

# Panasonic

## BUSINESS



## Professional DISPLAYS

Line-up Catalog Jan 2016

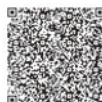
# Panasonic®

**Panasonic System Communications Company of North America**  
 Two Riverfront Plaza Newark, NJ 07102-5490  
 Telephone: +1-877-803-8492  
<http://www.business.panasonic.com/products-avtechnology-professionaldisplays>

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations. Windows, Windows Vista and PowerPoint are trademarks of Microsoft Corporation in the United States and other countries. Android is a registered trademark or trademark of Google Inc. Macintosh, Mac, Mac OS X, iPad, iPhone, iPod touch and iTunes are trademarks of Apple Inc., registered in the U.S. and other countries. The PJLink trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. Crestron Connected™ is a trademark of Crestron Electronics, Inc. Miracast™ are trademarks or registered trademarks of Wi-Fi Alliance. HDBaseT™ is a trademark of the HDBaseT Alliance. OpenPort PLATFORM is a registered trademark or a trademark of Panasonic Corporation. All other trademarks are the property of their respective trademark owners. Images on screen are simulated. © 2016 Panasonic Corporation. All rights reserved.



The information of the Panasonic projectors and professional displays from your iOS/Android devices.  
 Mobile App - [panasonic.net/prodisplays/support/mobile\\_app/](http://panasonic.net/prodisplays/support/mobile_app/)



For the latest information about Panasonic Professional Displays, please visit:  
 Professional Display Global Website - [panasonic.net/prodisplays](http://panasonic.net/prodisplays)  
 YouTube - [www.youtube.com/PanasonicProDisplay](http://www.youtube.com/PanasonicProDisplay)  
 Facebook - [www.facebook.com/panasonicprojector](http://www.facebook.com/panasonicprojector)

All information included here is valid as of January 2016.

CT16-U01PF  
 Printed in Japan.



Worldwide  
Olympic Partner



Worldwide  
Paralympic Partner



# Panasonic Professional Displays Lineup

## 4K UHD Display



LQ70 Series

500 cd/m²

98" TH-98LQ70U  
84" TH-84LQ70U

98" TH-98LQ70LU  
84" TH-84LQ70LU

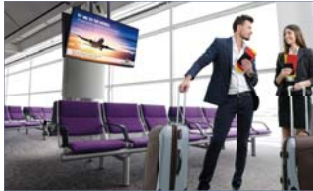
- High Durability & Reliability
- Excellent 4K Image Quality
- Easy Installation & System Expandability



\*Actual resolution : 3840 x 2160p

(LQ70 Series only)

## Indoor



- High Brightness
- 24/7 Use Reliability
- System Expandability

AF1 Series

500 cd/m²

55" TH-55AF1U  
49" TH-49AF1U  
42" TH-42AF1U



LF50 Series

700 cd/m²

80" TH-80LF50U  
70" TH-70LF50U

LF80 Series

700 cd/m²

55" TH-55LF80U  
49" TH-49LF80U  
42" TH-42LF80U

LF8 Series

500 cd/m²

55" TH-55LF8U  
49" TH-49LF8U  
42" TH-42LF8U



(LF80 Series only)

(LF50 Series only)

## Video Wall



- Installation Flexibility
- High Reliability
- High Visibility

LFV70

700 cd/m²

55" TH-55LFV70U  
55" TH-55LFV60U

LFV6

500 cd/m²

55" TH-55LFV6U  
47" TH-47LFV5U



(LFV70 only)

(LFV70/LFV60/LFV6 only)

(LFV5 only)

## Outdoor



- High Visibility Under Sunlight
- Durability Against Rain/Dust
- System Expandability

LFX60

2000 cd/m²

47" TH-47LFX60U

LFX6N

1200 cd/m²

47" TH-47LFX6NU



## Multi Touch Screen



- Easy set-up & Operation
- Wireless & Network Capability
- ECO & Good Usability

LFB70 Series

350 cd/m²

80" TH-80LFB70U  
65" TH-65LFB70U  
50" TH-50LFB70U



## Network



- Bright Clear Image Quality
- Wireless & Network Capability
- Low Power Consumption

LFC70 Series

350 cd/m²

80" TH-80LFC70U  
65" TH-65LFC70U  
50" TH-50LFC70U



## Standard



- Slim & Stylish offers Excellent Visibility
- Simple, Flexible Media Presentation
- Generous Connectivity for Professional Use

LFE8 Series

350 cd/m²

65" TH-65LFE8U  
55" TH-55LFE8U  
48" TH-48LFE8U  
43" TH-43LFE8U





| Model no.                           | TH-98LQ70U   | TH-84LQ70U                                   | TH-98LQ70LU  | TH-84LQ70LU                                  |
|-------------------------------------|--|--|--|--|
| <b>DISPLAY PANEL</b>                |  |  |  |  |
| Screen Size (Diagonal)/Aspect Ratio | 97.5-inch (2476.9 mm)/16:9   | 84.0-inch (2134.6 mm)/16:9                   | 97.5-inch (2476.9 mm)/16:9   | 84.0-inch (2134.6 mm)/16:9                   |
| Panel Type                          | LCD IPS Panel/D-LED  | LCD IPS Panel/E-LED                          | LCD IPS Panel/D-LED  | LCD IPS Panel/E-LED                          |
| Effective Display Area (W x H)      | 85.0" x 47.8" (2159 x 1214 mm)   | 73.3" x 41.3" (1860 x 1047 mm)               | 85.0" x 47.8" (2159 x 1214 mm)   | 73.3" x 41.3" (1860 x 1047 mm)               |
| Number of Pixels (H x V)            | 3840 x 2160 pixels   | 3840 x 2160 pixels                           | 3840 x 2160 pixels   | 3840 x 2160 pixels                           |
| Brightness (Typ)                    | 500 cd/m <sup>2</sup>  | 500 cd/m <sup>2</sup>                        | 500 cd/m <sup>2</sup>  | 500 cd/m <sup>2</sup>                        |
| Contrast Ratio                      | 1300 :1  | 1400 :1                                      | 1300 :1  | 1400 :1                                      |
| Dynamic Contrast Ratio              | 500000 :1  | 500000 :1                                    | 500000 :1  | 500000 :1                                    |
| Response Time                       | 8 ms (G to G)  | 12 ms (G to G)                               | 8 ms (G to G)  | 12 ms (G to G)                               |
| Viewing Angle (Horizontal/Vertical) | 178° / 178°  | 178° / 178°                                  | 178° / 178°  | 178° / 178°                                  |
| <b>TERMINAL</b>                     | HDMI TYPE A Connector x 2 (Up to 4K@ 50/60 Hz)*1, HDMI TYPE A Connector x 2 (Up to 2K@ 50/60 Hz)*1<br>DisplayPort x 1 (DP1.2a)*1 |  | HDMI TYPE A Connector x 2 (Up to 4K@ 50/60 Hz)*1, HDMI TYPE A Connector x 2 (Up to 2K@ 50/60 Hz)*1<br>DisplayPort x 1 (DP1.2a)*1 |  |
| DVI-D In                            | DVI-D 24-pin x 1   |  | DVI-D 24-pin x 1   |  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 set (Shared with PC In)  |  | Stereo Mini Jack (M3) x 1 set (Shared with PC In)  |  |
| PC In                               | Mini D-sub 15-pin x 1 (Female)*2   |  | Mini D-sub 15-pin x 1 (Female)*2   |  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 set (Shared with DVI-D In)   |  | Stereo Mini Jack (M3) x 1 set (Shared with DVI-D In)   |  |
| Audio Out                           | Stereo Mini Jack (M3) x 1  |  | Stereo Mini Jack (M3) x 1  |  |
| Serial In                           | D-sub 9-pin x 1, RS-232C Compatible  |  | D-sub 9-pin x 1, RS-232C Compatible  |  |
| LAN                                 | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)   |  | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)   |  |
| DIGITAL LINK                        | RJ45 x 1 (Shared with LAN)   |  | RJ45 x 1 (Shared with LAN)   |  |
| Function Slot                       | SLOT NX x 2 (Vacant)   |  | SLOT NX x 2 (Vacant)   |  |
| <b>GENERAL</b>                      | 110-127 V AC, 50/60 Hz   |  | 110-127 V AC, 50/60 Hz   |  |
| Power Requirements                  | 110-127 V AC, 50/60 Hz   |  | 110-127 V AC, 50/60 Hz   |  |
| Power Consumption                   | 650 W  | 560 W  | 650 W  | 560 W  |
| Power Off Condition                 | 0.3 W  | 0.3 W  | 0.3 W  | 0.3 W  |
| Stand-by Condition                  | 0.5 W  | 0.5 W  | 0.5 W  | 0.5 W  |
| Dimensions (W x H x D)              | 87.9" x 50.7" x 4.8" (2233 x 1288 x 122 mm)  | 76.7" x 44.9" x 3.9" (1949 x 1141 x 99 mm)   | 87.9" x 50.7" x 4.5" (2233 x 1288 x 113 mm)  | 76.7" x 44.9" x 3.7" (1949 x 1141 x 92 mm)   |
| Carton Size (W x H x D)             | 94.8" x 59.9" x 18.2" (2406 x 1520 x 460 mm)   | 84.9" x 53.6" x 15.9" (2156 x 1361 x 404 mm) | 94.8" x 59.9" x 18.2" (2406 x 1520 x 460 mm)   | 84.9" x 53.6" x 15.9" (2156 x 1361 x 404 mm) |
| Weight                              | Approx. 299.9 lbs. (136.0 kg)  | Approx. 238.1 lbs. (108.0 kg)                | Approx. 231.5 lbs. (105.0 kg)  | Approx. 185.2 lbs. (84.0 kg)                 |
| Gross Weight                        | Approx. 355.0 lbs. (161.0 kg)  | Approx. 286.6 lbs. (130.0 kg)                | Approx. 286.6 lbs. (130.0 kg)  | Approx. 233.7 lbs. (106.0 kg)                |
| Protective Glass                    | Yes  | Yes  | -  | -  |
| Built-in Speaker                    | 20W [10W + 10W] (10% THD)  |  | 20W [10W + 10W] (10% THD)  |  |
| Orientation                         | Landscape/Portrait   |  | Landscape/Portrait   |  |
| Tilting Angle                       | 10 degrees with landscape setting and 5 degrees with portrait setting*3  |  | 10 degrees with landscape setting and 5 degrees with portrait setting*3  |  |
| Operating Environment               | Temperature: 32 °F to 104 °F (0 °C to 40 °C) / Humidity: 20 % to 80 % (Non condensation) / Altitude 0-7874 ft (2400 m)*4         |  | Temperature: 32 °F to 104 °F (0 °C to 40 °C) / Humidity: 20 % to 80 % (Non condensation) / Altitude 0-7874 ft (2400 m)*4         |  |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non condensation)                                       |  | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non condensation)                                       |  |
| Operating Time*5                    | 24 h/day   |  | 24 h/day   |  |
| <b>OPTIONS</b>                      | TY-ST103PF9  |  | TY-ST103PF9  |  |
| Pedestal                            | TY-ST103PF9  |  | TY-ST103PF9  |  |
| Wall-hanging Bracket                | TY-WK103PV9  |  | TY-WK103PV9  |  |
| Ceiling-hanging Bracket             | TY-CE103PS10*6   |  | TY-CE103PS10*6   |  |
| Mobile Stand                        | -  |  | -  |  |
| 3G-SDI Terminal Board               | TY-TBN03G *Require 2 boards for 4K/60p   |  | TY-TBN03G *Require 2 boards for 4K/60p   |  |
| Digital Interface Box               | ET-YFB100G   |  | ET-YFB100G   |  |
| DIGITAL LINK Switcher               | ET-YFB200G   |  | ET-YFB200G   |  |

\*1: HDCP supported, Embedded audio supported \*2: RGB/YPbPr switchable \*3: Please contact your sales representative with regard to the tilt angle before installation.  
\*4: Environmental temperature to use this unit at high altitudes (4593 ft (1400 m) and higher and below 7874 ft (2400 m) above sea level); 32 °F to 95 °F (0°C to 35 °C) When using the unit where it is 4593 ft (1400 m) and higher and below 7874 ft (2400 m) above sea level, make sure [High altitude mode] is set to [ON].

\*5: In case of 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. \*6: Tilt angle limited to 10 degree maximum.

## A wide range of professional 4K required applications

### • Public Information



### • Store Signage



### • Rentals & Staging



### • Control Rooms



### • Broadcast Studios



### • Meeting Rooms





### High Color Reproduction (3D-LUT & 6-Axis Color Correction)

The color space on LCD displays tends to narrow when the luminance level drops, and it's often accompanied by color phase shifts. 3D-LUT (Look Up Table) Color Correction on the LQ70 Series has a look up table for each luminance level. Six Axis Coordinate Correction applies image processing to balance the six axes of the three primary colors (RGB) and their complementary colors (CMY). This keeps the intermediate shades of extremely fine colors vibrant and lifelike.

**Accurate color at low luminance level**

**3D-LUT**

When the luminance levels of input signal is 100%

When the luminance levels of input signal is 10%

Maintains consistent coloring

**Matrix (two dimensions)**

When the luminance levels of input signal is 100%

When the luminance levels of input signal is 10%

Coloring Varies

6-Axis (RGB/CMY) Color Correction

3-Axis (RGB) Color Correction

\* Images on screen are simulated.

### Portrait Installation Capability

When the LQ70 Series is installed vertically, it can display a person in almost life-size dimensions. It is ideal for digital signage use because it faithfully reproduces the textures and colours of a model's clothing and accessories. It helps to maintain a high-quality brand image. Vertical installation also has no effect on the lifetime of the panel.



### Capable of 4-Input Multi Display with No Processor Required

The LQ70 Series features a 4-Input Multi Display function. The image can be switched from a full-screen display to a 4-Input Multi Display with a single press of a remote control button. Ideal for checking details in various applications, such as videoconferences, digital signage, and surveillance monitoring.



\* Some restrictions exist for input signals and display splitting.  
 \* 3G-SDI input and 4K image are not supported by the 4-Input Multi Display function.

### Non-4K Sources Are Also Beautifully Compensated

Panasonic's new-generation image processing technology (Detail Clarity Processor3\*) also reproduces non-4K image content, such as Full-HD images and PC signals, with high picture quality. In addition, it compensates motion images for smooth, non-blurry display, which was difficult with conventional models.

\* Optimizes the frequency and level of the input signal in horizontal and vertical directions to produce beautifully sharp, clear images.

**Full-HD**

Some large displays are blurry around the edges.

**New-generation image processing technology**

A sharp, clear image with crisp edges.

### Designed for Easy Transportation and Installation

By mounting eyebolts to the installation holes of the LQ70 Series and attaching hooks to the eyebolts, the unit can be easily moved and installed using a hoisting device such as a crane. The tough frame resists twisting and distortion, thus reducing the burden on the installation staff.

\* The unit must be installed or uninstalled only by a specially trained installer.



### SLOT NX Versatile 4K Input

The new SLOT NX makes it possible to change the interface to match the application. If the optional 3G-SDI Terminal Board is mounted, the LQ70 Series can be connected with SDI. This feature is convenient for use in broadcasting stations, for rental use and for long-distance connection. The LQ70 Series is expandable and will accommodate 4K input in the future.



\* All images shown are simulated.  
 \* SLOT NX is not compatible with SLO2 2.0.  
 \* Require 2 boards for 4K/60p

### Designed with Rugged Durability for Professional Use

The LQ70 Series has protective glass with 3.5J\* impact resistance on the front of the display. With its strong resistance to external impacts, this rugged design allows safe installation in places where many people walk by, such as train stations, airports, and shopping malls. The special frame construction also resists twisting to boost reliability during installation. Ideal for rental applications, where the panel is frequently transported and installed.

**Protective glass resists impacts**

\* LQ70 Series only.

**Special latticed frame resists twisting**

\* Images on screen are simulated.

\* This value is from a Panasonic test. It does not imply a guaranteed value.

4K Special Website



Feature video  
 4K UHD LCD Display LQ70 Series



# AF Series

Available from Spring 2016

NEW



NEW



NEW



| Model no.                           | TH-55AF1U  | TH-49AF1U  | TH-42AF1U  |
|-------------------------------------|--|--|--|
| <b>DISPLAY PANEL</b>                |  |  |  |
| Screen Size (Diagonal)/Aspect Ratio | 54.6-inch (1387 mm)/16:9   | 48.5-inch (1232 mm)/16:9   | 41.9-inch (1064 mm)/16:9   |
| Panel Type                          | LCD IPS Panel/E-LED  | LCD IPS Panel/E-LED  | LCD IPS Panel/E-LED  |
| Effective Display Area (W x H)      | 47.6" x 26.7" (1209 x 680 mm)  | 42.2" x 23.7" (1073 x 604 mm)  | 36.5" x 20.5" (927 x 521 mm)   |
| Number of Pixels (H x V)            | 1920 x 1080 pixels   | 1920 x 1080 pixels   | 1920 x 1080 pixels   |
| Brightness                          | 500 cd/m <sup>2</sup> (Typ)  | 500 cd/m <sup>2</sup> (Typ)  | 500 cd/m <sup>2</sup> (Typ)  |
| Contrast Ratio                      | 1300:1   | 1300:1   | 1300:1   |
| Dynamic Contrast                    | 50000:1  | 50000:1  | 50000:1  |
| Response Time                       | 8 ms (G to G)  | 8 ms (G to G)  | 8 ms (G to G)  |
| Viewing Angle                       | 178°/178° (CR≥10)  | 178°/178° (CR≥10)  | 178°/178° (CR≥10)  |
| <b>PLATFORM</b>                     |  |  |  |
| OS                                  | Android 4.4.3  |  | Android 4.4.3  |
| CPU                                 | Cortex-A9, 1.0 GHz (Quad)  |  | Cortex-A9, 1.0 GHz (Quad)  |
| Memory                              | RAM 1 GB / ROM 8 GB  |  | RAM 1 GB / ROM 8 GB  |
| <b>TERMINAL</b>                     |  |  |  |
| <b>Display</b>                      |  |  |  |
| VIDEO In                            | BNC x 1 set (Shared with Component In)   |  | BNC x 1 set (Shared with Component In)   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with Component In)   |  | Stereo Mini Jack (M3) x 1 (Shared with Component In)   |
| HDMI In                             | HDMI Type A Connector x 2  |  | HDMI Type A Connector x 2  |
| Component/RGB In                    | BNC x 1 set (Shared with VIDEO In)   |  | BNC x 1 set (Shared with VIDEO In)   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with Video In)   |  | Stereo Mini Jack (M3) x 1 (Shared with Video In)   |
| DVI-D In                            | DVI-D 24-pin x 1   |  | DVI-D 24-pin x 1   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)  |  | Stereo Mini Jack (M3) x 1 (Shared with PC In)  |
| DVI-D Out                           | DVI-D 24-pin x 1   |  | DVI-D 24-pin x 1   |
| PC In                               | Mini D-Sub 15-pin x1 (Female)  |  | Mini D-Sub 15-pin x1 (Female)  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)   |  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)   |
| Audio Out (L/R)                     | Stereo Mini Jack (M3) x 1  |  | Stereo Mini Jack (M3) x 1  |
| Serial In/Out                       | D-sub 9-pin x 1/x 1, RS-232C Compatible  |  | D-sub 9-pin x 1/x 1, RS-232C Compatible  |
| USB                                 | USB connector (TYPE A) x 1, DC 5 V/1 A (USB3.0 is not supported)   |  | USB connector (TYPE A) x 1, DC 5 V/1 A (USB3.0 is not supported)   |
| IR In/Out                           | Stereo Mini Jack (M3) x 1 / x 1  |  | Stereo Mini Jack (M3) x 1 / x 1  |
| <b>OpenPort PLATFORM</b>            |  |  |  |
| LAN                                 | RJ45 x 1 for Network Connection, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PLink™  |  | RJ45 x 1 for Network Connection, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PLink™  |
| USB                                 | USB2.0 connector (TYPE A) x 3, DC 5 V/500 mA   |  | USB2.0 connector (TYPE A) x 3, DC 5 V/500 mA   |
| Micro-USB                           | Micro USB x 1  |  | Micro USB x 1  |
| microSD card slot                   | microSD, microSDHC x 1   |  | microSD, microSDHC x 1   |
| Wireless LAN                        | IEEE 802.11a/b/g/n   |  | IEEE 802.11a/b/g/n   |
| <b>GENERAL</b>                      |  |  |  |
| Power Requirements                  | 110-127 V AC, 50 Hz/60 Hz  | 110-127 V AC, 50 Hz/60 Hz  | 110-127 V AC, 50 Hz/60 Hz  |
| Power Consumption                   | 190 W  | 175 W  | 155 W  |
| Power Off Condition                 | Approx. 0.3 W  | Approx. 0.3 W  | Approx. 0.3 W  |
| Stand-by Condition                  | Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])<br>Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On])               | Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])<br>Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On]) | Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])<br>Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On])               |
| Dimensions (W x H x D)              | 48.4" x 27.6" x 2.8" * (1229 x 699 x 72 * mm)  | 43.1" x 24.6" x 2.8" * (1093 x 623 x 72 * mm)  | 37.3" x 21.3" x 2.8" * (947 x 541 x 72 * mm)   |
| Carton Size (W x H x D)             | 56.9" x 36.3" x 8.8" (1444 x 922 x 223 mm)   | 51.5" x 33.4" x 8.0" (1308 x 846 x 203 mm)   | 44.3" x 29.3" x 8.0" (1123 x 743 x 203 mm)   |
| Bezel Width                         | 0.25" (6.3 mm)   | 0.25" (6.3 mm)   | 0.25" (6.3 mm)   |
| Weight                              | Approx. 55.2 lbs. (25.0 kg)  | Approx. 42.6 lbs. (19.3 kg)  | Approx. 34.4 lbs. (15.6 kg)  |
| Gross Weight                        | Approx. 72.8 lbs. (33.0 kg)  | Approx. 57.4 lbs. (26.0 kg)  | Approx. 46.3 lbs. (21.0 kg)  |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400x 400 mm)   | VESA Compliant 15.8" x 15.8" (400x 400 mm)   | VESA Compliant 7.9" x 7.9" (200 x 200 mm)  |
| Built-in Speakers                   | 20 W [10 W + 10 W]   | 20 W [10 W + 10 W]   | 20 W [10 W + 10 W]   |
| Orientation                         | Landscape/Portrait (Angle adjustment 0-45 degrees for both left and right)   |  | Landscape/Portrait (Angle adjustment 0-45 degrees for both left and right)   |
| Tilting Angle*1                     | 0-45 degrees forward/backward with landscape/portrait setting*1<br>(Angle adjustment is not possible for forward/backward tilting installation.) |  | 0-45 degrees forward/backward with landscape/portrait setting*1<br>(Angle adjustment is not possible for forward/backward tilting installation.) |
| Operating Environment               | Temperature: 32 °F to 104 °F (0 °C to 40 °C)*2 ; 32 °F to 95 °F (0 °C to 35 °C)*3 / Humidity: 20 % to 80 % (Non-condensation)                    |  | Temperature: 32 °F to 104 °F (0 °C to 40 °C)*2 ; 32 °F to 95 °F (0 °C to 35 °C)*3 / Humidity: 20 % to 80 % (Non-condensation)                    |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non Condensation)   |  | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non Condensation)   |
| Operating Time*4                    | 24 h/day   |  | 24 h/day   |
| <b>OPTIONS</b>                      |  |  |  |
| Pedestal                            | TY-ST43PE8   | TY-ST43PE8   | TY-ST43PE8   |
| Digital Interface Box               | -  | -  | -  |
| DIGITAL LINK Switcher               | -  | -  | -  |
| Early Warning Software*5            | ET-SWA100  | ET-SWA100  | ET-SWA100  |
| Auto Display Adjustment Upgrade Kit | TY-VUK10 (Supports Ver.1.2 or later)   | TY-VUK10 (Supports Ver.1.2 or later)   | TY-VUK10 (Supports Ver.1.2 or later)   |

\*1: Please contact your sales representative with regard to the tilt angle before installation. \*2: for up to 4593 ft (1400 m) altitude

\*3: 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.

\*4: In case of 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.

\*5: Suffix of the part number may differ depending on the license type.

\* The handle part excluded, the thickness is 2.3" (57 mm).

Indoor

## Adaptable and Versatile with Excellent Reliability

Android™- and HTML5-based OpenPort Platform™ Gives Freedom to Customize and Grow with Digital Signage Apps, Simplifies Everyday Use. The AF1 Series incorporates a high-performance SoC (System on a Chip) with a 1 GHz Quad-Core CPU, 1 GB RAM, 8 GB Storage. All this is supported by an alliance with a leading signage software developer to jointly verify application operation.



The Android robot is reproduced or modified from work created and shared by Google and used according to terms described in the Creative Commons 3.0 Attribution License.

## Simple Installation and Easy Operation

A built-in Media Player and onboard Wi-Fi simplify installation and cabling without the need for an external set-top box. Display media and scheduling is easily updated via the Internet. And the Panasonic API\* is provided to efficiently control and monitor applications over a network.

\* Application Programming Interface



## High Brightness, Resolution, And Off-Axis Visibility

The bright 500 cd/m<sup>2</sup> IPS panel enables excellent off-axis visibility. And the stylish design with narrow 0.25" (6.3 mm) bezel complements beautiful, large-format images. A Preset Optimal Image mode is also available via application to attract customers' attention.

# LF Series

Indoor



| Model no.                           | TH-80LF50U  | TH-70LF50U                                   | TH-55LF80U  | TH-49LF80U                                  | TH-42LF80U   |
|-------------------------------------|---|--|---|---|--|
| <b>DISPLAY PANEL</b>                |   |  |   |   |  |
| Screen Size (Diagonal)/Aspect Ratio | 80.0-inch (2032 mm)/16:9  | 70.0-inch (1765 mm)/16:9                     | 54.6-inch (1387 mm)/16:9  | 48.5-inch (1232 mm)/16:9                    | 41.9-inch (1064 mm)/16:9   |
| Panel Type                          | LCD VA Panel/E-LED  | LCD VA Panel/E-LED                           | LCD IPS Panel/E-LED   | LCD IPS Panel/E-LED                         | LCD IPS Panel/E-LED  |
| Effective Display Area (W x H)      | 69.7" x 39.2" (1771 x 996 mm)   | 60.5" x 34.0" (1538 x 865 mm)                | 47.6" x 26.7" (1209 x 680 mm)   | 42.2" x 23.7" (1073 x 604 mm)               | 36.5" x 20.5" (927 x 521 mm)   |
| Number of Pixels (H x V)            | 1920 x 1080 pixels  | 1920 x 1080 pixels                           | 1920 x 1080 pixels  | 1920 x 1080 pixels                          | 1920 x 1080 pixels   |
| Brightness                          | 700 cd/m <sup>2</sup> (Typ)   | 700 cd/m <sup>2</sup> (Typ)                  | 700 cd/m <sup>2</sup> (Typ)   | 700 cd/m <sup>2</sup> (Typ)                 | 700 cd/m <sup>2</sup> (Typ)  |
| Contrast Ratio                      | 5000:1  | 5000:1                                       | 1300:1  | 1300:1                                      | 1300:1   |
| Dynamic Contrast                    | —   | —  | 50000:1   | 50000:1                                     | 50000:1  |
| Response Time                       | 9 ms (G to G)   | 9 ms (G to G)                                | 8 ms (G to G)   | 8 ms (G to G)                               | 8 ms (G to G)  |
| Viewing Angle                       | 176°/176°   | 176°/176°                                    | 178°/178° (CR≥10)   | 178°/178° (CR≥10)                           | 178°/178° (CR≥10)  |
| <b>TERMINAL</b>                     |   |  |   |   |  |
| VIDEO In                            | BNC x 1   |  | BNC x 1 set (Shared with Component / RGB Y/G)   |   | BNC x 1 set (Shared with Component / RGB Y/G)                          |
| Audio In (L/R)                      | Pin Jack x 1 set  |  | Stereo Mini Jack (M3) x 1 (Shared with Component In)  |   | Stereo Mini Jack (M3) x 1 (Shared with Component In)                   |
| HDMI In                             | HDMI Type A Connector x 1   |  | HDMI Type A Connector x 2   |   | HDMI Type A Connector x 2  |
| Component/RGB In                    | BNC x 1 set   |  | BNC x 1 set (Shared with Video In)  |   | BNC x 1 set (Shared with Video In)                                     |
| Audio In (L/R)                      | Pin Jack x 1 set  |  | Stereo Mini Jack (M3) x 1 (Shared with Video In)  |   | Stereo Mini Jack (M3) x 1 (Shared with Video In)                       |
| DVI-D In                            | DVI-D 24-pin x 1  |  | DVI-D 24-pin x 1  |   | DVI-D 24-pin x 1   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |  | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |   | Stereo Mini Jack (M3) x 1 (Shared with PC In)                          |
| DVI-D Out                           | DVI-D 24-pin x 1  |  | DVI-D 24-pin x 1  |   | DVI-D 24-pin x 1   |
| PC In                               | Mini D-Sub 15-pin x1 (Female)   |  | Mini D-Sub 15-pin x 1 (Female)  |   | Mini D-Sub 15-pin x 1 (Female)   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |   | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)                       |
| Audio Out (L/R)                     | Pin Jack x 1 set  |  | Stereo Mini Jack (M3) x 1   |   | Stereo Mini Jack (M3) x 1  |
| Serial In/Out                       | D-Sub 9-pin x 1/D-Sub 9-pin x 1, RS-232C Compatible   |  | D-sub 9-pin x 1/x 1, RS-232C Compatible   |   | D-sub 9-pin x 1/x 1, RS-232C Compatible                                |
| DIGITAL LINK                        | —   |  | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with LAN)   |   | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with LAN)          |
| LAN                                 | RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™  |  | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)  |   | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK) |
| IR In/Out                           | —   |  | Stereo Mini Jack (M3) x 1 / x 1   |   | Stereo Mini Jack (M3) x 1 / x 1  |
| USB                                 | —   |  | USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)  |   | USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)         |
| Function Slot                       | SLOT2.0 x 1   |  | —   |   | —  |
| <b>GENERAL</b>                      |   |  |   |   |  |
| Power Requirements                  | 110-127 V AC, 50 Hz/60 Hz   | 110-127 V AC, 50 Hz/60 Hz                    | 110-127 V AC, 50 Hz/60 Hz   | 110-127 V AC, 50 Hz/60 Hz                   | 110-127 V AC, 50 Hz/60 Hz  |
| Power Consumption                   | Approx. 380 W   | Approx. 260 W                                | Approx. 190 W   | Approx. 175 W                               | Approx. 155 W  |
| Power Off Condition                 | Approx. 0.3 W   | Approx. 0.3 W                                | Approx. 0.3 W   | Approx. 0.3 W                               | Approx. 0.3 W  |
| Stand-by Condition                  | Approx. 0.5 W   | Approx. 0.5 W                                | Approx. 0.5 W   | Approx. 0.5 W                               | Approx. 0.5 W  |
| Dimensions (W x H x D)              | 72.8" x 42.3" x 3.5" (1848 x 1073 x 89 mm)  | 63.2" x 36.7" x 3.5" (1604 x 931 x 89 mm)    | 48.4" x 27.6" x 2.8" (1229 x 699 x 72 mm)   | 43.1" x 24.6" x 2.8" (1093 x 623 x 72 mm)   | 37.3" x 21.3" x 2.8" (947 x 541 x 72 mm)                               |
| Carton Size (W x H x D)             | 78.6" x 46.9" x 13.8" (1995 x 1191 x 351 mm)  | 69.0" x 41.3" x 13.8" (1752 x 1050 x 351 mm) | 56.9" x 36.3" x 8.8" (1444 x 922 x 223 mm)  | 51.5" x 33.4" x 8.0" (1308 x 846 x 203 mm)  | 44.3" x 29.3" x 8.0" (1123 x 743 x 203 mm)                             |
| Bezel Width                         | 1.4" (36 mm)  | 1.2" (30 mm)                                 | 0.25" (6.3 mm)  | 0.25" (6.3 mm)                              | 0.25" (6.3 mm)   |
| Weight                              | Approx. 132.3 lbs. (60.0 kg)  | Approx. 103.6 lbs. (47.0 kg)                 | Approx. 54.5 lbs. (24.7 kg)   | Approx. 41.9 lbs. (19.0 kg)                 | Approx. 33.7 lbs. (15.3 kg)  |
| Gross Weight                        | Approx. 156.5 lbs. (71.0 kg)  | Approx. 123.5 lbs. (56.0 kg)                 | Approx. 70.6 lbs. (32.0 kg)   | Approx. 57.4 lbs. (26.0 kg)                 | Approx. 44.1 lbs. (20.0 kg)  |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | VESA Compliant 15.8" x 15.8" (400 x 400 mm)  | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | VESA Compliant 15.8" x 15.8" (400 x 400 mm) | VESA compliant 7.9" x 7.9" (200 x 200 mm)                              |
| Built-in Speakers                   | —   | —  | 20 W [10 W + 10 W]  | 20 W [10 W + 10 W]                          | 20 W [10 W + 10 W]   |
| Orientation                         | Landscape/Portrait  |  | Landscape/Portrait (Angle adjustment 0-45 degrees for both left and right)  |   |  |
| Tilting Angle                       | 0-20 degrees forward with landscape setting*1   |  | 0-45 degrees forward/backward with landscape/portrait setting*1 (Angle adjustment is not possible for forward/backward tilting installation.)     |   |  |
| Operating Environment               | Temperature: 32°F to 104°F (0 °C to 40 °C) / Humidity: 20 % to 80 % (Non Condensation)                  |  | Temperature: 32°F to 104°F (0 °C to 40 °C) <sup>3</sup> : 32 °F to 95 °F (0 °C to 35 °C) <sup>4</sup> / Humidity: 20 % to 80 % (Non-condensation) |   |  |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) <sup>2</sup> / Humidity: 20 % to 80 % (Non Condensation) |  | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non-condensation)  |   |  |
| Operating Time <sup>5</sup>         | 24 h/day  |  | 24 h/day  |   |  |
| <b>OPTIONS</b>                      |   |  |   |   |  |
| Pedestal                            | TY-ST65P20  | TY-ST58P20                                   | TY-ST43PE8  | TY-ST43PE8                                  | TY-ST43PE8   |
| Wall-hanging Bracket                | TY-WK70PV50   | TY-WK70PV50                                  | —   | —   | —  |
| Digital Interface Box               | —   | —  | ET-YFB100G  | ET-YFB100G                                  | ET-YFB100G   |
| DIGITAL LINK Switcher               | —   | —  | ET-YFB200G  | ET-YFB200G                                  | ET-YFB200G   |
| Early Warning Software <sup>6</sup> | —   | —  | ET-SWA100   | ET-SWA100                                   | ET-SWA100  |
| Auto Display Adjustment Upgrade Kit | —   | —  | TY-VUK10 (Supports Ver.1.1 or later)  | TY-VUK10 (Supports Ver.1.1 or later)        | TY-VUK10 (Supports Ver.1.1 or later)                                   |
| HD-SDI Terminal Board               | TY-FB10HD   | TY-FB10HD                                    | —   | —   | —  |
| Dual HDMI Terminal Board            | TY-FB10HMD  | TY-FB10HMD                                   | —   | —   | —  |

\*1: Please contact your sales representative with regard to the tilt angle before installation.

\*2: If the temperature is 104 °F to 140 °F (40 °C to 60 °C), please keep in humidity 20 % to 40 %.

\*3: for up to 4593 ft (1400 m) altitude

\*4: 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.

\*5: In case of 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.

\*6: Suffix of the part number may differ depending on the license type.

★ The handle part excluded, the thickness is 2.3" (57 mm).



| Model no.                           | TH-55LF8U   | TH-49LF8U                                   | TH-42LF8U   |
|-------------------------------------|---|---|---|
| <b>DISPLAY PANEL</b>                |   |   |   |
| Screen Size (Diagonal)/Aspect Ratio | 54.6-inch (1387 mm)/16:9  | 48.5-inch (1232 mm)/16:9                    | 41.9-inch (1064 mm)/16:9  |
| Panel Type                          | LCD IPS Panel/E-LED   | LCD IPS Panel/E-LED                         | LCD IPS Panel/E-LED   |
| Effective Display Area (W x H)      | 47.6" x 26.7" (1209 x 680 mm)   | 42.2" x 23.7" (1073 x 604 mm)               | 36.5" x 20.5" (927 x 521 mm)  |
| Number of Pixels (H x V)            | 1920 x 1080 pixels  | 1920 x 1080 pixels                          | 1920 x 1080 pixels  |
| Brightness                          | 500 cd/m <sup>2</sup> (Typ)   | 500 cd/m <sup>2</sup> (Typ)                 | 500 cd/m <sup>2</sup> (Typ)   |
| Contrast Ratio                      | 1300:1  | 1300:1                                      | 1300:1  |
| Dynamic Contrast                    | 50000:1   | 50000:1                                     | 50000:1   |
| Response Time                       | 8 ms (G to G)   | 8 ms (G to G)                               | 8 ms (G to G)   |
| Viewing Angle                       | 178°/178° (CR≥10)   | 178°/178° (CR≥10)                           | 178°/178° (CR≥10)   |
| <b>TERMINAL</b>                     |   |   |   |
| VIDEO In                            | BNC x 1 set (Shared with Component /RGB Y/G)  |   | BNC x 1 set (Shared with Component /RGB Y/G)  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with Component In)  |   | Stereo Mini Jack (M3) x 1 (Shared with Component In)  |
| HDMI In                             | HDMI Type A Connector x 2   |   | HDMI Type A Connector x 2   |
| Component In                        | BNC x 1 set   |   | BNC x 1 set   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with Video In)  |   | Stereo Mini Jack (M3) x 1 (Shared with Video In)  |
| DVI-D In                            | DVI-D 24-pin x 1  |   | DVI-D 24-pin x 1  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |   | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |
| DVI-D Out                           | DVI-D 24-pin x 1  |   | DVI-D 24-pin x 1  |
| PC In                               | Mini D-Sub 15-pin x1 (Female)   |   | Mini D-Sub 15-pin x1 (Female)   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |   | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |
| Audio Out (L/R)                     | Stereo Mini Jack (M3) x 1   |   | Stereo Mini Jack (M3) x 1   |
| Serial In/Out                       | D-sub 9-pin x 1/x 1, RS-232C Compatible   |   | D-sub 9-pin x 1/x 1, RS-232C Compatible   |
| DIGITAL LINK                        | -   |   | -   |
| LAN                                 | RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™  |   | RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™  |
| IR In/Out                           | Stereo Mini Jack (M3) x 1 / x 1   |   | Stereo Mini Jack (M3) x 1 / x 1   |
| USB                                 | USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)  |   | USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)  |
| Function Slot                       | -   |   | -   |
| <b>GENERAL</b>                      |   |   |   |
| Power Requirements                  | 110-127 V AC, 50 Hz/60 Hz   | 110-127 V AC, 50 Hz/60 Hz                   | 110-127 V AC, 50 Hz/60 Hz   |
| Power Consumption                   | 185 W   | 160 W                                       | 145 W   |
| Power Off Condition                 | Approx. 0.3 W   | Approx. 0.3 W                               | Approx. 0.3 W   |
| Stand-by Condition                  | Approx. 0.5 W   | Approx. 0.5 W                               | Approx. 0.5 W   |
| Dimensions (W x H x D)              | 48.4" x 27.6" x 2.8"* (1229 x 699 x 72* mm)   | 43.1" x 24.6" x 2.8"* (1093 x 623 x 72* mm) | 37.3" x 21.3" x 2.8"* (947 x 541 x 72* mm)  |
| Carton Size (W x H x D)             | 56.9" x 36.3" x 8.8" (1444 x 922 x 223 mm)  | 51.5" x 33.4" x 8.0" (1308 x 846 x 203 mm)  | 44.3" x 29.3" x 8.0" (1123 x 743 x 203 mm)  |
| Bezel Width                         | 0.25" (6.3 mm)  | 0.25" (6.3 mm)                              | 0.25" (6.3 mm)  |
| Weight                              | Approx. 54.5 lbs. (24.7 kg)   | Approx. 41.9 lbs. (19.0 kg)                 | Approx. 33.7 lbs. (15.3 kg)   |
| Gross Weight                        | Approx. 70.6 lbs. (32.0 kg)   | Approx. 57.4 lbs. (26.0 kg)                 | Approx. 44.1 lbs. (20.0 kg)   |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | VESA Compliant 15.8" x 15.8" (400 x 400 mm) | VESA Compliant 7.9" x 7.9" (200 x 200 mm)   |
| Built-in Speakers                   | 20 W [10 W + 10 W]  |   | 20 W [10 W + 10 W]  |
| Orientation                         | Landscape/Portrait (Angle adjustment 0-45 degrees for both left and right)  |   | Landscape/Portrait (Angle adjustment 0-45 degrees for both left and right)  |
| Tilting Angle                       | 0-45 degrees forward/backward with landscape/portrait setting <sup>1</sup><br>(Angle adjustment is not possible for forward/backward tilting installation.) |   | 0-45 degrees forward/backward with landscape/portrait setting <sup>1</sup><br>(Angle adjustment is not possible for forward/backward tilting installation.) |
| Operating Environment               | Temperature: 32 °F to 104 °F (0 °C to 40 °C) <sup>2</sup> ; 32 °F to 95 °F (0 °C to 35 °C) <sup>3</sup> / Humidity: 20 % to 80 % (Non-condensation)         |   | Temperature: 32 °F to 104 °F (0 °C to 40 °C) <sup>2</sup> ; 32 °F to 95 °F (0 °C to 35 °C) <sup>3</sup> / Humidity: 20 % to 80 % (Non-condensation)         |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non Condensation)  |   | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non Condensation)  |
| Operating Time <sup>4</sup>         | 24 h/day  |   | 24 h/day  |
| <b>OPTIONS</b>                      |   |   |   |
| Pedestal                            | TY-ST43PE8  | TY-ST43PE8                                  | TY-ST43PE8  |
| Digital Interface Box               | -   | -   | -   |
| DIGITAL LINK Switcher               | -   | -   | -   |
| Early Warning Software <sup>5</sup> | ET-SWA100   | ET-SWA100                                   | ET-SWA100   |
| Auto Display Adjustment Upgrade Kit | TY-VUK10 (Supports Ver.1.1 or later)  | TY-VUK10 (Supports Ver.1.1 or later)        | TY-VUK10 (Supports Ver.1.1 or later)  |

\*1: Please contact your sales representative with regard to the tilt angle before installation.

\*2: for up to 4593 ft (1400 m) altitude

\*3: 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.

\*4: In case of 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.

\*5: Suffix of the part number may differ depending on the license type.

\* The handle part is excluded, the thickness is 2.3" (57 mm).



### Easy Display of Images Optimized for the Display Content

AF1 LF80 LF8

Conventional display panels are preset with display modes such as Standard and Dynamic. The LF80/8/AF1 Series comes with an extensive display menu to let you select the most suitable mode for the content to be displayed and the viewing environment. You can select the best mode for the video source and the place of display.



\*Although the term "DICOM" is used, this product is not medical equipment. Do not use displayed images for medical purposes such as examination or diagnosis.

### High-Performance Image Engine for Flexible Image Adjustment Like Never Before

AF1 LF80 LF8

#### • 6-segment Color Management

Enables adjustment of the color tone, color density and brightness parameters individually for red, green, and blue, as well as the complementary colors of cyan, magenta and yellow.

#### • Color Enhancement

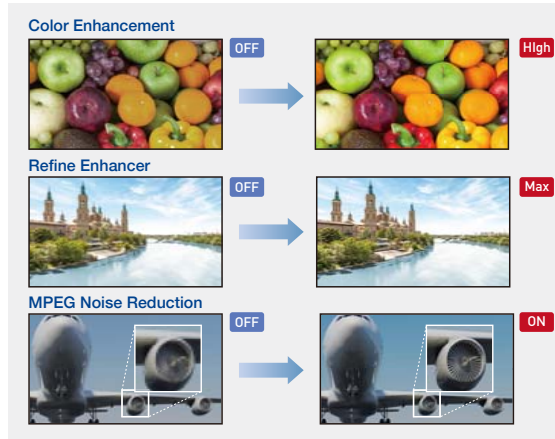
Displays images with enhanced color.

#### • Refine Enhancer

Corrects blurry image contours resulting from resizing, etc., to improve the image resolution.

#### • MPEG Noise Reduction

Noise reduction suppresses the block noise and mosquito noise that are characteristic of digital video signals. This faithfully reproduces the inherent beauty of the image.



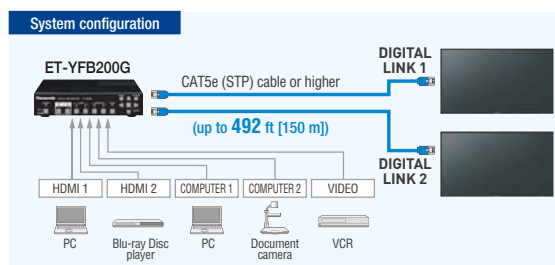
\* Images on screen are simulated.

### DIGITAL LINK Function Enables Simple Installation and Low System Costs

LF80

Using DIGITAL LINK makes it possible to transmit video, audio and control signals over a long distance (up to 492 ft [150 m]) with a single LAN cable\*1. Easy cabling also reduces labor during setup. This provides transmission of high-quality images and sounds, as well as remote control.

\*1 When connected with the [Long reach] mode, the maximum transmission distance is 492 ft (150 m). In this case, the unit can receive the signals of up to 1080/60p. A CAT5e (STP) cable or higher is required.



### 24/7 Operation

AF1 LF50 LF80 LF8

The tough design makes the display panel suitable for use as signage that operates all day and night in places such as restaurants, shopping malls and transportation facilities.



\* In case of 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.

### Built-in Speaker

AF1 LF80 LF8

The speaker is built into the rear of the display. There is no need for external speakers when using content that has a soundtrack.



### Fan-less Design

AF1 LF50 LF80 LF8

The fan-less design prevents malfunctions otherwise caused by dust particles brought in by the fan. This enables safe installation in crowded areas.

### Stylish Slim Design and Light Weight

AF1 LF50 LF80 LF8

Narrow bezel allows it to blend in with the installation space and gives greater visibility to the images on display. The bezel is also less noticeable in multi-screen displays, for effective large-screen applications.

### Flexible, Vertical Installation

AF1 LF50 LF80 LF8

The display can be installed either horizontally or vertically to match the content and installation location without being affected by "Mura" (unevenness). This is because the display has relatively uniform pressure distribution as compared to a TV panel, which results in far better stability. Regardless of the installation direction, the LED backlight life stays the same since a constant operating temperature is maintained.

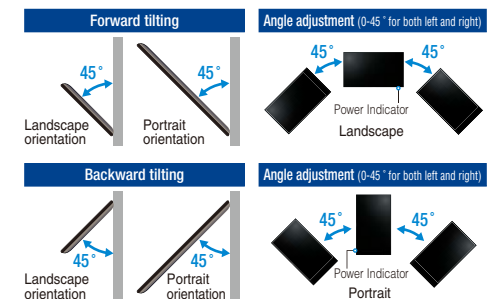


### Choose the Installation to Match Your Application

AF1 LF80 LF8

The LF80/8 series is designed for use in either portrait or horizontal orientation with no effect on panel color and lifespan, further reducing TCO. A tilt installation up to 45 degrees forward or backward is also possible. The angle can be adjusted for easy viewing when installed in a high location.

\*Angle adjustment is not possible for forward/backward tilting installation. Be sure that the Power Indicator comes to the downside.





# LFV Series

## Video Wall



| Model no.                           | TH-55LFV70U   | TH-55LFV60U   | TH-55LFV6U  | TH-47LFV5U  |
|-------------------------------------|---|---|---|---|
| <b>DISPLAY PANEL</b>                |   |   |   |   |
| Screen Size (Diagonal)/Aspect Ratio | 54.6-inch (1387mm)/16:9   | 54.6-inch (1387 mm)/16:9  | 54.6-inch (1387 mm)/16:9  | 46.9-inch (1192 mm)/16:9  |
| Panel Type                          | LCD IPS Panel/D-LED   | LCD IPS Panel/D-LED   | LCD IPS Panel/D-LED   | LCD IPS Panel/D-LED   |
| Effective Display Area (W x H)      | 47.6" x 26.7" (1209 x 680 mm)   | 47.6" x 26.7" (1209 x 680 mm)   | 47.6" x 26.7" (1209 x 680 mm)   | 40.9" x 23.0" (1039 x 584 mm)   |
| Number of Pixels (H x V)            | 1920 x 1080 pixels  | 1920 x 1080 pixels  | 1920 x 1080 pixels  | 1920 x 1080 pixels  |
| Brightness                          | 700 cd/m <sup>2</sup>   | 700 cd/m <sup>2</sup>   | 500 cd/m <sup>2</sup> (Typ)   | 500 cd/m <sup>2</sup> (Typ)   |
| Contrast Ratio                      | 1200:1  | 1400:1  | 1400:1  | 1400:1  |
| Response Time                       | 12 ms (G to G)  | 12 ms (G to G)  | 12 ms (G to G)  | 12 ms (G to G)  |
| Dynamic Contrast Ratio              | 500000:1  | 500000:1  | 500000:1  | 500000:1  |
| Viewing Angle                       | 178°/178° (CR≥10)   | 178°/178° (CR≥10)   | 178°/178° (CR≥10)   | 178°/178° (CR≥10)   |
| Panel Surface Treatment             | Anti-glare treatment (Haze 44%)   | Anti-Reflection   | Anti-Glare Treatment (Haze 10 %)  | Anti-Glare Treatment (Haze 10 %)  |
| <b>TERMINAL</b>                     |   |   |   |   |
| VIDEO In                            | BNC x 1 (Shared with Component In)  | BNC x 1 (Shared with Component In)  | BNC x 1   | BNC x 1   |
| Audio In (L/R)                      | Pin Jack x 1 set (Shared with Component In)   | Stereo Mini-Jack (M3) x 1 (Shared with Component/RGB In)  | Stereo Mini-Jack (M3) x 1 (Shared with Component/RGB In)  | Pin Jack x 1 set (Shared with Component In)   |
| HDMI In                             | HDMI Type A Connector x 1   | HDMI Type A Connector x 2   | HDMI Type A Connector x 2   | HDMI Type A Connector x 1   |
| Component/RGB In                    | BNC x 1 set   | BNC x 1 (Shared with VIDEO In)  | BNC x 1 (Shared with VIDEO In)  | BNC x 1 set   |
| Audio In (L/R)                      | Pin Jack x 1 set (Shared with VIDEO In)   | Stereo Mini-Jack (M3) x 1 (Shared with VIDEO In)  | Stereo Mini-Jack (M3) x 1 (Shared with VIDEO In)  | Pin Jack x 1 set (Shared with VIDEO In)   |
| DVI-D In                            | DVI-D 24-pin x 2  | DVI-D 24-pin x 1  | DVI-D 24-pin x 1  | DVI-D 24-pin x 1  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)   | Stereo Mini Jack (M3) x 1 (Shared with PC In)   | Stereo Mini Jack (M3) x 1 (Shared with PC In)   | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |
| DisplayPort In                      | DisplayPort x 1   | —   | —   | —   |
| DVI-D Out                           | —   | DVI-D 24-pin x 1  | DVI-D 24-pin x 1  | —   |
| DVI-I Out                           | —   | —   | —   | DVI-I 29-pin x 1  |
| PC In                               | Mini D-sub 15-pin x 1 (Female)  | Mini D-Sub 15-pin x1 (Female)   | Mini D-Sub 15-pin x1 (Female)   | Mini D-Sub 15-pin x1 (Female)   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |
| DIGITAL LINK In/DIGITAL LINK Out    | RJ45 x 1/RJ45 x 1   | —/—   | —/—   | —/—   |
| USB                                 | USB Type A Connector (DC 5 V/0.5 A) x 1 (Memory Viewer Only, USB 3.0 is not supported.)           | USB Type A Connector (DC 5 V/1 A) x 1 (USB 3.0 is not supported.)   | USB Type A Connector (DC 5 V/1 A) x 1 (USB 3.0 is not supported.)   | —   |
| Audio Out (L/R)                     | Pin Jack x 1 set  | Stereo Mini-Jack (M3) x 1   | Stereo Mini-Jack (M3) x 1   | Pin Jack x 1 set  |
| Serial In/Out                       | D-sub 9-pin x 1/D-sub 9-pin x 1, RS-232C Compatible   | D-Sub 9-pin x 1/D-Sub 9-pin x 1, RS-232C Compatible   | D-Sub 9-pin x 1/D-Sub 9-pin x 1, RS-232C Compatible   | D-Sub 9-pin x 1/D-Sub 9-pin x 1, RS-232C Compatible   |
| IR Transmitter In/Out               | Stereo Mini-Jack (M3) x 1 / Stereo Mini-Jack (M3) x 1   | Stereo Mini-Jack (M3) x 1 / Stereo Mini-Jack (M3) x 1   | Stereo Mini-Jack (M3) x 1 / Stereo Mini-Jack (M3) x 1   | Stereo Mini-Jack (M3) x 1 / Stereo Mini-Jack (M3) x 1   |
| LAN                                 | RJ45 x 1 (Shared with DIGITAL LINK In)  | RJ45 x 1 (10BASE-T/100BASE-TX, Compatible with PLink™)  | RJ45 x 1 (10BASE-T/100BASE-TX, Compatible with PLink™)  | RJ45 x 1 (Web Browser Control Only)   |
| <b>GENERAL</b>                      |   |   |   |   |
| Power Requirements                  | 110-127 V AC, 50/60 Hz  | 110-127 V AC, 50/60 Hz  | 110-127 V AC, 50/60 Hz  | 110-127 V AC, 50/60 Hz  |
| Power Consumption                   | 330 W   | 300 W   | 220 W   | 160 W   |
| Stand-by Condition                  | Approx. 0.5 W   | Approx. 0.5 W   | Approx. 0.5 W   | Approx. 0.5 W   |
| Dimensions (W x H x D)              | 47.8" x 26.9" x 3.7" (1213 x 684 x 95 mm)   | 47.8" x 26.9" x 3.7" (1213 x 684 x 95 mm)   | 47.8" x 26.9" x 3.7" (1213 x 684 x 95 mm)   | 41.2" x 23.3" x 4.3" (1045 x 590 x 109 mm)  |
| Carton Size (W x H x D)             | 61.1" X 37.8" X 17.7" (1551 X 961 X 450 mm)   | 60.8" x 38.3" x 11.9" (1544 x 973 x 301 mm)   | 60.8" x 38.3" x 11.9" (1544 x 973 x 301 mm)   | 54.8" x 37.4" x 17.6" (1390 x 950 x 445 mm)   |
| Bezel Width                         | L/T: 0.088" (2.25 mm), R / B: 0.049" (1.25 mm)  | L/T: 0.088" (2.25 mm), R / B: 0.049" (1.25 mm)  | L/T: 0.088" (2.25 mm), R / B: 0.049" (1.25 mm)  | L/T: 0.12" (3.2 mm), R / B: 0.07" (1.7 mm)  |
| Bezel to Bezel                      | 0.14" (3.5 mm) (Multi Screen)   | 0.14" (3.5 mm) (Multi Screen)   | 0.14" (3.5 mm) (Multi Screen)   | 0.19" (4.9 mm) (Multi Screen)   |
| Weight                              | Approx. 66.1 lbs. (30.0 kg)   | Approx. 66.1 lbs. (30.0 kg)   | Approx. 66.1 lbs. (30.0 kg)   | Approx. 55.1 lbs. (25.0 kg)   |
| Grass Weight                        | Approx. 99.2 lbs. (45.0 kg)   | Approx. 86.0 lbs. (39.0 kg)   | Approx. 86.0 lbs. (39.0 kg)   | Approx. 86.0 lbs. (39.0 kg)   |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   |
| External Speaker                    | 8 Ω, 20 W [10 W + 10 W] (10% THD)   | 8 Ω, 20 W [10 W + 10 W] (10% THD)   | 8 Ω, 20 W [10 W + 10 W] (10% THD)   | 8 Ω, 20 W [10 W + 10 W] (10% THD)   |
| Orientation <sup>1</sup>            | Landscape/Portrait  | Landscape/Portrait  | Landscape/Portrait  | Landscape/Portrait  |
| Tilting Angle <sup>1</sup>          | Vertical Only   | Vertical Only   | Vertical Only   | Vertical Only   |
| Operating Environment               | Temperature: 32°F to 104°F (0°C to 40°C) <sup>2</sup> / Humidity: 10 % to 90 % (Non Condensation) | Temperature: 32°F to 104°F (0°C to 40°C) <sup>2</sup> / 32°F to 95°F (0°C to 35°C) <sup>4</sup> / Humidity: 10 % to 90 % (Non-Condensation) | Temperature: 32°F to 104°F (0°C to 40°C) <sup>2</sup> / 32°F to 95°F (0°C to 35°C) <sup>4</sup> / Humidity: 10 % to 90 % (Non-Condensation) | Temperature: 32°F to 104°F (0°C to 40°C) <sup>2</sup> / Humidity: 10 % to 90 % (Non Condensation) |
| Storage Environment                 | Temperature: -4°F to 140°F (-20°C to 60°C) / Humidity: 10 % to 90 % (Non Condensation)            | Temperature: -4°F to 140°F (-20°C to 60°C) / Humidity: 10 % to 90 % (Non Condensation)  | Temperature: -4°F to 140°F (-20°C to 60°C) / Humidity: 10 % to 90 % (Non Condensation)  | Temperature: -4°F to 140°F (-20°C to 60°C) / Humidity: 10 % to 90 % (Non Condensation)            |
| Operating Time <sup>5</sup>         | 24 h/day  | 24 h/day  | 24 h/day  | 24 h/day  |
| <b>OPTIONS</b>                      |   |   |   |   |
| Remote Control Kit                  | —   | —   | —   | TY-RM50W  |
| Cover Frame Kit                     | TY-CF55VW50   | TY-CF55VW50   | TY-CF55VW50   | TY-CF47VW5  |
| Installation Mount                  | TY-VK55LV1  | TY-VK55LV1  | TY-VK55LV1  | TY-VK47LV1  |
| Early Warning Software <sup>6</sup> | ET-SWA100   | ET-SWA100   | ET-SWA100   | —   |
| Auto Display Adjustment Upgrade Kit | TY-VUK10  | TY-VUK10 (Supports Ver.1.1 or later)  | TY-VUK10 (Supports Ver.1.1 or later)  | TY-VUK10  |

<sup>1</sup>: Please contact your sales representative with regard to the tilt angle before installation.

<sup>2</sup>: For up to 6562 ft (2000 m) altitude. <sup>3</sup>: For up to 4593 ft (1400 m) altitude. <sup>4</sup>: For between 4593 ft (1400 m) and 9186 ft (2800 m) altitude.

<sup>5</sup>: In case of 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.

<sup>6</sup>: Suffix of the part number may differ depending on the license type.

### Installation video



Video Wall Workflow Panasonic TY-VK55LV1

### Ultra Narrow Bezel with 0.14" (3.5 mm)\* Thinness

LFV70 LFV60 LFV6

The ultra-narrow bezel results in joints that are only 0.14" (3.5 mm)\* wide for video wall installations. Even in large-screen configurations, the screen borders can barely be seen, so images are powerful and natural.

Note: Bezel-to-bezel distance means the combined top and bottom (or left and right) bezel width of adjacent displays in multi-screen configuration. The gap between displays is not included.

\*The TH-47LFV5 is 0.19" (4.9 mm) wide.



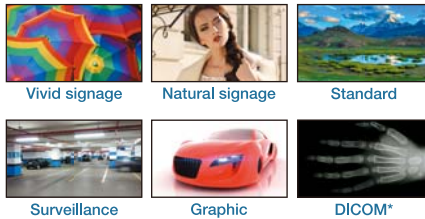
\* LfV70/60/6 Series.

### Optimized Image Modes

LFV60 LFV6

Conventional display panels usually include basic display mode presets such as Standard and Dynamic. The LfV60/6 Series, however, features an extensive display menu that allows you to very easily choose from a wide selection of display modes to suit different content, video sources, and lighting environments to achieve optimal results.

\* DICOM simulation only. Do not use for actual medical examinations or diagnosis



### Multi-Screen Video Synchronization

LFV60 LFV6

LfV60/6 Series incorporates a new video playback synchronization function for vertically adjacent displays in multi-screen configuration. It assures more natural video playback compared to displays with unsynchronized timing.

- **Frame Control**  
Adjusts timing or images to reproduce enlarged video more naturally.
- **Reverse Scan**  
Reverses direction of image scanning to smoothly play enlarged video on multiple screens.

### High-Performance Imaging Engine

LFV60 LFV6

Color and image quality can be fine-tuned and customized to assure seamless uniformity across all displays in multi-screen configuration.



\* Images on screen are simulated.

- **Color matching function**  
Corrects any unevenness in color between multiple screens. R (red), G (green), and B (blue) along with intermediate colors (cyan, magenta, and yellow) are corrected individually on each display.
- **Color enhancement**  
Displays images with enhanced color intensity.
- **Refine enhancer**  
Corrects blurry image contours that result from resizing to improve resolution.
- **Gradation smoother**  
Extracts and eliminates noise components from input video signals for noise-free image reproduction.

### Multi-Screen Imaging Syncing via USB and Changing Content via LAN

LFV70 LFV60 LFV6

The LfV70/60/6 can be quickly adapted for digital signage—just connect USB memory devices to inputs on each display in 2 x 2 multi-screen configuration for automatically synchronized 4K (4 x 1080p) images. No external devices or processors are required. This function also serves as a backup in case the primary video source fails. By using Multi Monitoring & Control Software<sup>1</sup>, it's possible to easily replace content stored on USB via LAN<sup>2</sup>, perfect in situations where the display is difficult to access.

<sup>1</sup> For more information about Multi Monitoring & Control Software, please visit: <http://panasonic.net/prodisplays/download/software/index.html>

<sup>2</sup> Replacing content stored on USB memory device via LAN is available on LfV60/6 Series displays only.

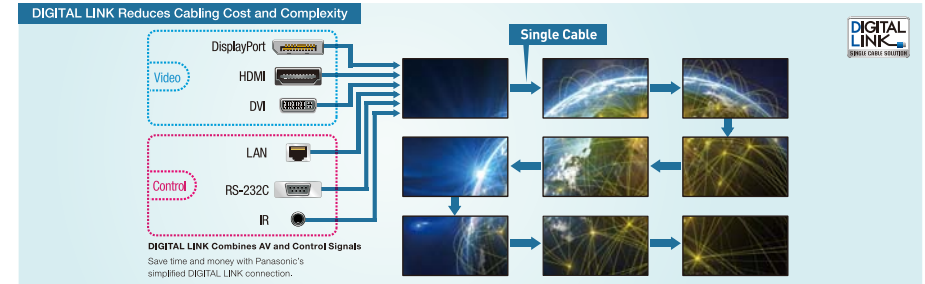


Note: Connection example for LfV60/6 Series shown.

### Video, Audio, and Control Signals Can Be Distributed by DIGITAL LINK Single Cable Daisy Chain

LFV70

The terminal board for the LfV70 Series is equipped with a DIGITAL LINK output terminal. Video, audio and control signals are combined into one DIGITAL LINK signal and can be transmitted by single cable daisy chain connection. This enables not only a multi-screen system to be configured using only displays and video sources with no need for a video splitter or other device, but also easy installation and control of multi-screen system thanks to simple cabling.

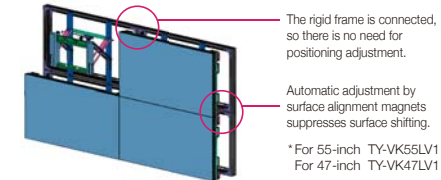


### Installation Frame Simplifies Set-up

LFV70 LFV60 LFV6 LFV5

The optional Installation Mount makes it much easier to configure a video wall. There's no need for complicated display positioning, and fluctuations between installers are covered. It also saves time and cuts labor costs.

Video wall fluctuations occur when the bezels are not correctly aligned vertically and horizontally and the surfaces are not properly adjusted. Installation is quick and easy using the rigid frame, with easy adjustment using surface alignment magnets. This structure also makes the displays easier to remove when performing maintenance.



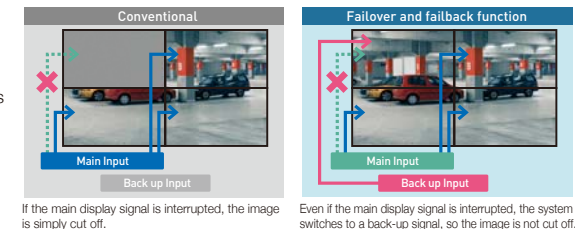
\* For 55-inch TY-VK55LV1  
For 47-inch TY-VK47LV1

### Failover and Failback Functions Support Emergency Situations

LFV70 LFV60 LFV6

The LfV70/60/6 Series is equipped with digital signal input terminals of two DVI-D, HDMI, DisplayPort\*, DIGITAL LINK\*, and USB. If the main video and audio signals are interrupted, the system immediately switches to alternative signals. This makes it ideal for mission critical control rooms and surveillance centres.

\* LfV70 Series only.



If the main display signal is interrupted, the image is simply cut off. Even if the main display signal is interrupted, the system switches to a back-up signal, so the image is not cut off.

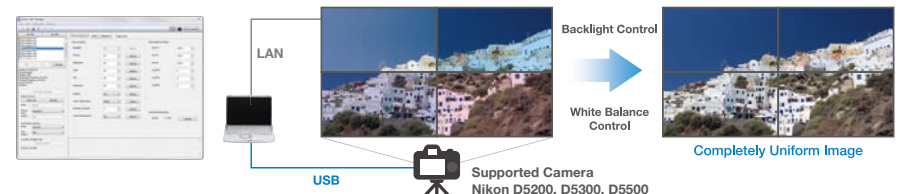
### Video Wall Manager Software and Auto Display Adjustment Upgrade Kit

LFV70 LFV60 LFV6 LFV5

Panasonic's free Video Wall Manager software can be used with LfV Series displays. With this software, you can calibrate display colour using a colour sensor (optional), adjust display settings, and control and manage data via PC. If you upgrade this software with an optional TY-VUK10 Auto Camera Adjustment Kit, you can adjust brightness and colour among multiple displays automatically using a compatible camera (Nikon D5200/D5300/D5500)\*.

\* Supports Ver.1.1 or later

\* Available only with normal zoom lens: AF-S DX NIKKOR 18–55 mm f/3.5–5.6G VR, AF-S DX NIKKOR 18–140 mm f/3.5–5.6G ED VR  
With LfV70 and TY-VUK10 connected



Auto Display Adjustment Upgrade Kit: <http://panasonic.net/prodisplays/products/ty-vuk10/index.html>

# LFX Series



| Model no.                           | TH-47LFX60U  | TH-47LFX6NU                                 |
|-------------------------------------|--|---|
| <b>DISPLAY PANEL</b>                |  |   |
| Screen Size (Diagonal)/Aspect Ratio | 46.9-inch (1192 mm)/16:9   | 46.9-inch (1192 mm)/16:9                    |
| Panel Type                          | LCD IPS Panel/D-LED  | LCD IPS Panel/D-LED                         |
| Effective Display Area (W x H)      | 40.9" x 23.0" (1039 x 584 mm)  | 40.9" x 23.0" (1039 x 584 mm)               |
| Number of Pixels (H x V)            | 1920 x 1080 pixels   | 1920 x 1080 pixels                          |
| Brightness                          | 2000 cd/m <sup>2</sup> (Typ)   | 1200 cd/m <sup>2</sup> (Typ)                |
| Contrast Ratio                      | 1300:1   | 1300:1                                      |
| Dynamic Contrast                    | 500000:1   | 500000:1                                    |
| Response Time                       | 10 ms (G to G)   | 10 ms (G to G)                              |
| Viewing Angle                       | 178°/178°  | 178°/178°                                   |
| <b>TERMINAL</b>                     |  |   |
| VIDEO In                            | —  | —   |
| Audio In (L/R)                      | —  | —   |
| HDMI In                             | HDMI Type A Connector x 1  |   |
| Component/RGB In                    | —  |   |
| Audio In (L/R)                      | —  |   |
| DVI-D In                            | DVI-D 24-pin x 1   |   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)  |   |
| PC In                               | Mini D-Sub 15-pin x1 (Female)  |   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)   |   |
| Audio Out (L/R)                     | Pin Jack x 1 set   |   |
| DIGITAL LINK                        | RJ45 x 1 (Shared with LAN)   |   |
| Serial In                           | D-Sub 9-pin x 1, RS-232C Compatible  |   |
| LAN                                 | RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)                                   |   |
| <b>GENERAL</b>                      |  |   |
| Power Requirements                  | 110-127 V AC, 50 Hz/60 Hz  | 110-127 V AC, 50 Hz/60 Hz                   |
| Power Consumption                   | 370 W  | 270 W                                       |
| Power Off Condition                 | Approx. 0.3 W  | Approx. 0.3 W                               |
| Stand-by Condition                  | Approx. 0.5 W  | Approx. 0.5 W                               |
| Outdoor Mode On                     | Approx. 41 W   | Approx. 41 W                                |
| Network Stand-by Mode               | Approx. 16 W   | Approx. 16 W                                |
| Dimensions (W x H x D)              | 45.8" x 27.8" x 8.5" (1162 x 706 x 216 mm)   | 45.8" x 27.8" x 8.5" (1162 x 706 x 216 mm)  |
| Carton Size (W x H x D)             | 51.5" x 33.5" x 12.7" (1308 x 851 x 323 mm)  | 51.5" x 33.5" x 12.7" (1308 x 851 x 323 mm) |
| Weight                              | Approx. 103.0 lbs. (47.0 kg)   | Approx. 103.0 lbs. (47.0 kg)                |
| Gross Weight                        | Approx. 121.0 lbs. (55.0 kg)   | Approx. 121.0 lbs. (55.0 kg)                |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400 x 400 mm)  |   |
| Built-in Speakers                   | —  |   |
| Direct Sunlight Capability          | Yes (Built-in Air Cooling System)  |   |
| Dust and Water Resistant Level      | IP55 Equivalent  |   |
| Orientation                         | Landscape/Portrait   |   |
| Tilting Angle                       | 0-20 degrees forward with landscape and portrait setting / 0-20 degrees backward with portrait setting*1 |   |
| Operating Environment*2             | Temperature: -4 °F*3 to 122 °F (-20 °C*3 to 50 °C) / Humidity: 20 % to 80 % (Non Condensation)           |   |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C) / Humidity: 20 % to 80 % (Non Condensation)               |   |
| Operating Time*4                    | 24 h/day   |   |
| <b>OPTIONS</b>                      |  |   |
| Replacement Air Filter              | TY-AF60STD   | TY-AF60STD                                  |
| Digital Interface Box               | ET-YFB100G   | ET-YFB100G                                  |
| DIGITAL LINK Switcher               | ET-YFB200G   | ET-YFB200G                                  |
| Early Warning Software*5            | ET-SWA100  | ET-SWA100                                   |

\*1: Please contact your sales representative with regard to the tilt angle before installation. \*2: Don't use in places where the presence of corrosive gases or salt damage area. \*3: When used in Outdoor mode. \*4: In case of 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. \*5: Suffix of the part number may differ depending on the license type.

## Dust and Water Resistance Performance – Ideal for Outdoor Installation

IP level dust and water resistant performance provides tough durability in harsh conditions.

\* What is IP?: This denotes the degree of dust and water resistance. IP is an abbreviation of the international standard Ingress Protection. (IEC60529)

| Dust Resistance |   | Water Resistance |                              |
|-----------------|---|------------------|------------------------------|
| Level           | Degree of Protection  | Level            | Degree of Protection         |
| 5               | Protected against dust limited ingress (no harmful deposit) | 5                | Protected against water jet. |

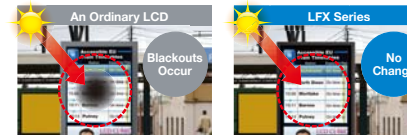
## High-Brightness 2000-cd/m<sup>2</sup> Model with Wide-Viewing-Angle IPS Panel and LED Backlight

Images are clear even in brightly lit places. Full 2000 cd/m<sup>2</sup>\* brightness maintains excellent visibility under direct sunlight. This makes the LFX ideal for installation in drive-through lanes. And because the brightness isn't affected by external light, information such as menu items and prices remain clear and easy to read.

\* TH-47LFX60 only.

## Forced Air-Cooling System Helps to Prevent Blackouts and Dew Condensation

Outside air is brought into the cabinet to produce an airflow between the front glass and the LCD panel. This suppresses internal temperature rises and prevents blackouts when the display is installed outdoors. It also serves as a countermeasure against condensation.



Direct sunlight raises the LCD panel temperature and causes blackouts.

The LFX operates stably even outdoors under direct sunlight.

## Highly Durable Display Resists Temperature Changes and the Summer Sun

Featuring an operating temperature range of -20°C\*1 to 50°C (-4 °F\*1 to 122 °F), performance remains unchanged even in cold and hot climates.

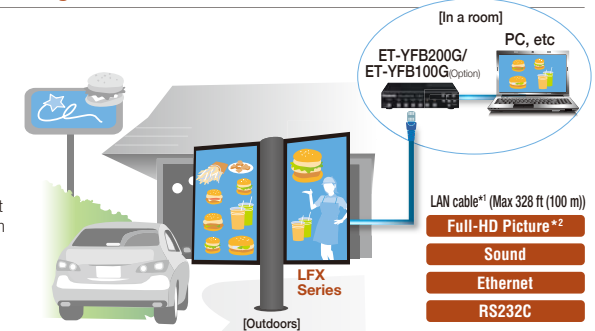
\*1: When used in Outdoor mode.

## DIGITAL LINK for Transmission of Video, Audio and Control Signals for up to 328 ft (100m) with a Single LAN Cable

Only a single LAN cable\*1 is required to transmit uncompressed HD video, audio and control signals for a distance of up to 328 ft (100m). This enables indoor installation of the PC and other devices connected to the display at an outdoor location in order to protect the PC and devices from rain and dust. Since only one cable needs to be connected between the PC and panel, cable routing work is quick and easy. Because a control signal can also be sent simultaneously, it is easy to upgrade the system by combining it with the optional DIGITAL LINK Switcher (ET-YFB200G)/Digital Interface Box (ET-YFB100G).

\*1: Use an STP cable of CAT5e or higher.

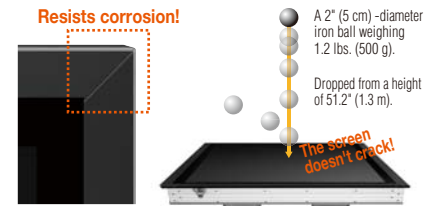
\*2: WUXGA (1920 x 1200 pixels) compatible.



## Outdoor

## Aluminum Cabinet and Tempered Glass

The aluminum cabinet strongly resists corrosion. In addition, tempered glass ensures rugged strength against impacts.



## High Reliability Enables Continuous 24-Hour Operation

The use of a highly durable panel and electronic components allows continuous 24-hour operation, ideal for installation in 24/7 stores, drive-thrus, public places, etc.

## Supporting Stable Operation – Early Warning Software (ET-SWA100)

Early Warning Software monitors the status of display connected to an intranet and informs you when an abnormality is detected or predicted, and when there are symptoms of trouble. This minimizes display downtime to support more stable operation.

## Feature video



Outdoor Tough Signage Full HD LCD Display video



# LFB Series



## Multi Touch Screen

| Model no.                           | TH-80LFB70U   | TH-65LFB70U   | TH-50LFB70U   |
|-------------------------------------|---|---|---|
| <b>DISPLAY PANEL</b>                |   |   |   |
| Screen Size (Diagonal)/Aspect Ratio | 80.0-inch (2032 mm)/16:9  | 64.5-inch (1638 mm)/16:9  | 49.5-inch (1257 mm)/16:9  |
| Panel Type                          | LCD VA Panel/E-LED  | LCD VA Panel/E-LED  | LCD VA Panel/E-LED  |
| Effective Display Area (W x H)      | 69.7" x 39.2" (1771 x 996 mm)   | 56.2" x 31.6" (1428 x 803 mm)   | 43.1" x 24.3" (1095 x 616 mm)   |
| Number of Pixels (H x V)            | 1920 x 1080 pixels  | 1920 x 1080 pixels  | 1920 x 1080 pixels  |
| Brightness                          | 350 cd/m <sup>2</sup> (Typ)   | 350 cd/m <sup>2</sup> (Typ)   | 350 cd/m <sup>2</sup> (Typ)   |
| Contrast Ratio                      | 5000:1  | 4000:1  | 5000:1  |
| Response Time                       | 4 ms (G to G)   | 6.5 ms (G to G)   | 6.5 ms (G to G)   |
| Viewing Angle                       | 176°/176°   | 178°/178°   | 176°/176°   |
| <b>TERMINAL</b>                     |   |   |   |
| Detection Method                    | Infrared Blocking Detection Method  | Infrared Blocking Detection Method  | Infrared Blocking Detection Method  |
| PC Connection Port                  | USB (3.0 Compliant)   | USB (3.0 Compliant)   | USB (3.0 Compliant)   |
| VIDEO In                            | BNC x 1   | BNC x 1   | BNC x 1   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with Component/RGB In)                                  | Stereo Mini Jack (M3) x 1 (Shared with Component/RGB In)                                  | Stereo Mini Jack (M3) x 1 (Shared with Component/RGB In)                                  |
| HDMI In                             | HDMI Type A Connector x 2   | HDMI Type A Connector x 2   | HDMI Type A Connector x 2   |
| Component/RGB In                    | BNC x 1 set   | BNC x 1 set   | BNC x 1 set   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with VIDEO In)  | Stereo Mini Jack (M3) x 1 (Shared with VIDEO In)  | Stereo Mini Jack (M3) x 1 (Shared with VIDEO In)  |
| DVI-D In                            | DVI-D 24-pin (Digital) x 1  | DVI-D 24-pin (Digital) x 1  | DVI-D 24-pin (Digital) x 1  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)   | Stereo Mini Jack (M3) x 1 (Shared with PC In)   | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |
| PC In                               | Mini D-Sub 15-pin x1 (Female), Plug & Play (VESA DDC 2B)                                  | Mini D-Sub 15-pin x1 (Female), Plug & Play (VESA DDC 2B)                                  | Mini D-Sub 15-pin x1 (Female), Plug & Play (VESA DDC 2B)                                  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |
| PC Out                              | Mini D-Sub 15-pin x1  | Mini D-Sub 15-pin x1  | Mini D-Sub 15-pin x1  |
| USB A                               | TYPE A USB Connector x 1 (For Memory Viewer)  | TYPE A USB Connector x 1 (For Memory Viewer)  | TYPE A USB Connector x 1 (For Memory Viewer)  |
| USB B                               | TYPE B USB Connector x 1 (For Touch Panel)  | TYPE B USB Connector x 1 (For Touch Panel)  | TYPE B USB Connector x 1 (For Touch Panel)  |
| Serial                              | D-Sub 9-pin x 1 (male) for external control, RS-232C Compatible                           | D-Sub 9-pin x 1 (male) for external control, RS-232C Compatible                           | D-Sub 9-pin x 1 (male) for external control, RS-232C Compatible                           |
| DIGITAL LINK                        | RJ45 x 1 (Shared with LAN)  | RJ45 x 1 (Shared with LAN)  | RJ45 x 1 (Shared with LAN)  |
| LAN                                 | RJ45 x 1, 100BASE-TX, Compatible with PjLink™ (Shared with DIGITAL LINK)                  | RJ45 x 1, 100BASE-TX, Compatible with PjLink™ (Shared with DIGITAL LINK)                  | RJ45 x 1, 100BASE-TX, Compatible with PjLink™ (Shared with DIGITAL LINK)                  |
| Function Slot                       | SLOT2.0 x 1   | SLOT2.0 x 1   | SLOT2.0 x 1   |
| <b>GENERAL</b>                      |   |   |   |
| Power Requirements                  | 110-127 V AC, 50/60 Hz  | 110-127 V AC, 50/60 Hz  | 110-127 V AC, 50/60 Hz  |
| Power Consumption                   | 350 W   | 215 W   | 140 W   |
| Power Off Consumption               | Approx. 0.3 W   | Approx. 0.3 W   | Approx. 0.3 W   |
| Stand-by Condition                  | Approx. 0.5 W   | Approx. 0.5 W   | Approx. 0.5 W   |
| Dimensions (W x H x D)              | 73.5" x 43.0" x 4.1" (1868 x 1093 x 104 mm)   | 59.7" x 35.1" x 4.2" (1517 x 892 x 106 mm)  | 46.7" x 27.8" x 4.1" (1185 x 705 x 103 mm)  |
| Carton Size (W x H x D)             | 81.7" x 52.0" x 16.0" (2075 x 1319 x 404 mm)  | 67.8" x 40.5" x 11.3" (1720 x 1027 x 286 mm)  | 54.6" x 33.1" x 11.3" (1387 x 839 x 286 mm)   |
| Weight                              | Approx. 185.2 lbs. (84.0 kg)  | Approx. 127.9 lbs. (58.0 kg)  | Approx. 72.8 lbs. (33.0 kg)   |
| Gross Weight                        | Approx. 227.0 lbs. (103.0 kg)   | Approx. 150.0 lbs. (68.0 kg)  | Approx. 88.2 lbs. (40.0 kg)   |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | 26.9" x 11.8" (684 x 300 mm)  | 15.8" x 11.8" (400 x 300 mm)  |
| Protective Glass Thickness          | Approx. 0.16" (4 mm)/Anti-Glare   | Approx. 0.13" (3.2 mm)/Anti-Glare   | Approx. 0.1" (2.5 mm)/Anti-Glare  |
| Built-in Speaker                    | 20 W [10 W + 10 W]  | 20 W [10 W + 10 W]  | 20 W [10 W + 10 W]  |
| External Speaker                    | 8 Ω, 20 W [10 W + 10 W] (10 % THD)  | 8 Ω, 20 W [10 W + 10 W] (10 % THD)  | 8 Ω, 20 W [10 W + 10 W] (10 % THD)  |
| Orientation                         | Landscape/Portrait  | Landscape/Portrait  | Landscape/Portrait  |
| Tilting Angle                       | 0-20 degrees with landscape setting*1   | Vertical only*1   | 0-20 degrees with landscape setting*1   |
| Operating Environment               | Temperature: 32 °F to 104 °F (0 °C to 40 °C), Humidity: 20 % to 80 % (Non Condensation)   | Temperature: 32 °F to 104 °F (0 °C to 40 °C), Humidity: 20 % to 80 % (Non Condensation)   | Temperature: 32 °F to 104 °F (0 °C to 40 °C), Humidity: 20 % to 80 % (Non Condensation)   |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C), Humidity: 20 % to 80 % (Non Condensation) | Temperature: -4 °F to 140 °F (-20 °C to 60 °C), Humidity: 20 % to 80 % (Non Condensation) | Temperature: -4 °F to 140 °F (-20 °C to 60 °C), Humidity: 20 % to 80 % (Non Condensation) |
| Operating Time*2                    | 18 h/day  | 18 h/day  | 18 h/day  |
| <b>OPTIONS</b>                      |   |   |   |
| Pedestal                            | TY-ST65P20  | TY-ST65P20  | TY-ST42P50  |
| Wall-hanging Bracket                | TY-WK70PV50 (Vertical)  | TY-WK65PR20 (Vertical)  | TY-WK42PV20 (Vertical)/TY-WK42PR20 (Angled)   |
| Ceiling-hanging Bracket             | —   | —   | TY-CE42PS20   |
| Mobile Stand                        | TY-ST80LF70   | TY-ST65PB2  | TY-ST50PB2/TY-ST58PF20  |
| Easy Wireless Stick                 | ET-UW100  | ET-UW100  | ET-UW100  |
| Digital Interface Box               | ET-YFB100G  | ET-YFB100G  | ET-YFB100G  |
| DIGITAL LINK Switcher               | ET-YFB200G  | ET-YFB200G  | ET-YFB200G  |
| Early Warning Software*3            | ET-SWA100   | ET-SWA100   | ET-SWA100   |
| <b>FUNCTION BOARD</b>               |   |   |   |
| HD-SDI Terminal Board               | TY-FB9HD  | TY-FB9HD  | TY-FB9HD  |
| HD-SDI Terminal Board with Audio    | TY-FB10HD   | TY-FB10HD   | TY-FB10HD   |
| Dual Link HD-SDI Terminal Board     | TY-FB11DHD  | TY-FB11DHD  | TY-FB11DHD  |
| Dual HDMI Terminal Board            | TY-FB10HMD  | TY-FB10HMD  | TY-FB10HMD  |
| BNC Dual Video Terminal Board       | TY-FB9BD  | TY-FB9BD  | TY-FB9BD  |
| DVI-D Terminal Board                | TY-FB11DD   | TY-FB11DD   | TY-FB11DD   |

### Feature videos



Built-in Whiteboard Function



Whiteboard Software Ver.5 for PC



Introduction of Panasonic Wireless Solution



Panasonic Wireless Projector for iOS v3.3.0



Panasonic Wireless Projector for Android v2.4.0



\*1: Please contact your sales representative with regard to the tilt angle before installation. \*2: In case of 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.

\*3: Suffix of the part number may differ depending on the license type.



| Model no.                           | TH-80LFC70U   | TH-65LFC70U                                  | TH-50LFC70U   |
|-------------------------------------|---|--|---|
| <b>DISPLAY PANEL</b>                |   |  |   |
| Screen Size (Diagonal)/Aspect Ratio | 80.0-inch (2032 mm)/ 16:9   | 64.5-inch (1638 mm)/16:9                     | 49.5-inch (1257 mm)/16:9  |
| Panel Type                          | LCD VA Panel/E-LED  | LCD VA Panel/E-LED                           | LCD VA Panel/E-LED  |
| Effective Display Area (W x H)      | 69.7" x 39.2" (1771 x 996 mm)   | 56.2" x 31.6" (1428 x 803 mm)                | 43.1" x 24.3" (1095 x 616 mm)   |
| Number of Pixels (H x V)            | 1920 x 1080 pixels  | 1920 x 1080 pixels                           | 1920 x 1080 pixels  |
| Brightness                          | 350 cd/m <sup>2</sup> (Typ)   | 350 cd/m <sup>2</sup> (Typ)                  | 350 cd/m <sup>2</sup> (Typ)   |
| Contrast Ratio                      | 5000:1  | 4000:1                                       | 5000:1  |
| Response Time                       | 4 ms (G to G)   | 6.5 ms (G to G)                              | 6.5 ms (G to G)   |
| Viewing Angle                       | 176°/176°   | 178°/178°                                    | 176°/176°   |
| <b>TERMINAL</b>                     |   |  |   |
| VIDEO In                            | BNC x 1   |  | BNC x 1   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with Component/RGB In)                                  |  | Stereo Mini Jack (M3) x 1 (Shared with Component/RGB In)                                  |
| HDMI In                             | HDMI Type A Connector x 2   |  | HDMI Type A Connector x 2   |
| Component/RGB In                    | BNC x 1 set   |  | BNC x 1 set   |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with VIDEO In)  |  | Stereo Mini Jack (M3) x 1 (Shared with VIDEO In)  |
| DVI-D In                            | DVI-D 24-pin (Digital) x 1  |  | DVI-D 24-pin (Digital) x 1  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |  | Stereo Mini Jack (M3) x 1 (Shared with PC In)   |
| PC In                               | Mini D-Sub 15-pin x1 (Female), Plug & Play (VESA DDC 2B)                                  |  | Mini D-Sub 15-pin x1 (Female), Plug & Play (VESA DDC 2B)                                  |
| Audio In (L/R)                      | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)  |
| PC Out                              | Mini D-Sub 15-pin x 1   |  | Mini D-Sub 15-pin x1  |
| USB                                 | TYPE A USB Connector x 1 (For Memory Viewer)  |  | TYPE A USB Connector x 1 (For Memory Viewer)  |
| Serial                              | D-Sub 9-pin x 1 (male) for external control, RS-232C Compatible                           |  | D-Sub 9-pin x 1 (male) for external control, RS-232C Compatible                           |
| DIGITAL LINK                        | RJ45 x 1 (Shared with LAN)  |  | RJ45 x 1 (Shared with LAN)  |
| LAN                                 | RJ45 x 1, 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)                   |  | RJ45 x 1, 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)                   |
| Function Slot                       | SLOT2.0 x 1   |  | SLOT2.0 x 1   |
| <b>GENERAL</b>                      |   |  |   |
| Power Requirements                  | 110-127 V AC, 50/60 Hz  | 110-127 V AC, 50/60 Hz                       | 110-127 V AC, 50/60 Hz  |
| Power Consumption                   | 345 W   | 210 W  | 135 W   |
| Power off Consumption               | Approx. 0.3 W   | Approx. 0.3 W                                | Approx. 0.3 W   |
| Stand-by Condition                  | Approx. 0.5 W   | Approx. 0.5 W                                | Approx. 0.5 W   |
| Dimensions (W x H x D)              | 73.5" x 43.0" x 3.9" (1868 x 1093 x 99 mm)  | 58.4" x 33.8" x 3.8" (1484 x 859 x 97 mm)    | 45.3" x 26.5" x 3.7" (1151 x 672 x 94 mm)   |
| Carton Size                         | 81.7" x 52.0" x 16.0" (2075 x 1319 x 404 mm)  | 67.8" x 40.5" x 11.3" (1720 x 1027 x 286 mm) | 54.7" x 33.1" x 11.3" (1387 x 839 x 286 mm)   |
| Weight                              | Approx. 183.0 lbs. (83.0 kg)  | Approx. 121.3 lbs. (55.0 kg)                 | Approx. 66.1 lbs. (30.0 kg)   |
| Gross Weight                        | Approx. 222.7 lbs. (101.0 kg)   | Approx. 141.1 lbs. (64.0 kg)                 | Approx. 83.8 lbs. (38.0 kg)   |
| Pitch for Wall-Hanging              | VESA Compliant 15.8" x 15.8" (400 x 400 mm)   | 26.9" x 11.8" (684 x 300 mm)                 | 15.8" x 11.8" (400 x 300 mm)  |
| Protective Glass Thickness          | Approx. 0.16" (4 mm)/Anti-Glare   | Approx. 0.13" (3.2 mm)/Anti-Glare            | Approx. 0.1" (2.5 mm)/Anti-Glare  |
| Built-in Speaker                    | 20 W [10 W + 10 W]  | 20 W [10 W + 10 W]                           | 20 W [10 W + 10 W]  |
| External Speaker                    | 8 Ω, 20 W [10 W + 10 W] (10 % THD)  | 8 Ω, 20 W [10 W + 10 W] (10 % THD)           | 8 Ω, 20 W [10 W + 10 W] (10 % THD)  |
| Orientation                         | Landscape/Portrait  | Landscape/Portrait                           | Landscape/Portrait  |
| Tilting Angle                       | 0-20 degrees with landscape setting*1   | Vertical only*1                              | 0-20 degrees with landscape setting*1   |
| Operating Environment               | Temperature: 32 °F to 104 °F (0 °C to 40 °C), Humidity: 20 % to 80 % (Non Condensation)   |  | Temperature: 32 °F to 104 °F (0 °C to 40 °C), Humidity: 20 % to 80 % (Non Condensation)   |
| Storage Environment                 | Temperature: -4 °F to 140 °F (-20 °C to 60 °C), Humidity: 20 % to 80 % (Non Condensation) |  | Temperature: -4 °F to 140 °F (-20 °C to 60 °C), Humidity: 20 % to 80 % (Non Condensation) |
| Operating Time*2                    | 18 h/day  |  | 18 h/day  |
| <b>OPTIONS</b>                      |   |  |   |
| Pedestal                            | TY-ST65P20  | TY-ST65P20                                   | TY-ST42P50  |
| Wall-hanging Bracket                | TY-WK70PV50 (Vertical)  | TY-WK65PR20 (Vertical)                       | TY-WK42PV20 (Vertical)/TY-WK42PR20 (Angled)   |
| Ceiling-hanging Bracket             | —   | —  | TY-CE42PS20   |
| Mobile Stand                        | TY-ST80LF70   | TY-ST65PB2                                   | TY-ST50PB2/TY-ST58PF20  |
| Easy Wireless Stick                 | ET-UW100  | ET-UW100                                     | ET-UW100  |
| Digital Interface Box               | ET-YFB100G  | ET-YFB100G                                   | ET-YFB100G  |
| DIGITAL LINK Switcher               | ET-YFB200G  | ET-YFB200G                                   | ET-YFB200G  |
| Early Warning Software*3            | ET-SWA100   | ET-SWA100                                    | ET-SWA100   |
| <b>FUNCTION BOARD</b>               |   |  |   |
| HD-SDI Terminal Board               | TY-FB9HD  | TY-FB9HD                                     | TY-FB9HD  |
| HD-SDI Terminal Board with Audio    | TY-FB10HD   | TY-FB10HD                                    | TY-FB10HD   |
| Dual Link HD-SDI Terminal Board     | TY-FB11DHD  | TY-FB11DHD                                   | TY-FB11DHD  |
| Dual HDMI Terminal Board            | TY-FB10HMD  | TY-FB10HMD                                   | TY-FB10HMD  |
| BNC Dual Video Terminal Board       | TY-FB9BD  | TY-FB9BD                                     | TY-FB9BD  |
| DVI-D Terminal Board                | TY-FB11DD   | TY-FB11DD                                    | TY-FB11DD   |

### Feature video



Introduction of Panasonic Wireless Solution



Panasonic Wireless Projector for iOS v3.3.0



Panasonic Wireless Projector for Android v2.4.0

\*1: Please contact your sales representative with regard to the tilt angle before installation. \*2: In case of 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.

\*3: Suffix of the part number may differ depending on the license type.

# Multi Touch Screen LCD Displays LFB70 Series/ Network LCD Displays LFC70 Series

## Quick-Start Whiteboard LFB70

Start working on the built-in whiteboard instantly—just switch on the display. You can draw straight or freehand lines, and change line thickness, colour, and background using the tool palette. To switch input sources, picture settings, and volume, swipe the edge of the screen to display the main menu—no remote control necessary.



## Easy and Intuitive Operation LFB70

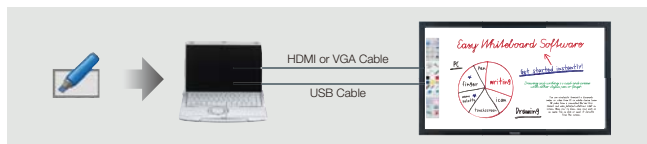
Four-point multi-touch functionality makes it easy to resize and move graphics around on your documents. The included Stylus Pen and Eraser accessory is a convenient way to write large amounts of text. So simple to use, even for children and less technically experienced presenters.



## Whiteboard Software for PC Extends Your Capabilities LFB70

Whiteboard Software for PC offers extra functionality for power users. As well as adding extra presentation tools and a PowerPoint® Link mode to easily import and modify PowerPoint files, the application's six-point touch interface lets up to six people write and draw simultaneously. Other highlights include:

- Color Universal Design presents color information accurately for all people, including those with color-vision defects\*4
- Three modes of operation\*\* (Whiteboard Function, PowerPoint(R) Link Mode, and Desktop Operation)
- More presentation tools\*\* (Loupe, Spotlight, Shade, Fade-out Marker)
- Screen video recorder function\*\*4
- Image capture
- Image import (JPEG, PNG, BMP)
- Start-up from external memory\*\*4



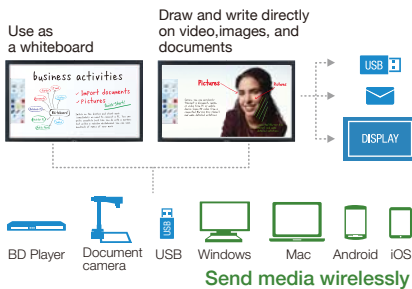
Whiteboard Software Version 5.1 for Windows Supported by Windows® 7, Windows® 8, and Windows® 8.1  
Whiteboard Software Version 1.1 for Macintosh Supported by Mac OS X v10.10.3  
Whiteboard Software Version 1.0 for Macintosh Supported by Mac OS X v10.6.8, v10.7.5, v10.8.5, v10.9.1

## Write and Draw On Media from External Devices LFB70

You can write on almost any media you like, including video and still images. Swipe to bring up the main menu, display content from your external device, and start making notes. These dynamic multi-media capabilities make it easy for teams to share information and contribute ideas.

## Easy Save and Share LFB70

Produce up to 100 pages\*1 of work on the whiteboard and save them to the built-in memory\*2 or USB thumb drive as JPEG image files. You can also copy data stored on internal memory to a USB drive, or send your pages as image files directly from the screen via email\*3. Keeping everyone in the loop is simple.



## User-Friendly Drawing Tool

A Color Universal Design function is included in consideration of those with color-vision defects. This practical feature ensures that colors are expressed clearly and accurately. Color Universal Design setting is ON/OFF-selectable (default setting is ON) according to user preference.

### What is Color Universal Design (CUD)?

Due to genetic characteristics or other vision disorders, people can perceive colors differently. Some individuals can have difficulty distinguishing between certain color combinations. CUD ensures that color information is accurately expressed for the comfort and convenience of everyone.

## Wireless and USB Connectivity

### Miracast for Instant Wireless Sharing

Transmit documents, Full-HD video, images, and audio from compatible Android devices and Windows PCs to the big screen with Miracast — the latest wireless standard that doesn't require software or complicated setup. With no cables, fast connection, and high bandwidth, Miracast™ makes it easy for everyone to contribute.



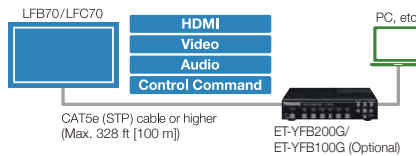
### Instant Playback of Content via USB

Playing back Full HD video, still images, and digital documents from USB storage devices couldn't be easier. Just insert the memory device into the display's USB port and commence your presentation without having to first connect a PC. The Memory Viewer app enables image\*5 (JPEG, BMP) and video\*5 (WMV, AVI, MOV, MP4, MPG) selection from handy thumbnail reviews.

## System Flexibility

### DIGITAL LINK

DIGITAL LINK transmits uncompressed Full HD video, audio, and control commands through a single CAT5e cable for up to 328 ft (100 m). Connect all your source devices to an optional DIGITAL LINK Switcher (ET-YFB200G)/Digital Interface Box (ET-YFB100G) and use just one cable to link your display. This simplifies installation and saves on cabling costs.



### Other Features

- Expand and Customize with SLOT.2.0
- PJLink™ Compliant
- Picture-in-Picture Capability
- Built-in Speaker
- Toughened Non-Reflective Glass

\*1 With built-in memory setting to ON. When the data size per file is large, the number of available pages may be decreased.  
\*2 Built-in memory ON/OFF is included. When OFF is selected, only one whiteboard page can be created.  
\*3 Can be sent as JPEG format only. Does not support mail servers using SSL or STARTTLS. \*4 For Windows(R) only.  
\*5 Some files may not be viewable even if they are encoded in a supported format. \*6 Supports 1080/60p signal only.

Note: Images on screen are simulated. Use of this product shall be in compliance with all relevant and applicable copyright protection laws. Data or work entered by the user into the Product's external inputs (including but not limited to motion pictures and photography) shall be the creation of the user (excluding quoting) or shall be authorized for use by the author(s) of the data or work. Panasonic has no right or authority to grant the product user any licence, rights, and titles to use, modify, copy, or distribute, etc., any data or work not created by the user or used with express permission of the data or work's author(s).

## Wireless Apps for Tablet and Smartphone

The Panasonic Wireless Projector for iOS app enables wireless transmission of media from iPad®, iPhone®, and iPod touch®. You can also use the Panasonic Wireless Projector for Android app for Android devices. Share PowerPoint® documents and PDF files quickly and conveniently on the big screen. The apps also support simultaneous display from multiple devices using Multi Mode.



### 16-Window Index\*7



## Easily Connect a Second Display

Use a VGA cable to mirror\*6 content on a second display or projector — even the notes you might add to documents, images, or video during your presentation. This dual-display capability makes both the LFB70 and LFC70 series ideal for use in larger venues.

Supported Inputs: HDMI/DVI/PC/Memory Viewer/Whiteboard







| Model no.             | TH-65LFE8U   | TH-55LFE8U  | TH-48LFE8U   | TH-43LFE8U  |  |
|-----------------------|--|---|--|---|--|
| DISPLAY PANEL         | Screen Size (Diagonal)/Aspect Ratio  | 64.5-inch (1638 mm)/16:9                                  | 54.6-inch (1387 mm)/16:9   | 47.6-inch (1209 mm)/16:9                                  | 42.5-inch (1079 mm)/16:9                                 |
|                       | Panel Type   | LCD VA Panel/E-LED  | LCD IPS Panel/D-LED  | LCD VA Panel/D-LED  | LCD VA Panel/D-LED                                       |
|                       | Effective Display Area (W x H)   | 56.2" x 31.6" (1428 x 803 mm)                             | 47.6" x 26.7" (1209 x 680 mm)  | 41.5" x 23.3" (1054 x 592 mm)                             | 37.0" x 20.8" (940 x 529 mm)                             |
|                       | Number of Pixels (H x V)   | 1920 x 1080 pixels  | 1920 x 1080 pixels   | 1920 x 1080 pixels  | 1920 x 1080 pixels                                       |
|                       | Brightness   | 350 cd/m <sup>2</sup>                                     | 350 cd/m <sup>2</sup>  | 350 cd/m <sup>2</sup>                                     | 350 cd/m <sup>2</sup>                                    |
|                       | Contrast Ratio   | 5000:1  | 1200:1   | 4000:1  | 3000:1   |
|                       | Response Time  | 6.5 ms (G to G)   | 9 ms (G to G)  | 8 ms (G to G)   | 6.5 ms (G to G)  |
|                       | Viewing Angle  | 176°/176° (CR≥20)   | 178°/178° (CR≥20)  | 178°/178° (CR≥20)   | 178°/178° (CR≥10)  |
| TERMINAL*1            | VIDEO In   | 4-pole Mini Jack (M3) x 1                                 |  | 4-pole Mini Jack (M3) x 1                                 |  |
|                       | Audio In(L/R)  | -   |  | -   |  |
|                       | HDMI In  | HDMI TYPE-A Connector x 2* *VIERA LINK is not supported.  |  | HDMI TYPE-A Connector x 2* *VIERA LINK is not supported.  |  |
|                       | Component/RGB In   | -   |  | -   |  |
|                       | Audio In (L/R)   | -   |  | -   |  |
|                       | DVI-D In   | DVI-D 24-pin x 1  |  | DVI-D 24-pin x 1  |  |
|                       | Audio In (L/R)   | Stereo Mini Jack (M3) x 1 (Shared with PC In)             |  | Stereo Mini Jack (M3) x 1 (Shared with PC In)             |  |
|                       | PC In  | Mini D-sub 15-pin x 1                                     |  | Mini D-sub 15-pin x 1                                     |  |
|                       | Audio In (L/R)   | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)          |  | Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)          |  |
|                       | PC Out   | -   |  | -   |  |
|                       | USB  | TYPE A USB Connector 5V DC/1A (USB 3.0 is not supported.) |  | TYPE A USB Connector 5V DC/1A (USB 3.0 is not supported.) |  |
|                       | Serial   | D-sub 9-pin x 1, RS-232C Compatible                       |  | D-sub 9-pin x 1, RS-232C Compatible                       |  |
|                       | DIGITAL LINK   | -   |  | -   |  |
| LAN                   | RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™   |   | RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™   |   |  |
| Function Slot         | -  |   | -  |   |  |
| GENERAL               | Power Requirements   | 110-127 V AC, 50 Hz/60 Hz                                 | 110-127 V AC, 50 Hz/60 Hz  | 110-127 V AC, 50 Hz/60 Hz                                 | 110-127 V AC, 50 Hz/60 Hz                                |
|                       | Power Consumption  | 160 W   | 170 W  | 150 W   | 135 W  |
|                       | Power off Condition  | Approx. 0.3 W   | Approx. 0.3 W  | Approx. 0.3 W   | Approx. 0.3 W  |
|                       | Stand-by Condition   | Approx. 0.5 W   | Approx. 0.5 W  | Approx. 0.5 W   | Approx. 0.5 W  |
|                       | Dimensions (W x H x D)   | 57.2" x 32.7" x 2.5" (1451 x 829 x 62 mm)                 | 48.8" x 28.0" x 2.5" (1239 x 712 x 62 mm)  | 42.6" x 24.6" x 2.5" (1082 x 624 x 62 mm)                 | 38.2" x 22.1" x 2.4" (969 x 560 x 61 mm)                 |
|                       | Carton Size  | 65.7" x 41.5" x 11.1" (1667 x 1052 x 280 mm)              | 53.7" x 34.0" x 7.3" (1365 x 864 x 185 mm)   | 47.0" x 30.5" x 6.8" (1192 x 773 x 171 mm)                | 42.2" x 27.4" x 6.3" (1070 x 696 x 159 mm)               |
|                       | Bezel Width  | 0.3" (7.5 mm) (Left/Right/Top), 0.41" (10.5 mm) (Bottom)  | 0.5" (12.6 mm) (Left/Right/Top), 0.6" (14.5 mm) (Bottom)                                       | 0.5" (11.9 mm) (Left/Right/Top), 0.6" (14.7 mm) (Bottom)  | 0.5" (11.9 mm) (Left/Right/Top), 0.6" (14.9 mm) (Bottom) |
|                       | Weight   | Approx. 79.9 lbs. (36.2 kg)                               | Approx. 35.3 lbs. (16.0 kg)  | Approx. 25.4 lbs. (11.5 kg)                               | Approx. 19.2 lbs. (8.7 kg)                               |
|                       | Gross Weight   | Approx. 103.7 lbs. (47.0 kg)                              | Approx. 53.0 lbs. (24.0 kg)  | Approx. 37.5 lbs. (17.0 kg)                               | Approx. 30.9 lbs. (14.0 kg)                              |
|                       | Pitch for Wall-Hanging   | VESA Compliant 15.8" x 15.8" (400 x 400 mm)               |  | VESA Compliant 7.9" x 7.9" (200 x 200 mm)                 |  |
|                       | Built-in Speaker   | 20 W [10W + 10 W] (10% THD)                               |  | 20 W [10W + 10 W] (10% THD)                               |  |
|                       | External Speaker   | -   |  | -   |  |
|                       | Orientation  | Landscape/Portrait  |  | Landscape/Portrait  |  |
| Tilting Angle         | 0-20 degrees forward with landscape setting*3  |   | 0-20 degrees forward with landscape setting*3  |   |  |
| Operating Environment | Temperature: 32 °F to 104 °F (0 °C to 40 °C)*4 / Humidity: 20 % to 80 % (Non Condensation)*5   |   | Temperature: 32 °F to 104 °F (0 °C to 40 °C)*4 / Humidity: 20 % to 80 % (Non Condensation)*5   |   |  |
| Storage Environment   | Temperature: -4 °F to 140 °F (-20 °C to 60 °C)*4 / Humidity: 20 % to 80 % (Non Condensation)*5 |   | Temperature: -4 °F to 140 °F (-20 °C to 60 °C)*4 / Humidity: 20 % to 80 % (Non Condensation)*5 |   |  |
| Operating Time*6      | 16 h/day   |   | 16 h/day   |   |  |
| OPTIONS               | Pedestal   | TY-ST65PE8  | TY-ST43PE8   | TY-ST43PE8  | TY-ST43PE8   |
|                       | Early Warning Software*7   | ET-SWA100   | ET-SWA100  | ET-SWA100   | ET-SWA100  |

\*1: Due to the terminal block construction, some connection cables and USB memory devices cannot be used. Be sure to check the \*CONNECTION TERMINAL\* information in the product specification sheet.

For more information about product specifications, please visit: <http://panasonic.net/prodisplays/download/specsheets02.html>

\*2: Please contact your sales representative with regard to the tilt angle before installation.

\*3: Environmental temperature to use this unit at high altitudes (4593 ft (1400 m) and higher and below 9186 ft (2800 m) above sea level); 32 °F to 95 °F (0 °C to 35 °C).

\*4: 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

\*5: In case of 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.

\*6: Suffix of the part number may differ depending on the license type.

# Stylish LFE8 Professional Displays

## Hit the Cost-to-Performance Sweet Spot

### Installs in Just About Any Space

This slim design allows effective space utilization in stores, showrooms and conference rooms. With a depth of less than 2.5" (62 mm), it is also not oppressive when mounted on a wall. Available in four sizes: 65, 55, 48, and 43 inches.



### The Slim Bezel Enhances Viewing and Replacement

The bezel is about the same width all around the perimeter. On the 65-inch model, the bezel is only 0.3" (7.5 mm) wide on the top and both sides, and 0.41" (10.5 mm) on the bottom. In addition, when replacing, for example, a 60-inch PDP TV, a larger, 65-inch model can fit into almost the same space.



\* Compared with the previous 60-inch model.

### Simple Signage Operation with No Set-top Box

The LFE8 Series features a USB media player. Signage operation is possible by simply inputting the desired content via USB, eliminating the need for a set-top box. Both videos and still images can be displayed, so a wide variety of original signage content can be used.

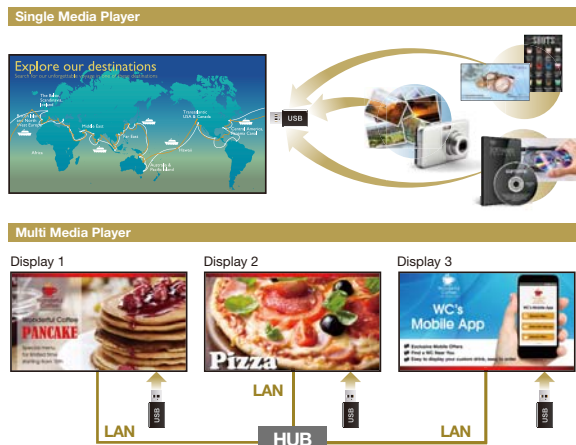
[Notes]

- The maximum size of file is 2 GB.
- You cannot play the files which are protected by Digital Rights Management (DRM).
- Both an image and the sound choose support form.
- Don't support reproduction of only an audio file.

[Applicable device]

- Devices with security feature are not supported.
- Devices not formatted with FAT16 or FAT32 cannot be used.
- The maximum memory size of USB is 32 GB.

\* Limitations exist for USB input. For details, please see the User's Manual.



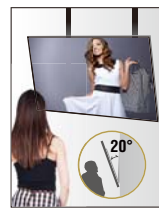
Connecting more than one unit with LAN cable reproduces files in USB memory simultaneously.  
\* Each display needs respective USB memory content.

### Choose the Installation to Match Your Application

The LFE8 Series is often used vertically for menu boards and town guide displays, and can be mounted in landscape and portrait. This provides information that is easy to see even in relatively high places inside the store, and increases mounting possibilities.



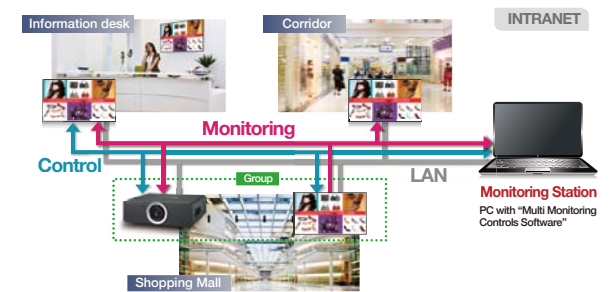
Portrait



\*Tilt 0-20 degrees forward with landscape setting.

### Multi Monitoring & Control Software Compatible

This free Panasonic original software enables you to monitor and control up to 2048 devices over a LAN network from a single PC. As a monitoring function, the status of multiple devices can be listed in groups, and then detailed information on each device can be separately displayed. Even more detailed information can be obtained by adding Early Warning Software (paid). As a control function, control commands such as power ON/OFF, input switching and command inputs can be executed, and a schedule function can be used.



\*Download Software from Global Website: <http://panasonic.net/prodisplays/download/software/index.html>

### Standalone Operation Saves Labor by Making Content Changes Over a Network

Multi Monitoring & Control Software makes it possible to change the content in the USB memory via LAN after installation. Content can be easily changed even when the display is installed in a high place or suspended from the ceiling. This enables smooth, easy operation.

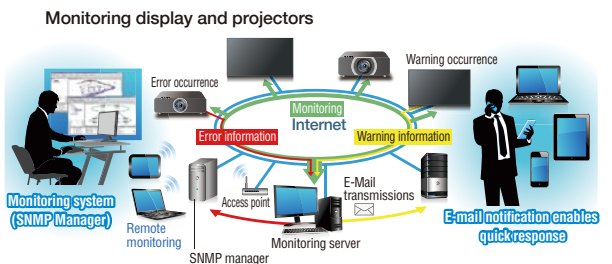


\* Depending on the production period, some products doesn't support this function. Please check Multi Monitoring & Control Software page for more information.  
<http://panasonic.net/prodisplays/download/software/multi/index.html>

### Early Warning Software Compatible

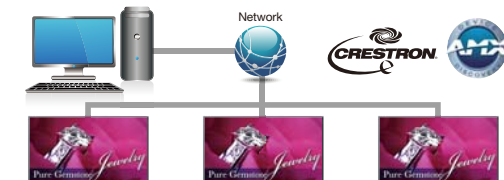
Combination with a network that includes Early Warning Software also allows remote monitoring of the panel's usage condition for cost-saving operation.

Early Warning Software:  
<http://panasonic.net/prodisplays/products/et-swa100/index.html>



### A LAN Control function for Internet-based control

This function is highly convenient for operating signage for multiple displays. Control is performed from a PC over a LAN network. General-purpose LAN cabling is used, and the PC allows troubleshooting if an error should occur, for immediate response.



#### Other Features

- Built-in Speakers are convenient for video conference
- Increased signal support for a wide variety of content

Panasonic professional displays at work in a variety of field and location.

## Arte, France

LFV Series  
TH-55LFV70 x 20

### Panasonic TH-55LFV70 videowall displays makes headlines at Arte TV NEWS

#### A reliable solution for secure broadcasting

Perfect immersion in the image means that the video walls have to satisfy many aesthetic criteria (weight, size, sharpness of edges) and give flawless image quality while making broadcasting secure. For Arte the new Panasonic screen, the TH-55LFV70 model, was a natural choice. These 55-inch video wall screens, with an ultra-slim bezel of just 0.14" (3.5 mm) from screen to screen, combine high image quality with extreme reliability.

Although display quality is especially important, continuity of broadcasting is vital because of the direct news output. An automatic switchover mode (Failover/Failback) is vital to avoid any breaks in transmission. With its two DVI-D ports, its HDMI, DisplayPort and USB ports with DIGITAL LINK technology, the video wall can switch automatically to an alternative feed if the main video signal is interrupted.

#### Why Panasonic?

- Ultra-slim bezel of just 0.14" (3.5 mm)
- High image quality with extreme reliability
- Failover/Failback



## Seibu Railway Co., Ltd., Japan

LQ Series  
TH-84LQ70 x 24

LF Series  
TH-70LF50 x 40

### Twenty-four highly durable 4K LCD displays installed for the first time\* at a train station in the Tokyo region.

#### New signage system introduced as a part of renovations timed for the 100th anniversary of the station's completion.

Panasonic professional displays already have protective glass over their surfaces, meaning protective panels are unnecessary and station users can see super-high-definition 4K images without any degradation.

\*As of February 24, 2015, survey by Panasonic.

#### Why Panasonic?

- Durability of protective glass
- Super-high-definition 4K images



70-inch full high-definition LCD displays are mounted on the columns in the passageway leading to the ticket gates, which are slightly thinner.

## Aichi Prefectural University, Japan

LFV Series  
TH-55LFV70 x 36

### Constructing a "Learning Common Environment" for Free and Active Discussion with a 330-inch-Equivalent Multi-Screen System for Flexible Image Layout

#### Creating a New Learning Common Environment to Nurture New-Generation Information System Technicians

In order to cultivate information system technicians who are capable of operating in today's information-oriented society, the Faculty of Information Science at Aichi Prefectural University focuses on the learning and research of advanced information technologies. In line with this goal, the university decided to renew its computer seminar room to construct a learning common environment that would provide students with greater flexibility for discussion.

#### Why Panasonic?

- The wide viewing angle and anti-glare features of the IPS panel
- The ultra-narrow bezel design
- The high 700 cd/m<sup>2</sup> brightness



This 36-Screen Multi-Vision System consists of bright, large-screen displays. The large screen completely fills one of the seminar room walls, bringing a lifelike ambience to the large, high-definition, 4K and other images created by the students.



Several related items of information can be displayed simultaneously, enabling presentations and discussions to proceed smoothly.

For more information about case studies, please visit: <http://panasonic.net/prodisplays/casestudies/>



|  |  | 4K         |            |             |             | Indoor     |            |            |            |            |           | Video Wall |           |             |             | Outdoor    |            | Multi Touch Screen |             |             | Network     |             |             | Standard    |             |            |            |            |            |
|--|--|------------|------------|-------------|-------------|------------|------------|------------|------------|------------|-----------|------------|-----------|-------------|-------------|------------|------------|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|
|  |  | TH-98LQ70U | TH-84LQ70U | TH-98LQ70LU | TH-84LQ70LU | TH-80LF50U | TH-70LF50U | TH-55LF80U | TH-49LF80U | TH-42LF80U | TH-55LF8U | TH-49LF8U  | TH-42LF8U | TH-55LFV70U | TH-55LFV60U | TH-55LFV6U | TH-47LFV5U | TH-47LFX60U        | TH-47LFX6NU | TH-80LFB70U | TH-65LFB70U | TH-50LFB70U | TH-80LFC70U | TH-65LFC70U | TH-50LFC70U | TH-65LFE8U | TH-55LFE8U | TH-48LFE8U | TH-43LFE8U |
| Size (inch)  |  | 98         | 84         | 98          | 84          | 80         | 70         | 55         | 49         | 42         | 55        | 49         | 42        | 55          | 55          | 55         | 47         | 47                 | 47          | 80          | 65          | 50          | 80          | 65          | 50          | 65         | 55         | 48         | 43         |
| SPECIFICATIONS   | Touch Operation                        | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | Yes         | Yes         | Yes         | -           | -           | -           | -          | -          | -          | -          |
|  | IP Rating                              | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | IP55               | IP55        | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Operating Time                         | 24         | 24         | 24          | 24          | 24         | 24         | 24         | 24         | 24         | 24        | 24         | 24        | 24          | 24          | 24         | 24         | 24                 | 24          | 18          | 18          | 18          | 18          | 18          | 18          | 16         | 16         | 16         | 16         |
|  | DIGITAL LINK                           | Yes        | Yes        | Yes         | Yes         | -          | -          | Yes        | Yes        | Yes        | -         | -          | -         | -           | -           | -          | -          | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
| INSTALLATION   | Wireless Function                      | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | Miracast                               | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | Protective Glass                       | Yes        | Yes        | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | Function Slot                          | SLOT NX    |            |             |             | SLOT2.0    |            |            |            |            |           |            |           | -           |             |            |            | SLOT2.0            |             |             |             | SLOT2.0     |             |             |             |            |            |            |            |
|  | 4 Input Multi Display (up to FHD)      | Yes        | Yes        | Yes         | Yes         | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Outdoor Installation                   | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | Yes                | Yes         | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Portrait                               | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | Multi Screen                           | -          | -          | -           | -           | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | -           | -           | -           | -           | -           | -           | Yes        | Yes        | Yes        | Yes        |
|  | Bezel H/V Adjustment                   | -          | -          | -           | -           | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | -           | -           | -           | -           | -           | -           | Yes        | Yes        | Yes        | Yes        |
|  | Pre Calibration                        | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
| FUNCTIONS  | Fan-less Design                        | -          | -          | -           | -           | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | -           | -           | -          | -          | -                  | -           | -           | -           | -           | -           | -           | -           | Yes        | Yes        | Yes        | Yes        |
|  | Monitor Out                            | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | Built-in Whiteboard                    | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | USB Media Player                       | -          | -          | -           | -           | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | Memory Viewer                          | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | Input Search                           | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | Digital Zoom                           | -          | -          | -           | -           | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | Daisy-Chain Connection                 | -          | -          | -           | -           | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Frame Creation                         | Yes        | Yes        | Yes         | Yes         | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | IR In/Out (infrared signal) Connection | -          | -          | -           | -           | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | -           | -           | -           | -           | -           | -           | Yes        | Yes        | Yes        | Yes        |
|  | Fail Over/Fail Back                    | -          | -          | -           | -           | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Power on Screen Delay                  | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | PC Power Management                    | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | DVI-D Power Management                 | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | HDMI Power Management                  | Yes        | Yes        | Yes         | Yes         | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | DIGITAL LINK Power Management          | -          | -          | -           | -           | -          | -          | Yes        | Yes        | Yes        | -         | -          | -         | -           | -           | -          | -          | -                  | -           | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Picture in Picture                     | -          | -          | -           | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | -           | -           | -           | -           | -           | -           | -          | -          | -          | -          |
|  | Brightness Sensor                      | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | -          | -          | -          | -         | -          | -         | -           | -           | -          | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |
|  | No Activity Power Off                  | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | No Signal Power Off                    | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | Input/Button Lock                      | Yes        | Yes        | Yes         | Yes         | Yes        | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
|  | Timer Setting                          | Yes        | Yes        | Yes         | Yes         | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        |
| Screen Saver   | Yes                                    | Yes        | Yes        | Yes         | Yes         | Yes        | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        |            |
| Early Warning Software Compatible*2                    | Yes                                    | Yes        | Yes        | Yes         | -           | -          | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        |            |
| Multi Monitoring & Control Software Compatible         | -                                      | -          | -          | -           | -           | -          | Yes        | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | -           | -           | -           | -           | -           | -           | Yes         | Yes        | Yes        | Yes        |            |
| Videowall Manager/ Auto Display Adjustment Upgrade Kit | -                                      | -          | -          | -           | -           | -          | Yes*3      | Yes*3      | Yes*3      | Yes*3      | Yes*3     | Yes*3      | Yes*3     | Yes*3       | Yes*3       | Yes*3      | Yes*3      | Yes*3              | -           | -           | -           | -           | -           | -           | -           | -          | -          | -          |            |
| Super High Quality Up-Scaling                          | Yes                                    | Yes        | Yes        | Yes         | -           | -          | -          | -          | -          | -          | -         | -          | -         | -           | -           | -          | -          | -                  | -           | -           | -           | -           | -           | -           | -           | -          | -          | -          |            |
| CONTROL  | Crestron Connected                     | Yes        | Yes        | Yes         | Yes         | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        |            |
|  | AMX D.D.                               | Yes        | Yes        | Yes         | Yes         | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes        | Yes        | Yes        |            |
|  | Extron XTP                             | Yes        | Yes        | Yes         | Yes         | -          | -          | Yes        | Yes        | Yes        | Yes       | Yes        | Yes       | Yes         | Yes         | Yes        | Yes        | Yes                | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | Yes         | -          | -          | -          | -          |

\*1: Limitations exist for USB input. For details, please see the User's Manual.

\*2: Suffix of the part number may differ depending on the license type.

\*3: Supports Ver.1.1 or later.