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

**DISPLAY**
- **Screen Size (Diagonal):** 64.5 inch (1638 mm)
- **Panel Type / Backlight:** VA / Direct LED
- **Aspect Ratio:** 16 : 9
- **Effective Display Area (W x H):** 1428.5 x 803.5 mm / 56.2" x 31.6"
- **Number of Pixels (H x V):** 1920 x 1080
- **Brightness:** 400 cd/m² (typ)
- **Contrast Ratio:** 4000 : 1 (typ)
- **Max. Display Colors:** 10 bit, 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 (Typ)
* An approximate time until the panel brightness decreases to half of its original value.

**TOUCH PANEL**
- **Detection Method:** Infrared blocking detection method
- **Touch Operation:** up to 10-point multi touch*
- **OS:**
  - Windows (7 / 8.1 / 10)
  - Mac (OS X 10.10 / 10.11, macOS Sierra)
* When using for Windows®. When using OS X is single touch.
  • Windows is trademarks of Microsoft Corporation in the United States and other countries.
  • Mac, Mac OS X, macOS are trademarks of Apple Inc., registered in the U.S. and other countries.

**CONNECTION TERMINAL**
- **HDMI IN**
  - HDMI TYPE A connector x 2
  - Linear PCM
    (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
  - Compatible with HDCP 1.4
- **DVI-D IN**
  - DVI-D 24-pin x 1
  - Compatible with HDCP 1.4
- **PC IN**
  - Mini D-sub 15 pin (DDC2B) x 1
  - B/G/B : without sync 0.7 V [p-p] (75 Ω)
  - HD/VD : TTL
- **SERIAL IN**
  - D-SUB 9pin x 1 RS-232C COMPATIBLE
- **IR IN**
  - Stereo mini jack (M3) x 1
  - 0.5 V [rms]
- **AUDIO IN**
  - Stereo mini jack (M3) x 1
  - 0.5 V [rms]
- **AUDIO OUT**
  - Stereo mini jack (M3) x 1
  - 0.5 V [rms]
  - Variable (-∞ - 0 dB) (1 kHz 0 dB Input, 10 kΩ Load)
- **USB**
  - USB 2.0 Type A connector x 1
  - DC 5 V / 500 mA
  - USB 3.0 is not supported.
- **PC IN (For touch panel)**
  - DirectCable USB 2.0 connector (Type A/male) x 1
  - DC 5 V / 500 mA
- **Speaker out**
  - 8 W + 8 W (8 Ω)

**ELECTRICAL**
- **Power Requirements**
  - AC 100-240 V, 50/60 Hz
- **Power Consumption**
  - 205 W
- **On Mode Average Power Consumption*:** 165 W
- **Power Off Condition**
  - approx. 0 W
- **Stand-by Condition**
  - approx. 0.5 W
- **Apparent Power**
  - 220 VA
* Based on IEC 62087 Ed.2 measurement method

**MECHANICAL**
- **Dimensions (W x H x D):**
  - 1490 x 865 x 106 mm / 58.7" x 34.1" x 4.2" (Mounting the speaker in the case of lateral placement)
  - 1573 x 865 x 106 mm / 62.0" x 34.1" x 4.2" (Mounting the speaker in the case of vertical placement)
- **Weight**
  - 44 kg / 97 lbs. / 46 kg / 102 lbs. (With external speaker)
- **Carton Dimensions (W x H x D):**
  - 1640 x 1044 x 226 mm / 64.6" x 41.2" x 8.9"
- **Gross Weight**
  - 57 kg / 126 lbs.
- **Cabinet Material**
  - Front: Metal / Back: Plastic
- **Bezel Color**
  - Black
- **Bezel Width**
  - T/B 30.0 mm / 1.18", R/L 30.2 mm / 1.19"
- **Pitch for Wall-Hanging**
  - VESA Compliant 400 x 400mm / 15.7" x 15.7" (Installed by: M6 screws / Screw hole depth 19 mm / 0.75")
- **Protection Glass Thickness**
  - approx. 4 mm / Anti Glare / Scattering prevention film
- **External speaker (W x H x D)(Include)**
  - 764 x 82 x 59 mm / 30.1" x 3.3" x 2.3"

**INSTALLATION REQUIREMENT**
- **Orientation**
  - Landscape / Portrait
- **Fitting Angle**
  - Landscape : 0 degrees forward / 20 degrees backward
* Please contact your sales representative with regard to the tilt angle before installation.
* When installing the display on portrait setting, be sure to install with the power indicator at the topside of the display.
**ENVIRONMENTAL**

Operating Environment
- Temperature: 0 ℃ to 40 ℃*1
- Humidity: 10 % to 80 % (Non condensation)
- Altitude: 0 to 1400 m

Storage Environment
- Temperature: -20 ℃ to 60 ℃
- Humidity: 20 % to 80 % (Non condensation)

*1 for up to 1400 m altitude
*2 for between 1400 m and 2800 m altitude Depending on the temperature or humidity conditions, uneven brightness may be observed. This is not a malfunction.

**STANDARD (CERTIFICATIONS)**

SAFETY REGULATIONS
- BEAB approval (TBD)
- AS/NSZ 60950.1:2015 Inc A1

RADIATION REGULATIONS
- EN55022:2010+AC:2011 (Class A) (expire 03/2017)
- EN55032:2012+AC:2013 Class A
- EN61000-3-2:2014
- EN61000-3-3:2013
- IEC61000-4-2:2008
- IEC61000-4-3:2010
- IEC61000-4-4:2012
- IEC61000-4-5:2014
- IEC61000-4-6:2013
- IEC61000-4-8:2009
- IEC61000-4-11:2004
- AS/NSZ CISPR32:2013 (Class A)
- RCM Mark
- 47 CFR FCC Part 15 Subpart B
- ANSI C63.4:2014
- ICES-003 Issue 6:2016

**REMOTE CONTROL TRANSMITTER**

- Power Requirements: DC 3 V (2 x AA Size batteries)
- Operating distance: approx. 5 m*
- Weight: 113 g including batteries
- Dimensions: (W x H x D) 160 x 50 x 20 mm

*When operated directly in front of receptor.

**INCLUDED ACCESSORIES**

- Operating Instruction book
- CD-ROM (User manual)
- Power supply cord (approx. 2 m)
- Remote Control Transmitter
- Batteries for the Remote Control Transmitter (AA/R6/LR6 type) x 2
- Clamper x 3
- Speaker x 1
- Speaker mounting clasp x 2
- (These clasps are assembled with the speaker and supplied with it.)
- Screws for mounting the speaker (M3) x 4
- Speaker cable (approx. 0.7 m) x 2

**OPTIONAL ACCESSORIES**

Pedestal Stand: TY-ST75P-E9

**MAIN FEATURE**

Auto setting: Yes
HDMI power management: Yes
PC power management: Yes
DVI-D power management: Yes
Remote-control: Yes
Key Pad: Yes
Signal check: Yes
Scheduler Priority: Yes
Easy Whiteboard Functions: Yes
Operating Time*: 16H/7d

*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 a moving images.

**DIMENSIONS**

![Dimensions diagram]

Cautions: This drawing is not a scale
Units: inches (mm)

**CONNECTION TERMINAL**

![Connection terminal diagram]
### Applicable Input Signals

**Picture signal form**

<table>
<thead>
<tr>
<th>Correspondence signal</th>
<th>Resolution dot</th>
<th>Scan rate</th>
<th>Dot clock rate (MHz)</th>
<th>Input format</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Horizontal (kHz)</td>
<td>Vertical (Hz)</td>
<td></td>
</tr>
<tr>
<td>640 x 480 60Hz</td>
<td>640 x 480</td>
<td>31.47</td>
<td>59.94</td>
<td>25.18</td>
</tr>
<tr>
<td>640 x 480 75Hz</td>
<td>640 x 480</td>
<td>37.50</td>
<td>75.00</td>
<td>31.50</td>
</tr>
<tr>
<td>800 x 600 60Hz</td>
<td>800 x 600</td>
<td>37.88</td>
<td>60.32</td>
<td>40.00</td>
</tr>
<tr>
<td>800 x 600 72Hz</td>
<td>800 x 600</td>
<td>48.08</td>
<td>72.19</td>
<td>50.00</td>
</tr>
<tr>
<td>800 x 600 75Hz</td>
<td>800 x 600</td>
<td>46.88</td>
<td>75.00</td>
<td>49.50</td>
</tr>
<tr>
<td>1024 x 768 60Hz</td>
<td>1024 x 768</td>
<td>48.36</td>
<td>60.00</td>
<td>65.00</td>
</tr>
<tr>
<td>1024 x 768 70Hz</td>
<td>1024 x 768</td>
<td>56.48</td>
<td>70.07</td>
<td>75.00</td>
</tr>
<tr>
<td>1024 x 768 75Hz</td>
<td>1024 x 768</td>
<td>60.02</td>
<td>75.03</td>
<td>78.75</td>
</tr>
<tr>
<td>1280 x 768 60Hz</td>
<td>1280 x 768</td>
<td>47.40</td>
<td>59.99</td>
<td>68.25</td>
</tr>
<tr>
<td>1280 x 768 60Hz</td>
<td>1280 x 768</td>
<td>47.78</td>
<td>59.87</td>
<td>79.50</td>
</tr>
<tr>
<td>1280 x 960 60Hz</td>
<td>1280 x 960</td>
<td>60.00</td>
<td>60.00</td>
<td>108.00</td>
</tr>
<tr>
<td>1280 x 1024 60Hz</td>
<td>1280 x 1024</td>
<td>63.98</td>
<td>60.02</td>
<td>108.00</td>
</tr>
<tr>
<td>1360 x 768 60Hz</td>
<td>1360 x 768</td>
<td>47.71</td>
<td>60.02</td>
<td>85.50</td>
</tr>
<tr>
<td>1600 x 1200 60Hz</td>
<td>1600 x 1200</td>
<td>75.00</td>
<td>60.00</td>
<td>162.00</td>
</tr>
<tr>
<td>1366 x 768 60Hz</td>
<td>1366 x 768</td>
<td>47.71</td>
<td>59.70</td>
<td>85.50</td>
</tr>
<tr>
<td>1920 x 1080 60Hz</td>
<td>1920 x 1080</td>
<td>67.50</td>
<td>60.00</td>
<td>148.50</td>
</tr>
<tr>
<td>1280 x 800 60Hz</td>
<td>1280 x 800</td>
<td>49.70</td>
<td>59.81</td>
<td>83.50</td>
</tr>
<tr>
<td>640 x 480 60Hz</td>
<td>640 x 480</td>
<td>31.50</td>
<td>60.00</td>
<td>25.20</td>
</tr>
<tr>
<td>480p 60Hz</td>
<td>720 x 480</td>
<td>31.50</td>
<td>60.00</td>
<td>27.03</td>
</tr>
<tr>
<td>480p 60Hz</td>
<td>720 x 480</td>
<td>31.50</td>
<td>60.00</td>
<td>27.03</td>
</tr>
<tr>
<td>720p 60Hz</td>
<td>1280 x 720</td>
<td>45.00</td>
<td>60.00</td>
<td>74.25</td>
</tr>
<tr>
<td>1080i 60Hz</td>
<td>1920 x 540</td>
<td>33.75</td>
<td>60.00</td>
<td>74.25</td>
</tr>
<tr>
<td>480i 60Hz</td>
<td>720(1440) x 480i</td>
<td>15.75</td>
<td>60.00</td>
<td>27.03</td>
</tr>
<tr>
<td>1080p 60Hz</td>
<td>1920 x 1080</td>
<td>67.50</td>
<td>60.00</td>
<td>148.50</td>
</tr>
<tr>
<td>576p 50Hz</td>
<td>720 x 576</td>
<td>31.25</td>
<td>50.00</td>
<td>27.00</td>
</tr>
<tr>
<td>720p 50Hz</td>
<td>720 x 576</td>
<td>31.25</td>
<td>50.00</td>
<td>27.00</td>
</tr>
<tr>
<td>1080i 50Hz</td>
<td>1920 x 540</td>
<td>37.50</td>
<td>50.00</td>
<td>74.25</td>
</tr>
<tr>
<td>576i 50Hz</td>
<td>720(1440) x 576i</td>
<td>15.63</td>
<td>50.00</td>
<td>27.00</td>
</tr>
<tr>
<td>1080p 24Hz</td>
<td>1920 x 1080</td>
<td>28.13</td>
<td>25.00</td>
<td>74.25</td>
</tr>
<tr>
<td>1080p 25Hz</td>
<td>1920 x 1080</td>
<td>28.13</td>
<td>25.00</td>
<td>74.25</td>
</tr>
<tr>
<td>1080p 30Hz</td>
<td>1920 x 1080</td>
<td>33.75</td>
<td>30.00</td>
<td>74.25</td>
</tr>
</tbody>
</table>
**Drawing of terminals**

*View from back*

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**Sectional view of terminal a**

**SERIAL IN/DVI-D IN**

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**Terminal a**

**65BFE1 Terminal (Bottom)**

<table>
<thead>
<tr>
<th></th>
<th>SERIAL IN</th>
<th>DVI-D IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.37 (9.5)</td>
<td>0.29 (7.3)</td>
</tr>
<tr>
<td>B</td>
<td>0.21 (5.3)</td>
<td>0.23 (5.8)</td>
</tr>
<tr>
<td>C</td>
<td>0.87 (22.2)</td>
<td></td>
</tr>
</tbody>
</table>

---

**Sectional view of terminal b**

**IR IN/AUDIO OUT/AUDIO IN/PC IN/USB/HDMI 1/HDMI 2**

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**Terminal b**

**65BFE1 Terminal (Side)**

<table>
<thead>
<tr>
<th></th>
<th>IR IN</th>
<th>AUDIO IN (IN/OUT)</th>
<th>PC IN</th>
<th>USB</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.39 (9.8)</td>
<td>0.39 (9.8)</td>
<td>0.37 (9.5)</td>
<td>0.28 (7.0)</td>
<td>0.26 (6.7)</td>
</tr>
<tr>
<td>B</td>
<td>0.06 (1.4)</td>
<td>0.12 (3.0)</td>
<td>0.21 (5.3)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>C</td>
<td>—</td>
<td>—</td>
<td>0.87 (22.2)</td>
<td>—</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.*