x 900  | 60                | ✓                              | ✓    |
| 1600 x 900  | 60                | ✓                              | ✓    |
| 1600 x 1200 | 60                | ✓                              | ✓    |
| 1680 x 1050 | 60                | ✓                              | ✓    |
| 1920 x 1080 | 60                | ✓                              | ✓    |
| 1920 x 1200 | 60                | ✓                              | ✓    |
| 3840 x 2160 | 30                | -                              | ✓    |
|             | 60                | -                              | ✓    |

● Drawing of terminals

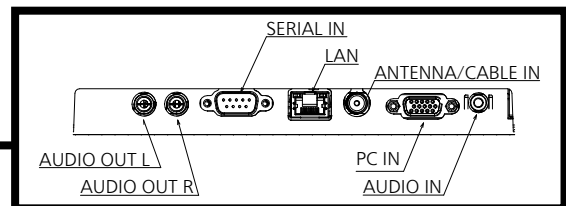
View from back



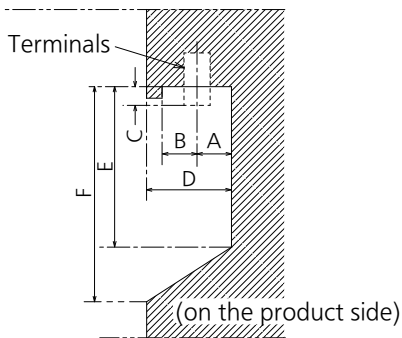
Magnified figure of terminal b



Magnified figure of terminal a



Sectional view of terminal a  
(AUDIO OUT L / AUDIO OUT R / SERIAL IN / LAN  
ANTENNA / CABLE IN / PC IN / AUDIO IN)

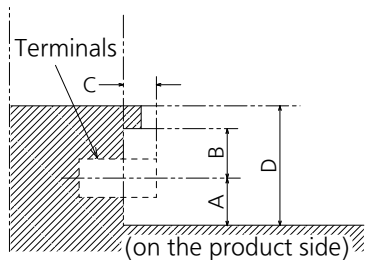


Terminal a  
50CQ1U Terminal (Bottom)

Units : inches (mm)

|   | AUDIO OUT   | SERIAL IN   | LAN         | ANTENNA/<br>CABLE IN | PC IN       | AUDIO IN    |
|---|-------------|-------------|-------------|----------------------|-------------|-------------|
| A | 0.52 (13.1) | 0.53 (13.5) | 0.50 (12.8) | 0.53 (13.5)          | 0.48 (12.2) | 0.54 (13.7) |
| B | 0.26 (6.6)  | 0.25 (6.2)  | 0.27 (6.9)  | 0.25 (6.2)           | 0.30 (7.6)  | 0.24 (6.0)  |
| C | 0.32 (8.2)  | 0.21 (5.4)  | 0.00 (0.0)  | 0.44 (11.2)          | 0.21 (5.3)  | 0.10 (2.5)  |
| D | 0.95 (24.0) |             |             |                      |             |             |
| E | 3.79 (96.2) |             |             |                      |             |             |
| F | 3.93 (99.8) |             |             |                      |             |             |

Sectional view of terminal b  
(HDMI 1 / HDMI 2 / USB)



Terminal b  
50CQ1U Terminal (Side)

|   | HDMI        | USB         |
|---|-------------|-------------|
| A | 0.45 (11.4) | 0.45 (11.4) |
| B | 0.27 (6.9)  | 0.27 (6.9)  |
| C | -           | -           |
| D | 0.89 (22.6) |             |

Units : inches (mm)

\*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.