## Product specification

### DISPLAY PANEL

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Size (Diagonal)</td>
<td>69.5-inch (1765 mm)</td>
</tr>
<tr>
<td>Panel type</td>
<td>VA / Edge-LED</td>
</tr>
<tr>
<td>Aspect ratio</td>
<td>16:9</td>
</tr>
<tr>
<td>Effective Display Area (W x H)</td>
<td>60.5&quot; x 34.0&quot; (1538 x 865 mm)</td>
</tr>
<tr>
<td>Number of pixels (H x V)</td>
<td>1920 x 1080 pixels</td>
</tr>
<tr>
<td>Brightness</td>
<td>700 cd/m² (typ.)</td>
</tr>
<tr>
<td>Contrast Ratio</td>
<td>5000:1</td>
</tr>
<tr>
<td>Dynamic Contrast</td>
<td>50000:1</td>
</tr>
<tr>
<td>Max. Display Colors</td>
<td>Approx. 1.0 Billion</td>
</tr>
<tr>
<td>Viewing Angle (Horizontal / Vertical)</td>
<td>176° / 176° (CR ≧ 10)</td>
</tr>
<tr>
<td>Panel Life Time</td>
<td>Approx. 50000 hours</td>
</tr>
</tbody>
</table>

### CONNECTION TERMINAL

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Connector</th>
<th>Standard</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI IN</td>
<td>HDMI Type A Connector x 2</td>
<td>Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)</td>
<td></td>
</tr>
<tr>
<td>VIDEO/ AUDIO IN (AV IN)</td>
<td>4-pole Mini Jack (M3) x 1</td>
<td>Y/C : 1.0 V [p-p] (75 Ω)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(AUDIO IN Shared with DVI-D IN, PC IN)</td>
<td>AUDIO : 0.5 V [rms]</td>
<td></td>
</tr>
<tr>
<td>DVI-D IN</td>
<td>DVI-D 24-pin x 1</td>
<td>Compliance with DVI Revision 1.0 Compatible with HDCP 1.1</td>
<td></td>
</tr>
<tr>
<td>DVI-D OUT</td>
<td>DVI-D 24-pin x 1</td>
<td>Compliance with DVI Revision 1.0 Compatible with HDCP 1.1</td>
<td></td>
</tr>
<tr>
<td>PC IN</td>
<td>Mini D-Sub 15-pin (DDC2B) x 1</td>
<td>Y/G : with sync 1.0 V [p-p] (75 Ω)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B/Y : without sync 0.7 V [p-p] (75 Ω)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>R/G : 0.7 V [p-p] (75 Ω)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HD/VD : with sync 0.7 V [p-p] (75 Ω)</td>
<td></td>
</tr>
<tr>
<td>SERIAL IN / OUT</td>
<td>D-sub 9-pin x 1 / x 1, RS-232C Compatible</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR TRANSMITTER IN / OUT</td>
<td>Stereo Mini Jack (M3) x 1 / x 1</td>
<td>Variable (-∞ ~ 0 dB) (1 kHz 0 dB Input, 10 k Ω Load)</td>
<td></td>
</tr>
<tr>
<td>AUDIO OUT</td>
<td>Stereo Mini Jack (M3) x 1</td>
<td>0.5 V [rms]</td>
<td></td>
</tr>
<tr>
<td>LAN / DIGITAL LINK</td>
<td>RJ45 x 1</td>
<td>100BASE-TX, compatible with PJLink™ (Long reach mode compatible when using DIGITAL LINK)</td>
<td></td>
</tr>
<tr>
<td>USB</td>
<td>USB 2.0 Type A Connector x 1</td>
<td>DC 5 V/1A (USB 3.0 is not supported.)</td>
<td></td>
</tr>
</tbody>
</table>

### AUDIO

- Built in Speaker: 10W (8 Ω Full Range: 96 mm x 27 mm) x 2
- Built in Speaker Out: 20 W [10 W +10 W]

### ELECTRICAL

- Power Requirements: AC 110 - 127 V 50/60 Hz
- Power Consumption: 235 W
- On Mode Average Power Consumption*: 205 W
- Power Off Condition: Approx. 0.3 W
- Stand-by Condition: Approx. 0.5 W
- Apparent power: 236 VA

### MECHANICAL

- Dimensions (W x H x D): 62.2" x 36.2" x 3.2" (1580 x 919 x 80 mm)
- Weight: 45 kg / 99 lbs
- Bezel Color: Black
- Carton Dimensions (W x H x D): 67.6" x 41.4" x 13.9" (1715 x 1050 x 351 mm)
- Gross Weight: 55 kg / 119 lbs
- Cabinet Material: Front: Metal / Back: Metal
- Pitch for Wall-Hanging: VESA Compliant 15.8" x 15.8" (400 x 400 mm) (Installed by: M6 screws / Screw hole depth 0.47" (12 mm))

### INSTALLATION

- Orientation: Landscape / Portrait / Angle adjustment 0-45 degrees for both left and right (Landscape setting only)
- Tilting Angle: 0-20 degrees forward / backward with landscape / portrait setting
- (Angle adjustment is not possible for forward / backward tilting installation)

*Please contact your sales representative with regard to the tilt angle before installation.
*When installing the Display vertically, be sure that the Power Indicator comes to the lower side.

### ENVIRONMENTAL

- Operating Environment: Temperature: 32° F to 104° F (+0°C to +40°C ), 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

## UPC Code

885170322349
**MAIN FEATURE**

- USB Media Player: YES
- Failover / Failback: YES
- Data Cloning: YES
- Multi display settings: YES
- Power on screen delay: YES
- Auto setting: YES
- Power management: HDMI/DIGITAL LINK/PC/DVI-D
- Power save: YES
- Button lock: YES
- Controller user level: YES
- Input search: YES
- 6-segment colour management: YES
- Gradation smoother: YES
- Frame creation: NO
- Dynamic backlight control: YES
- Set up timer: YES
- Crestron Connected: YES
- Extron XTP: YES
- WEB Browser control: YES
- PJlink: YES
- Image compatible: YES
- Input detection: YES
- HDMI/TEC compatible: YES
- Viewer: YES
- Playlist Editing Function: YES
- Operating Time*: 24h/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 a moving images.

**REMOTE CONTROL TRANSMITTER**

- Power Requirements: DC 3 V (2 x AAA Size batteries)
- Operating distance: Approx. 23 ft (7 m)*
- Weight: Approx. 2.2 oz (63 g)
- Dimensions (W x H x D): 1.9 x 5.3 x 0.8 (48 x 134 x 20 mm)

* When operated directly in front of receptor.

**STANDARD (CERTIFICATIONS)**

- Mexico: UL Certificate of Compliance (UL Mexico issue)
- RADIATION REGULATIONS: FCC 47 CFR, Part 15, Subpart B Class A

**INCLUDED ACCESSORIES**

- AC cord (79" (2.0 m))
- Remote Control
- Batteries (AAA size) x 2
- Clamper x 3
- Operating Instruction book

**Compatible Software**

- Multi Monitoring & Control Software: Ver 2.0 or later
- Content Management Software: Ver 3.1 or later
- Video Wall Manager: Ver 1.8 or later

**OPTIONAL ACCESSORIES**

- Pedestal Stand: TY-ST75PE9
- Early Warning Software*: ET-SWAT00series
  - Basic license / 3-year license
  - (Depending on the license type, the symbol at the end of the part number is different.)
- Video wall manager: TY-VUK10
- Automatic Display Adjustment Upgrade Kit: TY-VUK10
- Digital interface box: ET-YFB100
- DIGITAL LINK Switcher: ET-YFB200

* Multi-Monitoring Control Software: Ver 2.0 or later is required.

**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

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

<table>
<thead>
<tr>
<th>Correspondence signal</th>
<th>Resolution (dot)</th>
<th>Scan rate</th>
<th>Dot clock rate (MHz)</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC/NTSC4.43/PAL M/PAL G</td>
<td>720 x 480</td>
<td>15.73</td>
<td>59.94</td>
<td>V</td>
</tr>
<tr>
<td>PAL/PAL-N/SECAM</td>
<td>720 x 576</td>
<td>15.63</td>
<td>50.00</td>
<td>V</td>
</tr>
<tr>
<td>480/60i</td>
<td>720 x 480</td>
<td>15.73</td>
<td>59.94</td>
<td>Y</td>
</tr>
<tr>
<td>576/50i</td>
<td>720 x 576</td>
<td>15.63</td>
<td>50.00</td>
<td>Y</td>
</tr>
<tr>
<td>480/60i</td>
<td>720 x 480</td>
<td>15.73</td>
<td>59.94</td>
<td>Y</td>
</tr>
<tr>
<td>576/50i</td>
<td>720 x 576</td>
<td>15.63</td>
<td>50.00</td>
<td>Y</td>
</tr>
<tr>
<td>720 x 720</td>
<td>45.00</td>
<td>60.00</td>
<td>154.00</td>
<td>V</td>
</tr>
<tr>
<td>1080/60i</td>
<td>1920 x 1080</td>
<td>37.50</td>
<td>60.00</td>
<td>74.25</td>
</tr>
<tr>
<td>1080/50i</td>
<td>1920 x 1080</td>
<td>37.50</td>
<td>60.00</td>
<td>74.25</td>
</tr>
<tr>
<td>1080/4p</td>
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<td>27.00</td>
<td>24.00</td>
<td>74.25</td>
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<tr>
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<td>27.00</td>
<td>24.00</td>
<td>74.25</td>
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<tr>
<td>1080/30p</td>
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<td>30.00</td>
<td>74.25</td>
</tr>
<tr>
<td>1080/60p</td>
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<td>60.00</td>
<td>148.50</td>
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<tr>
<td>1080/50p</td>
<td>1920 x 1080</td>
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<td>50.00</td>
<td>148.50</td>
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<tr>
<td>640 x 400 /70</td>
<td>640 x 400</td>
<td>31.47</td>
<td>70.09</td>
<td>25.18</td>
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<tr>
<td>640 x 400 /85</td>
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<td>85.08</td>
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<td>640 x 480 /60</td>
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<td>60.00</td>
<td>27.00</td>
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<td>85.00</td>
<td>27.00</td>
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<td>800 x 600 /50</td>
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<td>35.16</td>
<td>75.00</td>
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<td>800 x 600 /60</td>
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<td>35.16</td>
<td>60.00</td>
<td>60.00</td>
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<td>720 x 480</td>
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<td>72.19</td>
<td>50.00</td>
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<td>46.88</td>
<td>75.00</td>
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<td>800 x 600 /85</td>
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<td>60.00</td>
<td>50.00</td>
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<td>832 x 642 /75</td>
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<td>74.55</td>
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<td>1024 x 768 /50</td>
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<td>45.16</td>
<td>60.00</td>
<td>65.00</td>
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<tr>
<td>1024 x 768 /60</td>
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<td>45.16</td>
<td>60.00</td>
<td>65.00</td>
</tr>
<tr>
<td>1066 x 600 /50</td>
<td>1066 x 600</td>
<td>37.64</td>
<td>59.94</td>
<td>53.00</td>
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<tr>
<td>1152 x 864 /60</td>
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<td>57.70</td>
<td>60.00</td>
<td>81.62</td>
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<tr>
<td>1152 x 864 /70</td>
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<td>63.99</td>
<td>70.02</td>
<td>94.20</td>
</tr>
<tr>
<td>1152 x 864 /75</td>
<td>1152 x 864</td>
<td>67.50</td>
<td>75.00</td>
<td>108.50</td>
</tr>
<tr>
<td>1152 x 864 /85</td>
<td>1152 x 864</td>
<td>77.09</td>
<td>85.00</td>
<td>119.65</td>
</tr>
<tr>
<td>1152 x 870 /75</td>
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<td>75.06</td>
<td>100.00</td>
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<td>1280 x 720 /50</td>
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<td>39.55</td>
<td>50.00</td>
<td>65.18</td>
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<tr>
<td>1280 x 768 /50</td>
<td>1280 x 768</td>
<td>39.55</td>
<td>50.00</td>
<td>65.18</td>
</tr>
<tr>
<td>1280 x 768 /60</td>
<td>1280 x 768</td>
<td>39.55</td>
<td>50.00</td>
<td>65.18</td>
</tr>
<tr>
<td>1280 x 900 /60</td>
<td>1280 x 900</td>
<td>49.70</td>
<td>60.00</td>
<td>80.14</td>
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<td>1280 x 1024 /50</td>
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<td>63.98</td>
<td>60.02</td>
<td>108.00</td>
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<td>1280 x 1024 /50</td>
<td>1280 x 1024</td>
<td>72.96</td>
<td>75.02</td>
<td>135.00</td>
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<td>1280 x 1024 /50</td>
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<td>91.15</td>
<td>85.02</td>
<td>157.50</td>
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<tr>
<td>1360 x 768 /50</td>
<td>1360 x 768</td>
<td>47.72</td>
<td>59.80</td>
<td>84.75</td>
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<td>1360 x 768 /60</td>
<td>1360 x 768</td>
<td>39.55</td>
<td>50.00</td>
<td>69.92</td>
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<tr>
<td>1360 x 768 /60</td>
<td>1360 x 768</td>
<td>57.68</td>
<td>60.00</td>
<td>85.00</td>
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<tr>
<td>1360 x 768 /60</td>
<td>1360 x 768</td>
<td>57.68</td>
<td>60.00</td>
<td>85.00</td>
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<tr>
<td>1400 x 1050 /50</td>
<td>1400 x 1050</td>
<td>65.22</td>
<td>60.00</td>
<td>123.81</td>
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<td>1400 x 1050 /60</td>
<td>1400 x 1050</td>
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<td>60.00</td>
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</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>
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<tr>
<td>1600 x 1050 /50</td>
<td>1600 x 1050</td>
<td>59.92</td>
<td>60.00</td>
<td>119.00</td>
</tr>
<tr>
<td>1600 x 1200 /50</td>
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<td>59.92</td>
<td>60.00</td>
<td>119.00</td>
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<tr>
<td>1920 x 1080 /60</td>
<td>1920 x 1080</td>
<td>66.59</td>
<td>59.93</td>
<td>138.50</td>
</tr>
<tr>
<td>1920 x 1200 /60</td>
<td>1920 x 1200</td>
<td>70.04</td>
<td>60.00</td>
<td>154.00</td>
</tr>
</tbody>
</table>

The signal format distinguished automatically will be sometimes indication different from an actual input signal.

*1: When 1035/60 signal is input, it is displayed as 1080/60i signal.
*2: Pixel-Repetition signal (dot clock frequency 27.0 MHz) only
*3: Displayed with image elements thined out in the image processing circuit.
*4: Not supported when [DIGITAL LINK mode] is set to [Long reach]

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TH-70SF2HU
**Drawing of terminals**

**View from back**

**Magnified figure of terminal a**

**Sectional view of terminal a** (IR OUT/SERIAL OUT/AUDIO OUT/IR IN/SERIAL IN/AV IN)

**Terminal a**

70SF2HU Terminal (Side)

<table>
<thead>
<tr>
<th></th>
<th>IR IN/OUT</th>
<th>SERIAL IN/OUT</th>
<th>AUDIO OUT</th>
<th>AV IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.70 (17.9)</td>
<td>0.67 (17.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.11 (2.7)</td>
<td>0.2 (5.2)</td>
<td>0.11 (2.7)</td>
<td>0.07 (1.7)</td>
</tr>
<tr>
<td>C</td>
<td>1.36 (34.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Magnified figure of terminal b**

**Sectional view of terminal b** (USB/DVI-D OUT/DVI-D IN/HDMI 1,2/DIGITAL LINK LAN/PC IN)

**Terminal b**

70SF2HU Terminal (Bottom)

<table>
<thead>
<tr>
<th></th>
<th>USB</th>
<th>DVI-D IN/OUT</th>
<th>HDMI</th>
<th>DIGITAL LINK/LAN</th>
<th>PC IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.62 (15.6)</td>
<td>0.65 (16.6)</td>
<td>0.59 (15.0)</td>
<td>0.65 (16.6)</td>
<td>0.70 (17.8)</td>
</tr>
<tr>
<td>B</td>
<td>0.22 (5.6)</td>
<td></td>
<td></td>
<td></td>
<td>0.21 (5.3)</td>
</tr>
<tr>
<td>C</td>
<td>1.36 (34.7)</td>
<td></td>
<td></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.