



110-inch all-in-one LED display

## TL-110AD12AW

### Set contents

|                               |                                                 |
|-------------------------------|-------------------------------------------------|
| Model No.                     | TL-110AD12AW                                    |
| Quantity                      | 1                                               |
| Carton Dimensions (W x H x D) | 1320 x 1724 x 850 mm (51.97" x 67.88" x 33.47") |
| Gross Weight                  | 198 kg (436.6 lb)                               |

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

#### ■ DISPLAY PANEL

|                                     |                                  |
|-------------------------------------|----------------------------------|
| Screen size                         | 110-inch-class (2790.3 mm)       |
| Aspect ratio                        | 16:9                             |
| Effective Display Area (W x H)      | 2432 x 1368 mm (95.74" x 53.85") |
| LED Type                            | 3-in-1 SMD                       |
| Pixel Pitch                         | 1.27 mm                          |
| Resolution (H x V)                  | 1920 x 1080                      |
| Brightness (Typ.)                   | 700 cd/m <sup>2</sup>            |
| Contrast (Typ.)                     | 4000:1                           |
| Refresh Rate                        | Max. 3840 Hz                     |
| Viewing angle (H / V)(Typ.)         | 170°/160°                        |
| Panel life time <sup>1</sup> (Typ.) | Approx. 100,000 hours            |

1 When the panel lifetime is at 50% of the brightness under the condition of 25 degrees Celsius (+/- 2 degrees Celsius).

#### ■ CONNECTION TERMINAL (Display Panel)

|             |             |
|-------------|-------------|
| AC Input    | IEC C14 x 4 |
| VIDEO Input | RJ45 x 4    |

#### ■ CONNECTION TERMINAL (Power Box)

|                |                                     |
|----------------|-------------------------------------|
| AC Input       | Neutrik (NAC3MP-HC) Rating 30 A x 1 |
| AC Output      | IEC C13 x 7                         |
| Control Signal | RJ45 x 1                            |
| Sensor Input   | Stereo Mini Jack (Φ 2.5 mm) x 1     |

#### ■ CONNECTION TERMINAL (Control Box)

|                   |                                                                                                                                                                                                                  |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AC IN             | IEC C14 x 1                                                                                                                                                                                                      |
| HDMI™ IN          | HDMI™ Type A Connector x 3<br>Linear PCM (sampling frequency: 48 kHz/44.1 kHz/32 kHz)<br>Compatible with HDCP 2.2                                                                                                |
| HDMI™ OUT         | HDMI™ Type A Connector x 1<br>Linear PCM (sampling frequency: 48 kHz/44.1 kHz/32 kHz)<br>Compatible with HDCP 2.2                                                                                                |
| AUDIO IN          | Stereo Mini Jack (Φ 3.5 mm) x 1<br>(Shared video input except USB and MEMORY VIEWER)<br>0.5 V [rms]                                                                                                              |
| AUDIO OUT         | Stereo mini jack (Φ 3.5 mm) x 1<br>(Shared video input except USB and MEMORY VIEWER)<br>0.5 V [rms]                                                                                                              |
| AUDIO DIGITAL OUT | SPDIF                                                                                                                                                                                                            |
| USB               | USB TYPE A connector x 1 (DC 5V/2A, USB 3.0 is supported)(For Maintenance) USB Type A Connector x 1 (DC 5 V / 0.5 A, USB 2.0 is supported), USB Type mini B Connector x 1 (DC 5 V / 0.5 A, USB 2.0 is supported) |
| SERIAL IN         | D-sub 9 pin x 1, RS-232C compliant                                                                                                                                                                               |
| IR IN             | Stereo Mini Jack (Φ 3.5 mm) x 1                                                                                                                                                                                  |
| LAN               | RJ45 x 1 compatible with PLink™ RJ45 10BASE-T / 100BASE-TX                                                                                                                                                       |
| SLOT              | x 2<br>Intel® SDM specification<br>SLOT1: SDM-S / L; 3.3 V / Max. 1.1 A, 12 V / Max. 5.5 A<br>SLOT2: SDM-S / L; 3.3 V / Max. 1.1 A, 12 V / Max. 2.75 A                                                           |

#### ■ ELECTRICAL

|                                                                   |                                                |                                               |
|-------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|
| All in one<br>(Including Display panel / Control box / Power box) | Power Requirements                             | AC 220 V - 240 V 50 Hz / 60 Hz 10.0 A         |
|                                                                   | Power Consumption                              | 1503 W (Shipping Condition) / 1980 W (Rating) |
|                                                                   | On Mode Average Power Consumption <sup>1</sup> | 708 W (Shipping Condition)                    |
|                                                                   | Power Off Condition                            | Approx. 0.5 W                                 |
|                                                                   | Stand-by Condition                             | Approx. 0.7 W                                 |
|                                                                   | Apparent power                                 | 2064 VA                                       |
|                                                                   | Energy efficiency class for Europe             |                                               |
| Control Box                                                       | Power Requirements                             | AC 220 V - 240 V 50 Hz / 60 Hz 1.0 A          |
|                                                                   | Power Consumption                              | 57 W (Shipping Condition) / 200 W (Rating)    |
| Power Box                                                         | Power Requirements                             | AC IN AC 220 - 240 V 50 Hz / 60 Hz, 10.0 A    |
|                                                                   | Power Consumption                              | 6 W (Shipping Condition)                      |

1 Based on IEC 62087 Ed.2 measurement method.

#### ■ MECHANICAL

|                                                                               |                           |                                                 |
|-------------------------------------------------------------------------------|---------------------------|-------------------------------------------------|
| All in one<br>(Including Display panel / Wall Mount, Control box / Power box) | Dimension (W x H x D)     | 2442 x 1378 x 98.5 mm (96.14" x 54.25" x 3.88") |
|                                                                               | Weight                    | Approx. 109.4 kg (241.2 lbs)                    |
| Display panel                                                                 | Dimension (W x H x D)     | 2442 x 1378 x 30.5 mm (96.14" x 54.25" x 1.20") |
|                                                                               | Weight                    | Approx. 90 kg / 198.5 lbs                       |
|                                                                               | Cabinet Material          | Aluminum die-casting                            |
|                                                                               | Bezel Color (Cover Frame) | Black                                           |
|                                                                               | Bezel Width               | Top / Bottom / Left / Right: 5.0 mm (0.2")      |

MECHANICAL

|                  |                       |                                                        |
|------------------|-----------------------|--------------------------------------------------------|
| Control Box      | Dimension (W x H x D) | 441 x 62 x 696 mm (17.37" x 2.44" x 27.41")            |
|                  | Weight                | Approx. 6.6 kg (14.6 lbs)                              |
| Power Box        | Dimension (W x H x D) | 300 x 62 x 318 mm (11.82" x 2.44" x 12.52")            |
|                  | Weight                | Approx. 2.2 kg (4.9 lbs)                               |
| Wall Mount (x 2) | Dimension (W x H x D) | 2324 x 51 x 57 mm (91.50" x 2.01" x 2.25") (per piece) |
|                  | Weight                | Approx. 4.6 kg (10.2 lbs) (per piece)                  |
| UPC Code         | 885170439429          |                                                        |

|                        |           |
|------------------------|-----------|
| Installation direction | Landscape |
| Installation angle     | 0°        |

|                      |                                                                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Operating conditions | Temperature : 0 °C to 40 °C (32 °F to 104 °F)<br>: 0 °C to 35 °C (32 °F to 95 °F) <sup>2</sup><br>Humidity : 10 % to 80 % (No condensation) |
| Storage conditions   | Temperature : -10 °C to 40 °C (14 °F to 104 °F)<br>Humidity : 10 % to 80 % (No condensation)                                                |

1 for up to 1400 m (4593 ft) altitude  
2 for between 1400 m (4593 ft) and 2800 m (9186 ft) altitude

|                                                |                                    |
|------------------------------------------------|------------------------------------|
| Input Search/Input Detection                   | Yes                                |
| Failover/Failback                              | Yes                                |
| Digital Zoom                                   | Yes                                |
| Multi-Screen Settings                          | Yes                                |
| Power on Screen Delay                          | Yes                                |
| Screen saver                                   | Yes                                |
| HDMI™ Power Management                         | Yes                                |
| SLOT Power Management                          | Yes (TY-SB01DL Only when inserted) |
| Sensor setting                                 | Yes                                |
| Controller user level                          | Yes                                |
| Dynamic contrast                               | Yes                                |
| Color enhancement                              | Yes                                |
| Refine enhancer                                | Yes                                |
| Gradation smoother                             | Yes                                |
| Set up timer                                   | Yes                                |
| AMX D.D.                                       | Yes                                |
| Crestron Connected™                            | Yes (V2 / XiO)                     |
| WEB Browser control                            | Yes                                |
| PJLink™                                        | Yes (Class2)                       |
| SNMP                                           | Yes (v3)                           |
| Image settings                                 | Yes                                |
| HDMI™ CEC Compatible                           | Yes                                |
| Media Player (USB memory/Internal memory)      | Yes                                |
| Memory Viewer                                  | Yes                                |
| Playlist edit                                  | Yes                                |
| Data Cloning (USB/LAN)                         | Yes                                |
| Blue light reduction mode                      | Yes                                |
| Color management (color gamut conversion)      | Yes                                |
| Pixel Calibration                              | Yes                                |
| Panel check                                    | Yes                                |
| Multi Monitoring & Control Software compatible | Yes                                |
| Content management Software compatible         | Yes                                |
| Screen Monitoring compatible                   | Yes                                |
| Operating Time <sup>1</sup>                    | 24 h / day                         |

1 In case of running for a long time, the moving image is recommended to be displayed.

|                       |                                                                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SAFETY REGULATIONS    | UL 62368-1 Ed. 3-2019<br>CSA C22.2 No. 62368-1:19<br>EN 62368-1:2014, (BS EN 62368-1:2014)<br>EN IEC62368-1:2020, (BS EN IEC 62368-1:2020)                       |
| RADIATION REGULATIONS | US: FCC 47 CFR Part 15 SupartB<br>ICES-003 Issue7<br>EN55032:2015 / A11:2020<br>EN55035:2017 / A11:2020<br>EN61000-3-2:2014<br>EN6100-3-3:2013<br>EN62311-2:2008 |

|                        |                                           |
|------------------------|-------------------------------------------|
| Power supply           | DC 3 V (AAA Size batteries x 2)           |
| Operating distance     | Approx. 7 m (23 ft) <sup>1</sup>          |
| Weight                 | Approx. 63 g (2.3 oz) including batteries |
| Dimensions (W x H x D) | 48 x 134 x 20 mm (1.9" x 5.3" x 0.8")     |

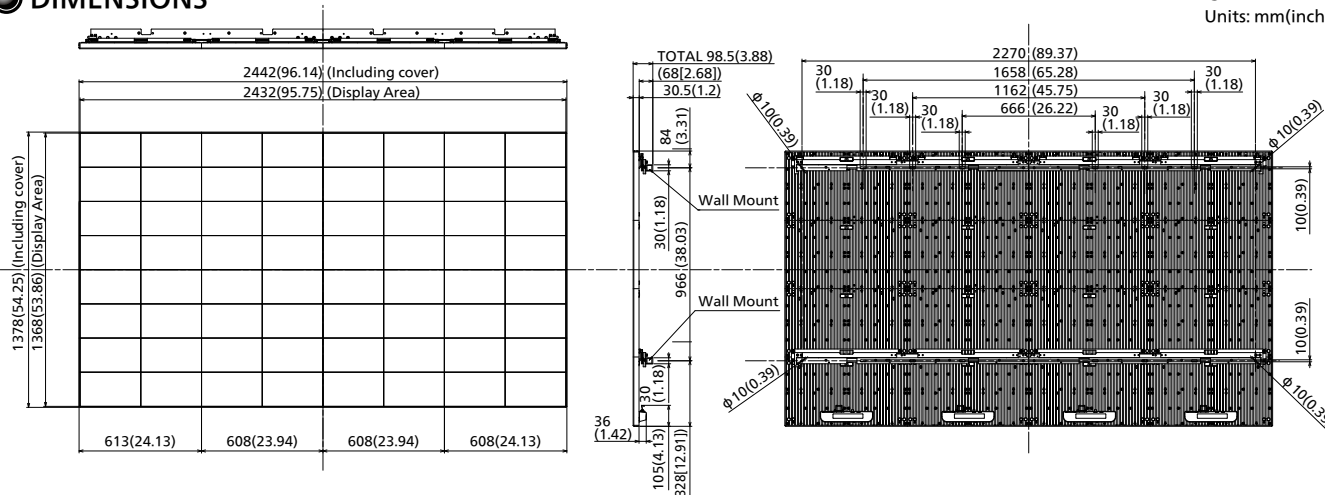
1 When operated directly in front of receptor

- Main unit
  - Wall mount x 2    • Wall mount installation jig
  - Spare LED module    • Tools for assembly x 1
- Control box
  - LAN cable x 4    • Power supply cord x 2 (approx. 2 m)
  - Remote control transmitter x 1
  - Batteries : AAA size x 2    • External IR receiver x 1 (approx. 1.8 m)
  - SLOT adapters x 2    • Mounting bracket x 1
  - Power supply cord x 1 (For connecting TY-PWRBX1W)(approx. 2 m)
- Power box
  - Power supply cord (for power outlet) x 2 (approx. 3 m)
  - Power supply cord (for connecting to Cabinet module) x 4
  - Sensor module x 1    • LAN cable    • 4-pole micro plug cable

|                                     |
|-------------------------------------|
| Multi Monitoring & Control Software |
| Content Management Software         |
| Screen Transfer                     |

|                                                |             |
|------------------------------------------------|-------------|
| Mobile Stand                                   | TY-ST110AD1 |
| LED module                                     | TY-MD12A51  |
| Control Box                                    | TY-CTRFHD1W |
| Power Box                                      | TY-PWRBX1W  |
| 12G-SDI Terminal Board                         | TY-SB01Q5   |
| DIGITAL LINK Terminal Board                    | TY-SB01DL   |
| Wireless Presentation System<br>Receiver Board | TY-SB01WP   |

(Note) This drawing is not to scale.  
Units: mm (inches)



## List of correspondence signals

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

| Correspondence signal        | Resolution<br>(dot)            | Scan rate           |                  | Dot clock rate<br>(MHz) | Plug and play compatible signal <sup>2</sup> |        |    |
|------------------------------|--------------------------------|---------------------|------------------|-------------------------|----------------------------------------------|--------|----|
|                              |                                | Horizontal<br>(kHz) | Vertical<br>(Hz) |                         | HDMI                                         |        |    |
|                              |                                |                     |                  |                         | 4K/60p <sup>3</sup>                          | 4K/30p | 2K |
| 480/60i <sup>5</sup>         | 720 (1440) x 480i <sup>1</sup> | 15.73               | 59.94            | 27.00                   | ○                                            | ○      | ○  |
| 576/50i                      | 720 (1440) x 576i <sup>1</sup> | 15.63               | 50.00            | 27.00                   | ○                                            | ○      | ○  |
| 480/60p <sup>5</sup>         | 720 x 483                      | 31.47               | 59.94            | 27.00                   | ○                                            | ○      | ○  |
| 576/50p                      | 720 x 576                      | 31.25               | 50.00            | 27.00                   | ○                                            | ○      | ○  |
| 720/60p                      | 1280 x 720                     | 45.00               | 60.00            | 74.25                   | ○                                            | ○      | ○  |
| 720/50p                      | 1280 x 720                     | 37.50               | 50.00            | 74.25                   | ○                                            | ○      | ○  |
| 1080/60i                     | 1920 x 1080i                   | 33.75               | 60.00            | 74.25                   | ○                                            | ○      | ○  |
| 1080/50i                     | 1920 x 1080i                   | 28.13               | 50.00            | 74.25                   | ○                                            | ○      | ○  |
| 1080/24p <sup>5</sup>        | 1920 x 1080                    | 27.00               | 24.00            | 74.25                   | ○                                            | ○      | ○  |
| 1080/24PsF <sup>5</sup>      | 1920 x 1080i                   | 27.00               | 48.00            | 74.25                   | -                                            | -      | -  |
| 1080/25p                     | 1920 x 1080                    | 28.13               | 25.00            | 74.25                   | ○                                            | ○      | ○  |
| 1080/30p                     | 1920 x 1080                    | 33.75               | 30.00            | 74.25                   | ○                                            | ○      | ○  |
| 1080/60p                     | 1920 x 1080                    | 67.50               | 60.00            | 148.50                  | ○                                            | ○      | ○  |
| 1080/50p                     | 1920 x 1080                    | 56.25               | 50.00            | 148.50                  | ○                                            | ○      | ○  |
| 2K/24p <sup>5</sup>          | 2048 x 1080                    | 27.00               | 24.00            | 74.25                   | -                                            | -      | -  |
| 2K/25p                       | 2048 x 1080                    | 28.13               | 25.00            | 74.25                   | -                                            | -      | -  |
| 2K/30p                       | 2048 x 1080                    | 33.75               | 30.00            | 74.25                   | -                                            | -      | -  |
| 2K/48p <sup>5</sup>          | 2048 x 1080                    | 54.00               | 48.00            | 148.50                  | -                                            | -      | -  |
| 2K/60p                       | 2048 x 1080                    | 67.50               | 60.00            | 148.50                  | -                                            | -      | -  |
| 2K/50p                       | 2048 x 1080                    | 56.25               | 50.00            | 148.50                  | -                                            | -      | -  |
| 3840 x 2160/24p <sup>5</sup> | 3840 x 2160                    | 54.00               | 24.00            | 297.00                  | ○                                            | ○      | -  |
| 3840 x 2160/25p              | 3840 x 2160                    | 56.25               | 25.00            | 297.00                  | ○                                            | ○      | -  |
| 3840 x 2160/30p              | 3840 x 2160                    | 67.50               | 30.00            | 297.00                  | ○                                            | ○      | -  |
| 3840 x 2160/60p              | 3840 x 2160                    | 135.00              | 60.00            | 594.00                  | ○                                            | -      | -  |
| 3840 x 2160/50p              | 3840 x 2160                    | 112.50              | 50.00            | 594.00                  | ○                                            | -      | -  |
| 4096 x 2160/24p <sup>5</sup> | 4096 x 2160                    | 54.00               | 24.00            | 297.00                  | ○                                            | ○      | -  |
| 4096 x 2160/25p              | 4096 x 2160                    | 56.25               | 25.00            | 297.00                  | ○                                            | ○      | -  |
| 4096 x 2160/30p              | 4096 x 2160                    | 67.50               | 30.00            | 297.00                  | ○                                            | ○      | -  |
| 4096 x 2160/60p              | 4096 x 2160                    | 135.00              | 60.00            | 594.00                  | ○                                            | -      | -  |
| 4096 x 2160/50p              | 4096 x 2160                    | 112.50              | 50.00            | 594.00                  | ○                                            | -      | -  |
| 640 x 400/70 <sup>5</sup>    | 640 x 400                      | 31.47               | 70.09            | 25.18                   | -                                            | -      | -  |
| 640 x 400/85 <sup>5</sup>    | 640 x 400                      | 37.86               | 85.08            | 31.50                   | -                                            | -      | -  |
| 640 x 480/60 <sup>5</sup>    | 640 x 480                      | 31.47               | 59.94            | 25.18                   | ○                                            | ○      | ○  |
| 640 x 480/67 <sup>5</sup>    | 640 x 480                      | 35.00               | 66.67            | 30.24                   | -                                            | -      | -  |
| 640 x 480/73 <sup>5</sup>    | 640 x 480                      | 37.86               | 72.81            | 31.50                   | -                                            | -      | -  |
| 640 x 480/75 <sup>5</sup>    | 640 x 480                      | 37.50               | 75.00            | 31.50                   | -                                            | -      | -  |
| 640 x 480/85 <sup>5</sup>    | 640 x 480                      | 43.27               | 85.01            | 36.00                   | -                                            | -      | -  |
| 800 x 600/56 <sup>5</sup>    | 800 x 600                      | 35.16               | 56.25            | 36.00                   | -                                            | -      | -  |
| 800 x 600/60 <sup>5</sup>    | 800 x 600                      | 37.88               | 60.32            | 40.00                   | ○                                            | ○      | ○  |
| 800 x 600/72 <sup>5</sup>    | 800 x 600                      | 48.08               | 72.19            | 50.00                   | -                                            | -      | -  |
| 800 x 600/75 <sup>5</sup>    | 800 x 600                      | 46.88               | 75.00            | 49.50                   | -                                            | -      | -  |
| 800 x 600/85 <sup>5</sup>    | 800 x 600                      | 53.67               | 85.06            | 56.25                   | -                                            | -      | -  |
| 832 x 624/75 <sup>5</sup>    | 832 x 624                      | 49.72               | 74.55            | 57.28                   | -                                            | -      | -  |
| 852 x 480/60 <sup>5</sup>    | 852 x 480                      | 31.47               | 59.94            | 34.24                   | -                                            | -      | -  |
| 1024 x 768/50                | 1024 x 768                     | 39.55               | 50.00            | 51.89                   | -                                            | -      | -  |
| 1024 x 768/60                | 1024 x 768                     | 48.36               | 60.00            | 65.00                   | ○                                            | ○      | ○  |
| 1024 x 768/70 <sup>5</sup>   | 1024 x 768                     | 56.48               | 70.07            | 75.00                   | -                                            | -      | -  |
| 1024 x 768/75 <sup>5</sup>   | 1024 x 768                     | 60.02               | 75.03            | 78.75                   | -                                            | -      | -  |
| 1024 x 768/82 <sup>5</sup>   | 1024 x 768                     | 65.55               | 81.63            | 86.00                   | -                                            | -      | -  |
| 1024 x 768/85 <sup>5</sup>   | 1024 x 768                     | 68.68               | 85.00            | 94.50                   | -                                            | -      | -  |
| 1066 x 600/60 <sup>5</sup>   | 1066 x 600                     | 37.64               | 59.94            | 53.00                   | -                                            | -      | -  |
| 1152 x 864/60                | 1152 x 864                     | 53.70               | 60.00            | 81.62                   | -                                            | -      | -  |
| 1152 x 864/70 <sup>5</sup>   | 1152 x 864                     | 63.99               | 70.02            | 94.20                   | -                                            | -      | -  |
| 1152 x 864/75 <sup>5</sup>   | 1152 x 864                     | 67.50               | 75.00            | 108.00                  | -                                            | -      | -  |
| 1152 x 864/85 <sup>5</sup>   | 1152 x 864                     | 77.09               | 85.00            | 119.65                  | -                                            | -      | -  |
| 1152 x 870/75 <sup>5</sup>   | 1152 x 870                     | 68.68               | 75.06            | 100.00                  | -                                            | -      | -  |
| 1280 x 720/60                | 1280 x 720                     | 44.76               | 60.00            | 74.48                   | -                                            | -      | -  |
| 1280 x 768/50 <sup>5</sup>   | 1280 x 768                     | 39.55               | 49.94            | 65.18                   | -                                            | -      | -  |
| 1280 x 768/60                | 1280 x 768                     | 47.70               | 60.00            | 80.14                   | -                                            | -      | -  |
| 1280 x 768/60 <sup>5</sup>   | 1280 x 768                     | 47.78               | 59.87            | 79.50                   | -                                            | -      | -  |
| 1280 x 800/50                | 1280 x 800                     | 41.20               | 50.00            | 68.56                   | -                                            | -      | -  |
| 1280 x 800/60 <sup>5</sup>   | 1280 x 800                     | 49.31               | 59.91            | 71.00                   | -                                            | -      | -  |
| 1280 x 800/60 <sup>5</sup>   | 1280 x 800                     | 49.70               | 59.81            | 83.50                   | -                                            | -      | -  |
| 1280 x 960/60                | 1280 x 960                     | 60.00               | 60.00            | 108.00                  | -                                            | -      | -  |
| 1280 x 1024/60 <sup>5</sup>  | 1280 x 1024                    | 63.98               | 60.02            | 108.00                  | ○                                            | ○      | ○  |
| 1280 x 1024/75 <sup>5</sup>  | 1280 x 1024                    | 79.98               | 75.02            | 135.00                  | -                                            | -      | -  |
| 1280 x 1024/85 <sup>5</sup>  | 1280 x 1024                    | 91.15               | 85.02            | 157.50                  | -                                            | -      | -  |
| 1360 x 768/60 <sup>5</sup>   | 1360 x 768                     | 47.71               | 60.02            | 85.50                   | -                                            | -      | -  |
| 1360 x 768/60                | 1360 x 768                     | 47.70               | 60.00            | 84.72                   | -                                            | -      | -  |
| 1360 x 768/60 <sup>5</sup>   | 1360 x 768                     | 47.72               | 59.80            | 84.75                   | -                                            | -      | -  |
| 1366 x 768/50                | 1366 x 768                     | 39.55               | 50.00            | 69.92                   | -                                            | -      | -  |
| 1366 x 768/60 <sup>5</sup>   | 1366 x 768                     | 48.39               | 60.03            | 86.71                   | -                                            | -      | -  |
| 1366 x 768/60                | 1366 x 768                     | 48.00               | 60.00            | 72.00                   | -                                            | -      | -  |
| 1366 x 768/50 <sup>5</sup>   | 1366 x 768                     | 39.56               | 49.89            | 69.00                   | -                                            | -      | -  |
| 1366 x 768/60 <sup>5</sup>   | 1366 x 768                     | 47.71               | 59.79            | 85.50                   | -                                            | -      | -  |
| 1400 x 1050/60               | 1400 x 1050                    | 65.22               | 60.00            | 122.61                  | -                                            | -      | -  |
| 1400 x 1050/75 <sup>5</sup>  | 1400 x 1050                    | 82.20               | 75.00            | 155.85                  | -                                            | -      | -  |
| 1440 x 900/60 <sup>5</sup>   | 1440 x 900                     | 55.47               | 59.90            | 88.75                   | -                                            | -      | -  |
| 1440 x 900/60                | 1440 x 900                     | 55.92               | 60.00            | 106.47                  | -                                            | -      | -  |

| Correspondence signal       | Resolution (dot)         | Scan rate        |               | Dot clock rate (MHz) | Plug and play compatible signal <sup>2</sup> |        |    |
|-----------------------------|--------------------------|------------------|---------------|----------------------|----------------------------------------------|--------|----|
|                             |                          | Horizontal (kHz) | Vertical (Hz) |                      | HDMI                                         |        |    |
|                             |                          |                  |               |                      | 4K/60p <sup>3</sup>                          | 4K/30p | 2K |
| 1600 x 900/50               | 1600 x 900               | 46.30            | 50.00         | 97.05                | -                                            | -      | -  |
| 1600 x 900/60               | 1600 x 900               | 60.00            | 60.00         | 108.00               | -                                            | -      | -  |
| 1600 x 900/60 <sup>5</sup>  | 1600 x 900               | 55.99            | 59.95         | 118.25               | -                                            | -      | -  |
| 1600 x 900/60               | 1600 x 900               | 55.92            | 60.00         | 119.00               | -                                            | -      | -  |
| 1600 x 1200/60              | 1600 x 1200              | 75.00            | 60.00         | 162.00               | -                                            | -      | -  |
| 1680 x 1050/60 <sup>5</sup> | 1680 x 1050              | 65.29            | 59.95         | 146.25               | -                                            | -      | -  |
| 1920 x 1080/60 <sup>5</sup> | 1920 x 1080 <sup>4</sup> | 66.59            | 59.93         | 138.50               | -                                            | -      | -  |
| 1920 x 1080/60              | 1920 x 1080              | 67.50            | 60.00         | 148.50               | ○                                            | ○      | ○  |
| 1920 x 1200/60 <sup>5</sup> | 1920 x 1200              | 74.04            | 59.95         | 154.00               | ○                                            | ○      | ○  |
| 1920 x 2160/60 <sup>5</sup> | 1920 x 2160              | 133.29           | 59.99         | 277.25               | -                                            | -      | -  |
| 1920 x 2160/60              | 1920 x 2160              | 135.00           | 60.00         | 297.00               | -                                            | -      | -  |
| 2560 x 1440/60 <sup>5</sup> | 2560 x 1440              | 88.79            | 59.95         | 241.50               | -                                            | ○      | -  |
| 2560 x 1600/50 <sup>5</sup> | 2560 x 1600              | 82.37            | 49.95         | 286.00               | -                                            | -      | -  |
| 2560 x 1600/60 <sup>5</sup> | 2560 x 1600              | 98.71            | 59.97         | 268.50               | -                                            | -      | -  |
| 3840 x 1080/60 <sup>5</sup> | 3840 x 1080              | 66.63            | 59.97         | 266.50               | -                                            | -      | -  |
| 3840 x 2160/30 <sup>5</sup> | 3840 x 2160              | 65.69            | 29.98         | 262.75               | -                                            | -      | -  |
| 3840 x 2160/60              | 3840 x 2160              | 133.31           | 60.00         | 533.25               | -                                            | -      | -  |

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

2 : Signals with ○ in the plug and play compatible signal column is the signal described in the EDID (extended display identification data) of the display.  
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.

3 : 4K / 60p means 4K / 60p / HDR and 4K / 60p / SDR.

4 : Conforms to VESA CMT-RB (Reduced Blanking)

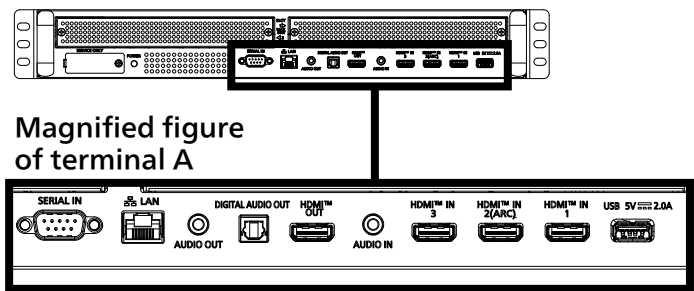
5 : Depending on the content, such as video, display may not be smooth.

#### Note

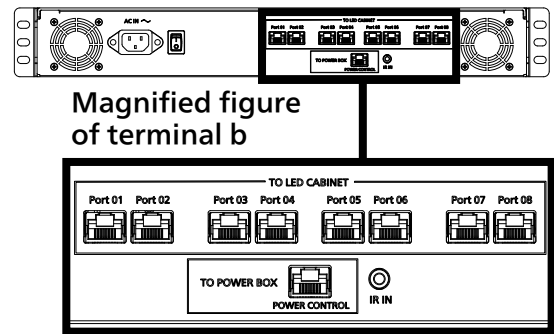
- All LED pixels are 1920 horizontal x 1080 vertical. Signals with different resolutions are converted to the number of pixels and displayed.
- The signal format distinguished automatically will be sometimes indication different from an actual input signal.
- [ i ] shown after the number of dots of resolution means the interlace 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 (Control Box)

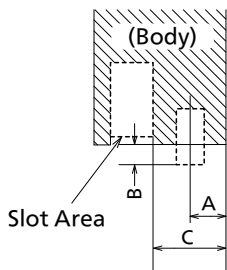
View from front



View from back



Sectional view of terminal a  
(SERIAL IN / LAN / AUDIO IN/OUT /  
DIGITAL AUDIO OUT / HDMI 1/2/3/OUT / USB)

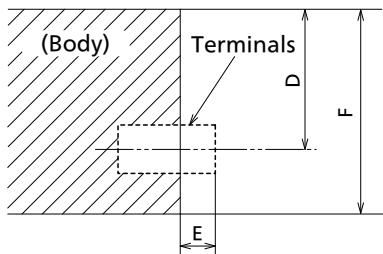


Terminal a  
TL-110AD12A Front terminal

Units : mm (inches)

|   | SERIAL IN   | LAN         | AUDIO<br>IN/OUT | DIGITAL<br>AUDIO<br>OUT | HDMI<br>1/2/3/OUT | USB         |
|---|-------------|-------------|-----------------|-------------------------|-------------------|-------------|
| A | 15.9 (0.63) | 14.3 (0.57) | 16.1 (0.64)     | 14.1 (0.56)             | 13.1 (0.52)       | 13.7 (0.54) |
| B | 3.9 (0.16)  | -           | 1.3 (0.05)      | -                       | -                 | -           |
| C | 27.6 (1.09) |             |                 |                         |                   |             |

Sectional view of terminal b  
(TO LED CABINET(8 PLACES) / TO POWER BOX / IR IN)



Terminal b  
TL-110AD12A Rear Terminal

Units : mm (inches)

|   | TO LED CABINET<br>(8 PLACES) | TO POWER BOX | IR IN       |
|---|------------------------------|--------------|-------------|
| D | 34.0 (1.34)                  | 14.3 (0.57)  | 16.1 (0.64) |
| E | -                            | -            | 1.3 (0.06)  |
| F | 62.0 (2.44)                  |              |             |

1 Due to the structure of the terminals, some connection cables/USB memory devices may not be usable.  
Please check this diagram before use. Please be sure to check this diagram before using the connection cable or USB memory device.