

Downloadable for Free

- Whiteboard Software
- Wireless Manager
- Multi Monitoring & Control Software

To download software for free.

<http://panasonic.net/prodisplays/download/software/index.html>



Optional

- Early Warning Software (ET-SWA100 Series)
- Video Wall Manager (download for free) & Auto Display Adjustment Upgrade Kit (TY-VUK10)

To download or activate this optional software, please visit PASS.

<http://panasonic.net/prodisplays/pass/>



Mobile App

- Wireless Projector (iOS/Android)

Download For iOS



For More Information

[http://panasonic.net/prodisplays/download/software/wd\\_ios/index.html](http://panasonic.net/prodisplays/download/software/wd_ios/index.html)

Download for Android



For More Information

[http://panasonic.net/prodisplays/download/software/wd\\_android/index.html](http://panasonic.net/prodisplays/download/software/wd_android/index.html)

- Visual System Products information (VSP info)

Download For iOS

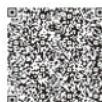


Download for Android



# Panasonic®

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.



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](https://www.youtube.com/PanasonicProDisplay)

Facebook - [www.facebook.com/panasonicprojector](https://www.facebook.com/panasonicprojector)

All information included here is valid as of June 2016.

CT16-EG02PF  
Printed in Japan.

# Panasonic BUSINESS



Professional  
**DISPLAYS**  
Line-up Catalog June 2016



Worldwide  
Olympic Partner

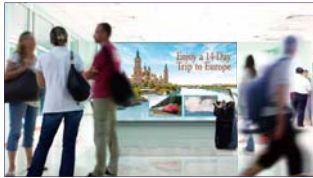


Worldwide  
Paralympic Partner



# Panasonic Professional Displays Lineup

## 4K UHD Display



LQ70 Series

500 cd/m²

98" TH-98LQ70

84" TH-84LQ70

98" TH-98LQ70L

84" TH-84LQ70L

Protective Glassless Model

- 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-55AF1

49" TH-49AF1

42" TH-42AF1



LF50 Series

700 cd/m²

80" TH-80LF50

70" TH-70LF50

LF80 Series

700 cd/m²

55" TH-55LF80

49" TH-49LF80

42" TH-42LF80

LF8 Series

500 cd/m²

55" TH-55LF8

49" TH-49LF8

42" TH-42LF8



(LF80 Series only)

(LF50 Series only)

## Video Wall



- Installation Flexibility
- High Reliability
- High Visibility

LFV70

700 cd/m²

55" TH-55LFV70

55" TH-55LFV60

LFV6

500 cd/m²

55" TH-55LFV6

47" TH-47LFV5



(LFV70 only)

(LFV70/LFV6/LFV6 only)

(LFV5 only)

## Outdoor



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

LFX60

2000 cd/m²

47" TH-47LFX60

LFX6N

1200 cd/m²

47" TH-47LFX6N



## Touch Screen



- Powerful and Intuitive Whiteboard
- Universal Wireless Support
- System Flexibility and Additional Features

BF1 Series

350 cd/m²

80" TH-80BF1

65" TH-65BF1

50" TH-50BF1



Portrait

SLOT 2.0

## Standard



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

EF1 Series

350 cd/m²

84" TH-84EF1

75" TH-75EF1

32" TH-32EF1

Narrow

LFE8 Series

350 cd/m²

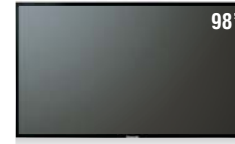
65" TH-65LFE8

55" TH-55LFE8

48" TH-48LFE8

43" TH-43LFE8





	Model no.	TH-98LQ70	TH-84LQ70		TH-98LQ70L	TH-84LQ70L
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	98-inch (2476.9 mm)/16:9	84-inch (2134.6 mm)/16:9		98-inch (2476.9 mm)/16:9	84-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)	2159 x 1214 mm (85.0" x 47.8")	1860 x 1047 mm (73.3" x 41.3")		2159 x 1214 mm (85.0" x 47.8")	1860 x 1047 mm (73.3" x 41.3")
	Resolution (H x V)	3840 x 2160	3840 x 2160		3840 x 2160	3840 x 2160
	Brightness (Typ)	500 cd/m²	500 cd/m²		500 cd/m²	500 cd/m²
	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°
TERMINAL	HDMI In	HDMI TYPE A Connector x4, HDMI 1*1/HDMI 2*1 (Up to 4K@50/60Hz), HDMI 3*1/HDMI 4*2 (Up to 2K@50/60Hz)			HDMI TYPE A Connector x4, HDMI 1*1/HDMI 2*1 (Up to 4K@50/60Hz), HDMI 3*1/HDMI 4*2 (Up to 2K@50/60Hz)	
	DisplayPort In	DisplayPort x 1 (DP1.2a)*2			DisplayPort x 1 (DP1.2a)*2	
	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)*3			Mini D-sub 15-pin x 1 (Female)*3	
	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)	
GENERAL	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)	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz			220-240 V AC, 50 Hz/60 Hz	
	Power Consumption	620 W	540W		620 W	540 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)	2233 x 1288 x 122 mm (87.9" x 50.7" x 4.8")	1949 x 1141 x 99 mm (76.7" x 44.9" x 3.9")		2233 x 1288 x 113 mm (87.9" x 50.7" x 4.5")	1949 x 1141 x 92 mm (76.7" x 44.9" x 3.7")
	Carton Size (W x H x D)	2406 x 1520 x 460 mm (94.8" x 59.9" x 18.2")	2156 x 1361 x 404 mm (84.9" x 53.6" x 15.9")		2406 x 1520 x 460 mm (94.8" x 59.9" x 18.2")	2156 x 1361 x 404 mm (84.9" x 53.6" x 15.9")
	Weight	Approx. 136.0 kg (299.9 lbs.)	Approx. 108.0 kg (238.1 lbs.)		Approx. 105.0 kg (231.5 lbs.)	Approx. 84.0 kg (185.2 lbs.)
Gross Weight	Approx. 161.0 kg (355.0 lbs.)	Approx. 130.0 kg (286.6 lbs.)		Approx. 130.0 kg (286.6 lbs.)	Approx. 106.0 kg (233.7 lbs.)	
OPTIONS	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*4			10 degrees with landscape setting and 5 degrees with portrait setting*4	
	Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F) / Humidity: 20 % to 80 % (Non condensation) / Altitude 0-2400 m (7874 ft)*5			Temperature: 0 °C to 40 °C (32 °F to 104 °F) / Humidity: 20 % to 80 % (Non condensation) / Altitude 0-2400 m (7874 ft)*5	
	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non condensation)			Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non condensation)	
	Operating Time*6	24 h/day			24 h/day	
	Pedestal	TY-ST103PF9	TY-ST85P12		TY-ST103PF9	TY-ST85P12
	Wall-hanging Bracket	TY-WK103PV9	TY-WK85PV12		TY-WK103PV9	TY-WK85PV12
Ceiling-hanging Bracket	TY-CE103PS10*7	TY-CE85PS12*7		TY-CE103PS10*7	TY-CE85PS12*7	
Mobile Stand	—	TY-ST85PB1		—	TY-ST85PB1	
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: HDCP1.4 supported, Embedded audio supported. \*2: HDCP1.3 supported, Embedded audio supported. \*3: RGB/YPbPr switchable.

\*4: Please contact your sales representative with regard to the tilt angle before installation.

\*5: Environmental temperature to use this unit at high altitudes (1400 m (4593 ft) and higher and below 2400 m (7874 ft) above sea level): 0 °C to 35 °C (32 °F to 95 °F) When using the unit where it is 1400 m (4593 ft) and higher and below 2400 m (7874 ft) above sea level, make sure [High altitude mode] is set to [ON].

\*6: 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. \*7: 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

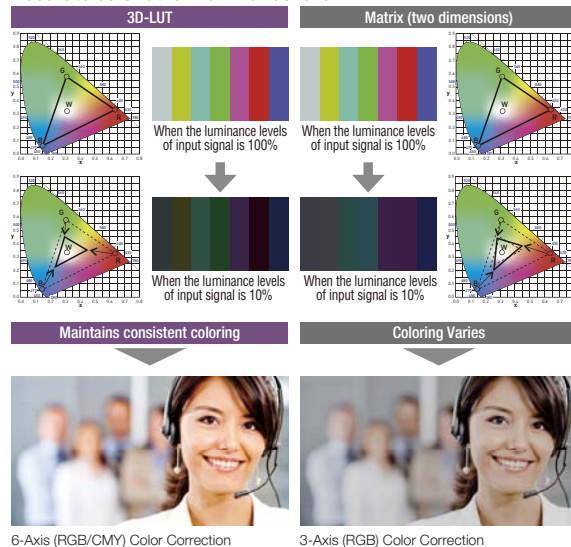




## High Color Reproduction (3D-LUT & 6-Axis Color Correction)

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

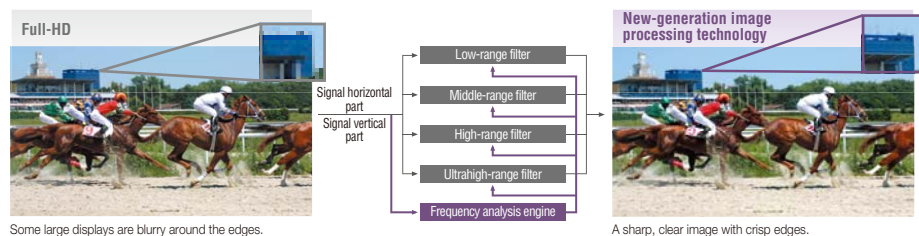


\* Images on screen are simulated.

## 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.

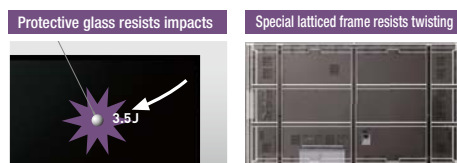
\* Optimizes the frequency and level of the input signal in horizontal and vertical directions to produce beautifully sharp, clear images.



## 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.

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



\* LQ70 Series only.

\* 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 colors 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.

## 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 SLOT 2.0.

\* Require 2 boards for 4K/60p

4K Special Website



Feature video  
4K UHD LCD Display LQ70 Series



# AF Series

NEW



NEW



NEW



Model no.		TH-55AF1	TH-49AF1	TH-42AF1
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	55-inch (1387 mm)/16:9	49-inch (1232 mm)/16:9	42-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)	1209 x 680 mm (47.6" x 26.7")	1073 x 604 mm (42.2" x 23.7")	927 x 521 mm (36.5" x 20.5")
	Resolution (H x V)	1920 x 1080	1920 x 1080	1920 x 1080
	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 (Horizontal/Vertical)	178°/178° (CR≥10)	178°/178° (CR≥10)	178°/178° (CR≥10)
PLATFORM	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
TERMINAL	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
OpenPort PLATFORM	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
	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 Connector x 1		Micro USB Connector x 1
GENERAL	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
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz	220-240 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
GENERAL	Stand-by Condition	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [On])	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])
	Dimensions (W x H x D)	1229 x 699 x 72 *mm (48.4" x 27.6" x 2.8"*)	1093 x 623 x 72 *mm (43.1" x 24.6" x 2.8"*)	947 x 541 x 72 *mm (37.3" x 21.3" x 2.8"*)
	Carton Size (W x H x D)	1444 x 922 x 223 mm (56.9" x 36.3" x 8.8")	1308 x 846 x 203 mm (51.5" x 33.4" x 8.0")	1123 x 743 x 203 mm (44.3" x 29.3" x 8.0")
	Bezel Width	6.3 mm (0.25")	6.3 mm (0.25")	6.3 mm (0.25")
	Weight	Approx. 25.0 kg (55.2 lbs.)	Approx. 19.3 kg (42.6 lbs.)	Approx. 15.6 kg (34.4 lbs.)
	Gross Weight	Approx. 33.0 kg (72.8 lbs.)	Approx. 26.0 kg (57.4 lbs.)	Approx. 21.0 kg (46.3 lbs.)
	Pitch for Wall-Hanging	VESA Compliant 400x 400 mm (15.8" x 15.8")	VESA Compliant 400x 400 mm (15.8" x 15.8")	VESA Compliant 200 x 200 mm (7.9" x 7.9")
	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 (Angle adjustment is not possible for forward/backward tilting installation.)		0-45 degrees forward/backward with landscape/portrait setting*1 (Angle adjustment is not possible for forward/backward tilting installation.)
	Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F)*2 : 0 °C to 35 °C (32 °F to 95 °F)*3 / Humidity: 20 % to 80 % (Non-condensation)		Temperature: 0 °C to 40 °C (32 °F to 104 °F)*2 : 0 °C to 35 °C (32 °F to 95 °F)*3 / Humidity: 20 % to 80 % (Non-condensation)
	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non Condensation)		Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non Condensation)
	Operating Time*4	24 h/day		24 h/day
OPTIONS	Pedestal	TY-ST43PE8	TY-ST43PE8	TY-ST43PE8
	Digital Interface Box	—	—	—
	DIGITAL LINK Switcher	—	—	—
	Early Warning Software*5	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series
	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 1400 m (4593 ft) altitude

\*3: for between 1400 m (4593 ft) and 2800 m (9186 ft) 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 57 mm (2.3").

Indoor

## Feature video



AF1 Series: Pro Signage Display Featuring  
Android-based OpenPort PLATFORM

## Evolving with Your Needs

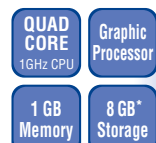
Android™- and HTML5-based OpenPort PLATFORM™ Gives Freedom to Customize and Grow with Digital Signage Apps, Simplifies Everyday Use. The AF1 Series incorporates a high-performance SoC (System on a Chip) with a 1 GHz Quad-Core CPU, 1 GB RAM, 8 GB Storage. All this is supported by an alliance with a leading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

## Evolving with Your Needs

Simple, expandable, and reliable, the AF1 Series' Android™-based OpenPort PLATFORM™ is powered by a high-performance SoC (System on a Chip) with a 1 GHz quad-core CPU, 1 GB of memory, and 8 GB\* of internal storage. Together with verified apps created by global alliance partners for custom signage and other roles in business, these adaptive displays deliver your message with maximum impact now and in the future.

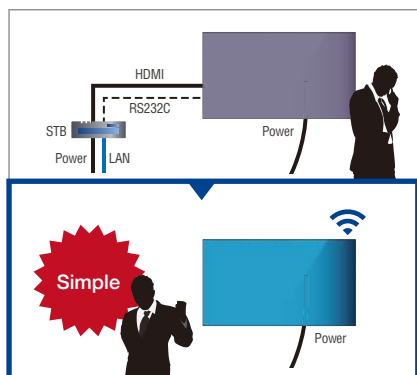


CPU, GPU, and memory are all included in an SoC (System on a Chip).  
\* Total capacity of storage including OS.



## No Need for External Devices and Cables

Thanks to the built-in media player function, external devices such as set-top boxes, PCs, and associated cabling are not required for digital signage applications. Wireless functionality paves the way to simple, stress-free installation while saving you time and money.



## Panasonic Original Home Screen

Initial setup of network and language preferences is easy using the remote controller\* and original Panasonic Home Screen.

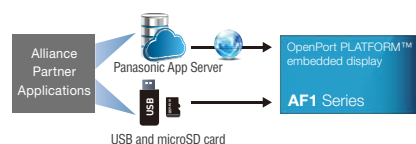
\* Some setting and application operations cannot be performed using the remote control. In this case, use a USB mouse to operate.



## Simple App Installation

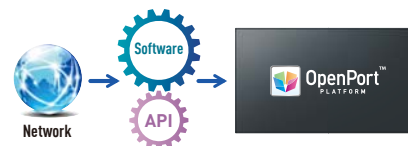
Applications are easily accessed and installed via Panasonic App Server\*, which streamlines settings before operation. App installation is also enabled via USB drive or microSD card.

\* Certain partner apps not supported.



## Panasonic API Expands Application Functions

Panasonic's clear and intuitive API (Application Programming Interface) enables the expansion of application functions, allowing the display to be controlled remotely without need of RS232C or other complicated applications.



## A Reliable, Fully Certified Platform

The OpenPort PLATFORM™ based on Android™ is fully certified by Google to assure stable, secure, and reliable operation.

## Mutual Check with App Alliance Partners

Applications running on OpenPort PLATFORM™ are thoroughly checked by alliance partners and Panasonic for stable and secure operation.



See our partners:  
<http://panasonic.net/prodisplays/products/af1/partner.html>

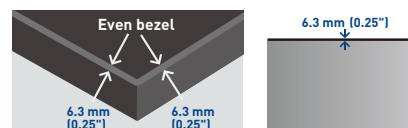
## Optional Early Warning Software (ET-SWA100 Series)

Optional ET-SWA100 Series\* Early Warning Software monitors the displays and projectors connected to an intranet and informs you when an abnormality is detected or there are symptoms of trouble. With this software installed, a monitoring server can be controlled remotely via tablet or PC.

\* Part number suffix may differ depending on the license type.

## Bright and Stylish IPS Display

The slim-bezel AF1 Series is offered in 42-, 49-, and 55-inch sizes and features an edge-lit LED IPS panel with a high 500 cd/m² of brightness. This efficient technology assures uncommonly good off-axis visibility, preserving accurate color reproduction even in bright ambient light. Furthermore, the AF1 Series features a slim 6.3 mm-bezel-width that boosts perceived image size while enhancing any interior design.



## Supports Connection of Peripheral Devices

Peripheral devices such as a mouse, keyboard, or USB camera can be connected to AF1 Series displays to further expand functionality.



Note: Some USB devices are not supported.

## Supports External Memory Devices

USB drives and microSD cards can also be used to expand the 8 GB internal memory storage capacity.



## Built for Continuous 24/7 Operation

Use of quality electronic components guarantees dependable 24-hour operation seven days a week, even in portrait orientation. Tilt installation of up to 45 degrees forward or backward is also supported. This makes the AF1 Series ideal for signage installations in variety of locations, such as public spaces, shops, malls, and restaurants.



## Fanless Design

AF1 Series' robust fanless design prevents problems caused by the intake of dusty air. The displays can be safely installed and operated in high-traffic environments.



# LF Series



Model no.		TH-80LF50	TH-70LF50	TH-55LF80	TH-49LF80	TH-42LF80
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	80-inch (2032 mm)/16:9	70-inch (1765 mm)/16:9	55-inch (1387 mm)/16:9	49-inch (1232 mm)/16:9	42-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)	1771 x 996 mm (69.7" x 39.2")	1538 x 865 mm (60.5" x 34.0")	1209 x 680 mm (47.6" x 26.7")	1073 x 604 mm (42.2" x 23.7")	927 x 521 mm (36.5" x 20.5")
	Resolution (H x V)	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	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 (Horizontal/Vertical)	176°/176°	176°/176°	178°/178° (CR≥10)	178°/178° (CR≥10)	178°/178° (CR≥10)
TERMINAL	VIDEO In	BNC x 1		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)		
	HDMI In	HDMI Type A Connector x 1		HDMI Type A Connector x 2		
	Component/RGB In	BNC x 1 set		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)		
	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 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)		
	Audio Out (L/R)	Pin Jack x 1 set		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		
	DIGITAL LINK	—		RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with LAN)		
GENERAL	LAN	RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™		RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)		
	IR In/Out	—		Stereo Mini Jack (M3) x 1 / x 1		
	USB	—		USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)		
	Function Slot	SLOT2.0 x 1 (Vacant)		—		
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz
GENERAL	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)	1848 x 1073 x 89 mm (72.8" x 42.3" x 3.5")	1604 x 931 x 89 mm (63.2" x 36.7" x 3.5")	1229 x 699 x 72*mm (48.4" x 27.6" x 2.8"*)	1093 x 623 x 72*mm (43.1" x 24.6" x 2.8"*)	947 x 541 x 72*mm (37.3" x 21.3" x 2.8"*)
	Carton Size (W x H x D)	1995 x 1191 x 351 mm (78.6" x 46.9" x 13.8")	1752 x 1050 x 351 mm (69.0" x 41.3" x 13.8")	1444 x 922 x 223 mm (56.9" x 36.3" x 8.8")	1308 x 846 x 203 mm (51.5" x 33.4" x 8.0")	1123 x 743 x 203 mm (44.3" x 29.3" x 8.0")
	Bezel Width	36 mm (1.4")	30 mm (1.2")	6.3 mm (0.25")	6.3 mm (0.25")	6.3 mm (0.25")
	Weight	Approx. 60.0 kg (132.3 lbs.)	Approx. 47.0 kg (103.6 lbs.)	Approx. 24.7 kg (54.5 lbs.)	Approx. 19.0 kg (41.9 lbs.)	Approx. 15.3 kg (33.7 lbs.)
	Gross Weight	Approx. 71.0 kg (156.5 lbs.)	Approx. 56.0 kg (123.5 lbs.)	Approx. 32.0 kg (70.6 lbs.)	Approx. 26.0 kg (57.4 lbs.)	Approx. 20.0 kg (44.1 lbs.)
	Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA compliant 200 x 200 mm (7.9" x 7.9")
	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: 0 °C to 40 °C (32°F to 104°F) / Humidity: 20 % to 80 % (Non Condensation)		Temperature: 0 °C to 40 °C (32°F to 104°F)*3 : 0 °C to 35 °C (32 °F to 95 °F)*4 / Humidity: 20 % to 80 % (Non-condensation)		
	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F)*2 / Humidity: 20 % to 80 % (Non Condensation)		Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non-condensation)		
	Operating Time*5	24 h/day		24 h/day		
OPTIONS	Pedestal	TY-ST65P20	—	TY-ST43PE8	TY-ST43PE8	TY-ST43PE8
	Wall-hanging Bracket	—	—	—	—	—
	Digital Interface Box	—	—	ET-YFB100G	ET-YFB100G	ET-YFB100G
	DIGITAL LINK Switcher	—	—	ET-YFB200G	ET-YFB200G	ET-YFB200G
	Early Warning Software*6	—	—	ET-SWA100 Series	ET-SWA100 Series	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)
	Multi Window Processor	ET-MWP100G	ET-MWP100G	ET-MWP100G	ET-MWP100G	ET-MWP100G
	HD-SDI Terminal Board	TY-FB10HD	TY-FB10HD	—	—	—

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

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

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

\*4: for between 1400 m (4593 ft) and 2800 m (9186 ft) 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 57 mm (2.3").





Model no.		TH-55LF8	TH-49LF8	TH-42LF8
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	55-inch (1387 mm)/16:9	49-inch (1232 mm)/16:9	42-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)	1209 x 680 mm (47.6" x 26.7")	1073 x 604 mm (42.2" x 23.7")	927 x 521 mm (36.5" x 20.5")
	Resolution (H x V)	1920 x 1080	1920 x 1080	1920 x 1080
	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 (Horizontal/Vertical)	178°/178° (CR≥10)	178°/178° (CR≥10)	178°/178° (CR≥10)
TERMINAL	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	—		—
GENERAL	Power Requirements	220-240 V AC, 50 Hz/60 Hz		220-240 V AC, 50 Hz/60 Hz
	Power Consumption	185 W		145 W
	Power Off Condition	Approx. 0.3 W		Approx. 0.3 W
	Stand-by Condition	Approx. 0.5 W		Approx. 0.5 W
	Dimensions (W x H x D)	1229 x 699 x 72 ★mm (48.4" x 27.6" x 2.8" ★)	1093 x 623 x 72 ★mm (43.1" x 24.6" x 2.8" ★)	947 x 541 x 72 ★mm (37.3" x 21.3" x 2.8" ★)
	Carton Size (W x H x D)	1444 x 922 x 223 mm (56.9" x 36.3" x 8.8")	1308 x 846 x 203 mm (51.5" x 33.4" x 8.0")	1123 x 743 x 203 mm (44.3" x 29.3" x 8.0")
	Bezel Width	6.3 mm (0.25")		6.3 mm (0.25")
	Weight	Approx. 24.7 kg (54.5 lbs.)		Approx. 15.3 kg (33.7 lbs.)
	Gross Weight	Approx. 32.0 kg (70.6 lbs.)		Approx. 20.0 kg (44.1 lbs.)
	Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (15.8" x 15.8")		VESA Compliant 200 x 200 mm (7.9" x 7.9")
	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*1 (Angle adjustment is not possible for forward/backward tilting installation.)		0-45 degrees forward/backward with landscape/portrait setting*1 (Angle adjustment is not possible for forward/backward tilting installation.)
	Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F)*2 : 0 °C to 35 °C (32 °F to 95 °F)*3 / Humidity: 20 % to 80 % (Non-condensation)		Temperature: 0 °C to 40 °C (32 °F to 104 °F)*2 : 0 °C to 35 °C (32 °F to 95 °F)*3 / Humidity: 20 % to 80 % (Non-condensation)
	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non Condensation)		Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non Condensation)
	Operating Time*4	24 h/day		24 h/day
OPTIONS	Pedestal	TY-ST43PE8	TY-ST43PE8	TY-ST43PE8
	Digital Interface Box	—	—	—
	DIGITAL LINK Switcher	—	—	—
	Early Warning Software*5	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series
	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)
	Multi Window Processor	ET-MWP100G	ET-MWP100G	ET-MWP100G

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

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

\*3: for between 1400 m (4593 ft) and 2800 m (9186 ft) 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 57 mm (2.3").



## 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

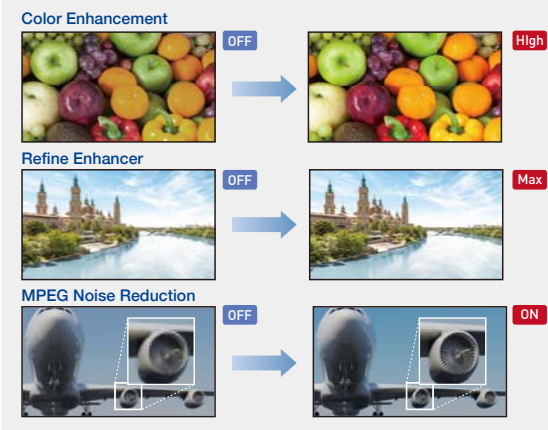
Displays images with enhanced color.

### • 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.



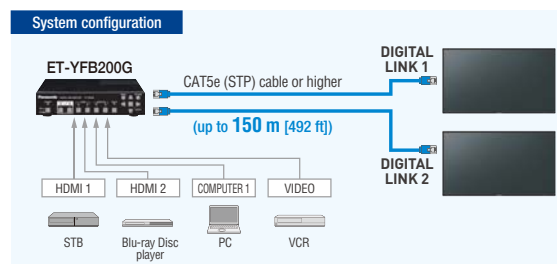
\* Images on screen are simulated.

## 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 150 m [492 ft]) with a single LAN cable\*. 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 150 m (492 ft). In this case, the unit can receive the signals of up to 1080/60p. A CAT5e (STP) cable or higher is required.



## Simple Signage Operation with No Set-top Box

AF1 LF80 LF8

The AF1/LF80/LF8 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.

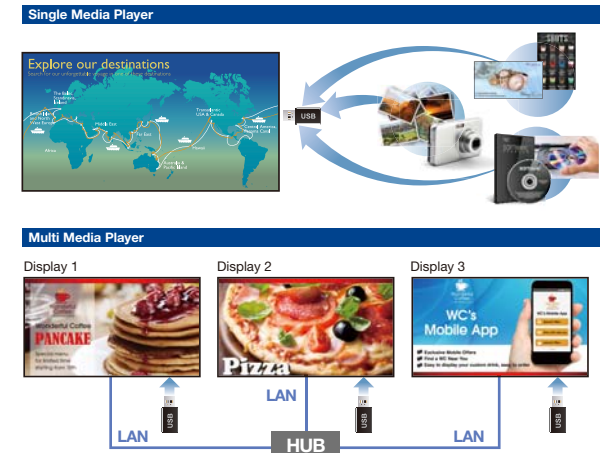
[Notes]

- 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.

## 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.

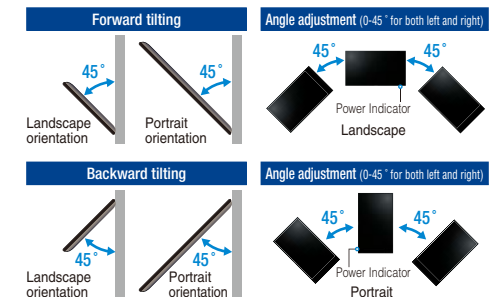


## Choose the Installation to Match Your Application

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.



### Other Features

- 24/7 Operation
- Built-in Speaker (AF1/LF80/LF8 Series)
- Fan-less Design
- Stylish Slim Design and Light Weight



Model no.	TH-55LFV70	TH-55LFV60		TH-55LFV6	TH-47LFV5
<b>DISPLAY PANEL</b>					
Screen Size (Diagonal)/Aspect Ratio	55-inch (1387mm)/16:9	55-inch (1387 mm)/16:9		55-inch (1387 mm)/16:9	47-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)	1209 x 680 mm (47.6" x 26.7")	1209 x 680 mm (47.6" x 26.7")		1209 x 680 mm (47.6" x 26.7")	1039 x 584 mm (40.9" x 23.0")
Resolution (H x V)	1920 x 1080	1920 x 1080		1920 x 1080	1920 x 1080
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
Dynamic Contrast Ratio	500000:1	500000:1		500000:1	500000:1
Response Time	12 ms (G to G)	12 ms (G to G)		12 ms (G to G)	12 ms (G to G)
Viewing Angle (Horizontal/Vertical)	178°/178° (CR≥10)	178°/178° (CR≥10)		178°/178° (CR≥10)	178°/178° (CR≥10)
Panel Surface Treatment	Anti-Glare (Haze 44%)	Anti-Reflection		Anti-Glare (Haze 10 %)	Anti-Glare (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
Stereo 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 PoE Link™)		RJ45 x 1 (10BASE-T/100BASE-TX, Compatible with PoE Link™)	RJ45 x 1 (Web Browser Control Only)
<b>GENERAL</b>					
Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz		220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz
Power Consumption	330 W	330 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)	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 (47.8" x 26.9" x 3.7")	1045 x 590 x 109 mm (41.2" x 23.3" x 4.3")
Carton Size (W x H x D)	1551 X 961 X 450 mm (61.1" X 37.8" X 17.7")	1544 x 973 x 301 mm (60.8" x 38.3" x 11.9")		1544 x 973 x 301 mm (60.8" x 38.3" x 11.9")	1390 x 950 x 445 mm (54.8" x 37.4" x 17.6")
Bezel Width	L/T: 2.25 mm (0.088"), R / B: 1.25 mm (0.049")	L/T: 2.25 mm (0.088"), R / B: 1.25 mm (0.049")		L/T: 2.25 mm (0.088"), R / B: 1.25 mm (0.049")	L/T: 3.2 mm (0.12"), R / B: 1.7 mm (0.07")
Bezel to Bezel <sup>*1</sup>	3.5 mm (0.14") (Multi Screen)	3.5 mm (0.14") (Multi Screen)		3.5 mm (0.14") (Multi Screen)	4.9 mm (0.19") (Multi Screen)
Weight	Approx. 30.0 kg (66.1 lbs.)	Approx. 30.0 kg (66.1 lbs.)		Approx. 30.0 kg (66.1 lbs.)	Approx. 25.0 kg (55.1 lbs.)
Gross Weight	Approx. 45.0 kg (99.2 lbs.)	Approx. 39.0 kg (86.0 lbs.)		Approx. 39.0 kg (86.0 lbs.)	Approx. 39.0 kg (86.0 lbs.)
Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA Compliant 400 x 400 mm (15.8" x 15.8")		VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA Compliant 400 x 400 mm (15.8" x 15.8")
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>*2</sup>	Landscape/Portrait	Landscape/Portrait		Landscape/Portrait	Landscape/Portrait
Tilting Angle <sup>*2</sup>	Vertical Only	Vertical Only		Vertical Only	Vertical Only
Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F) <sup>*3</sup> / Humidity: 10 % to 90 % (Non Condensation)	Temperature: 0 °C to 40 °C (32 °F to 104 °F) <sup>*4</sup> / 0 °C to 35 °C (32 °F to 95 °F) <sup>*5</sup> / Humidity: 10 % to 90 % (Non-Condensation)		Temperature: 0 °C to 40 °C (32 °F to 104 °F) <sup>*4</sup> / 0 °C to 35 °C (32 °F to 95 °F) <sup>*5</sup> / Humidity: 10 % to 90 % (Non-Condensation)	Temperature: 0 °C to 40 °C (32 °F to 104 °F) <sup>*3</sup> / Humidity: 10 % to 90 % (Non Condensation)
Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 10 % to 90 % (Non Condensation)	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 10 % to 90 % (Non Condensation)		Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 10 % to 90 % (Non Condensation)	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 10 % to 90 % (Non Condensation)
Operating Time <sup>*6</sup>	24 h/day	24 h/day		24 h/day	24 h/day
<b>OPTIONS</b>					
Remote Control Kit	—	—		—	TY-RM50WV
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>*7</sup>	ET-SWA100 Series	ET-SWA100 Series		ET-SWA100 Series	—
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
Multi Window Processor	ET-MWP100G	ET-MWP100G		ET-MWP100G	ET-MWP100G

\*1: 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.

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

\*3: For up to 2000 m (6562 ft) altitude. \*4: For up to 1400 m (4593 ft) altitude. \*5: For between 1400 m (4593 ft) and 2800 m (9186 ft) altitude.

\*6: 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.

\*7: Suffix of the part number may differ depending on the license type.

## Installation video



Video Wall Workflow Panasonic TY-VK55LV1

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

LFV70 LFV60 LFV6

The ultra-narrow bezel results in joints that are only 3.5 mm (0.14")\* 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 4.9 mm (0.19") wide.



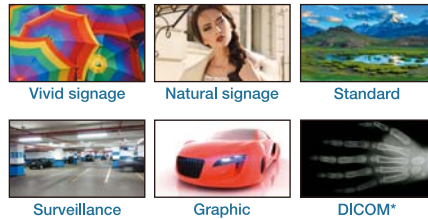
\* LFBV70/60/6 Series.

## Optimized Image Modes

LFV60 LFV6

Conventional display panels usually include basic display mode presets such as Standard and Dynamic. The LFBV60/6 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.

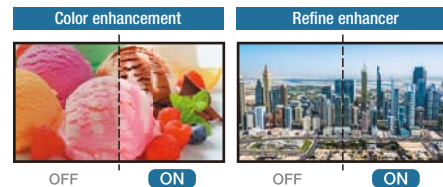
### • Reverse Scan

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 LFBV70/60/6 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 LFBV60/6 Series displays only.

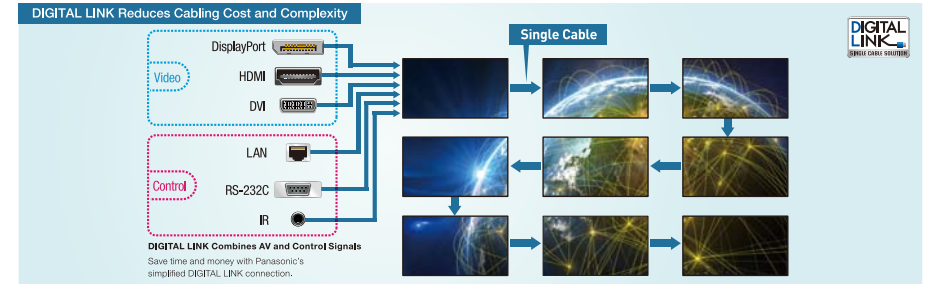


Note: Connection example for LFBV60/6 Series shown.

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

LFV70

The terminal board for the LFBV70 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.

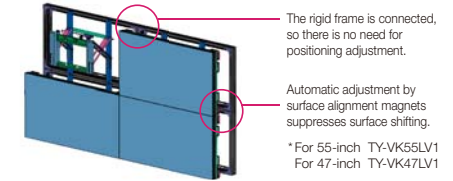


## Installation Frame Simplifies Set-up

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.



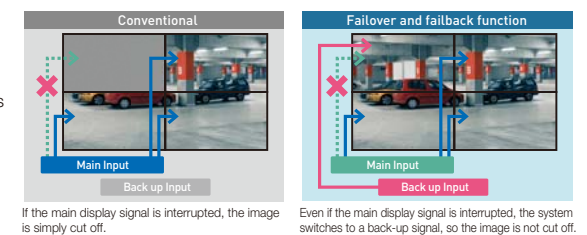
\* For 55-inch: TY-VK55LV1  
For 47-inch: TY-VK47LV1

## Failover and Failback Functions Support Emergency Situations

LFV70 LFV60 LFV6

The LFBV70/60/6 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.

\* LFBV70 Series only.



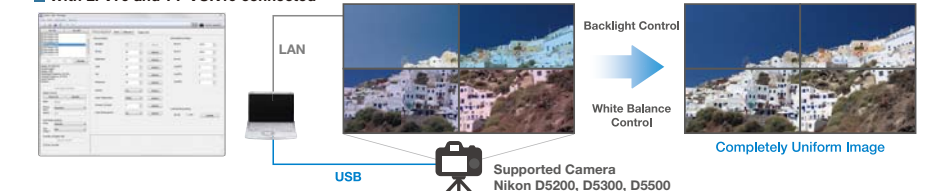
## Video Wall Manager Software and Auto Display Adjustment Upgrade Kit

LFV70 LFV60 LFV6 LFV5

Panasonic's free Video Wall Manager software can be used with LFBV Series displays. With this software, you can calibrate display color using a color 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 color among multiple displays automatically using a compatible camera (Nikon D5200/D5300/D5500)\*.

\* 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 LFBV70 and TY-VUK10 connected



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



# LFX Series



DISPLAY PANEL	Model no.	TH-47LFX60	TH-47LFX6N
	Screen Size (Diagonal)/Aspect Ratio	47-inch (1192 mm)/16:9	47-inch (1192 mm)/16:9
	Panel Type	LCD IPS Panel/D-LED	LCD IPS Panel/D-LED
	Effective Display Area (W x H)	1039 x 584 mm (40.9" x 23.0")	1039 x 584 mm (40.9" x 23.0")
	Resolution (H x V)	1920 x 1080	1920 x 1080
	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 (Horizontal/Vertical)	178°/178°	178°/178°
TERMINAL	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	
GENERAL	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)	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 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)	1162 x 706 x 216 mm (45.8" x 27.8" x 8.5")	1162 x 706 x 216 mm (45.8" x 27.8" x 8.5")
OPTIONS	Carton Size (W x H x D)	1308 x 851 x 323 mm (51.5" x 33.5" x 12.7")	1308 x 851 x 323 mm (51.5" x 33.5" x 12.7")
	Weight	Approx. 47.0 kg (103.0 lbs.)	Approx. 47.0 kg (103.0 lbs.)
	Gross Weight	Approx. 55.0 kg (121.0 lbs.)	Approx. 55.0 kg (121.0 lbs.)
	Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (15.8" x 15.8")	VESA Compliant 400 x 400 mm (15.8" x 15.8")
	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: -20 °C <sup>-3</sup> to 50 °C (-4 °F <sup>-3</sup> to 122 °F) / Humidity: 20 % to 80 % (Non Condensation)	
OPTIONS	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) / Humidity: 20 % to 80 % (Non Condensation)	
	Operating Time*4	24 h/day	
	Replacement Air Filter	TY-AF60STD	TY-AF60STD
	Digital Interface Box	ET-YFB100G	ET-YFB100G
	DIGITAL LINK Switcher	ET-YFB200G	ET-YFB200G
OPTIONS	Early Warning Software*5	ET-SWA100 Series	ET-SWA100 Series

\*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<sup>-1</sup> to 50°C (-4 °F<sup>-1</sup> 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 100m (328 ft) 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 100m (328 ft). 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).

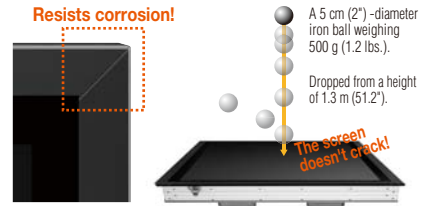
\*1: Use an STP cable of CAT5e or higher.

\*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.

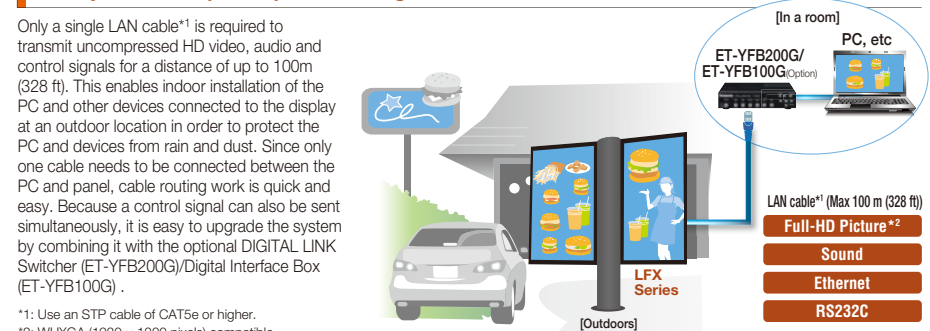
## Supporting Stable Operation – Early Warning Software (ET-SWA100)

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. The minimizes display downtime to support more stable operation.

## Feature video



Outdoor Tough Signage Full HD LCD Display video





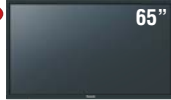
# BF Series

NEW



80"

NEW



65"

NEW



50"

Touch Screen

Model no.	TH-80BF1	TH-65BF1	TH-50BF1
<b>DISPLAY PANEL</b>			
Screen Size (Diagonal)/Aspect Ratio	80-inch (2032 mm)/16:9	65-inch (1638 mm)/16:9	50-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)	1771 x 996 mm (69.7" x 39.2")	1428 x 803 mm (56.2" x 31.6")	1095 x 616 mm (43.1" x 24.2")
Resolution (H x V)	1920 x 1080	1920 x 1080	1920 x 1080
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
Dynamic Contrast	50000:1	50000:1	50000:1
Response Time	4 ms (G to G)	6.5 ms (G to G)	8 ms (G to G)
Viewing Angle (Horizontal/Vertical)	176°/176° (CR≥10)	178°/178° (CR≥10)	176°/176° (CR≥10)
<b>TOUCH PANEL</b>			
Detection Method	Infrared Blocking Detection Method	Infrared Blocking Detection Method	Infrared Blocking Detection Method
Touch Operation	Up to 12-point multi-touch	Up to 12-point multi-touch	Up to 12-point multi-touch
<b>TERMINAL</b>			
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 for external control, RS-232C Compatible	D-Sub 9-pin x 1 for external control, RS-232C Compatible	D-Sub 9-pin x 1 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 PLink™ (Shared with DIGITAL LINK)	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 (Vacant)	SLOT2.0 x 1 (Vacant)	SLOT2.0 x 1 (Vacant)
<b>GENERAL</b>			
Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/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)	1868 x 1093 x 104 mm (73.6" x 43.1" x 4.1")	1517 x 892 x 108 mm (59.8" x 35.2" x 4.3")	1185 x 705 x 104 mm (46.7" x 27.8" x 4.1")
Carton Size (W x H x D)	2075 x 1319 x 404 mm (81.7" x 52.0" x 16.0")	1720 x 1027 x 286 mm (67.8" x 40.5" x 11.3")	1387 x 839 x 286 mm (54.7" x 33.1" x 11.3")
Weight	Approx. 81.0 kg (178.6 lbs)	Approx. 58.0 kg (127.9 lbs)	Approx. 34.0 kg (75.0 lbs)
Gross Weight	Approx. 99.0 kg (219.0 lbs)	Approx. 68.0 kg (150.0 lbs)	Approx. 42.0 kg (92.6 lbs)
Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (15.8" x 15.8")	684 x 300 mm (26.9" x 11.8")	400 x 300 mm (15.8" x 11.8")
Protective Glass Thickness	Approx. 3.3 mm (0.13")/Anti-glare	Approx. 2.9 mm (0.12")/Anti-glare	Approx. 2.9 mm (0.11")/Anti-glare
Built-in Speaker	20 W [10 W + 10 W] (10 % THD)	20 W [10 W + 10 W] (10 % THD)	20 W [10 W + 10 W] (10 % THD)
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 (When installing the display on portrait setting, be sure to install with the power indicator at the topside of the display.)	Landscape/Portrait (When installing the display on portrait setting, be sure to install with the power indicator at the topside of the display.)	Landscape/Portrait (When installing the display on portrait setting, be sure to install with the power indicator at the topside of the display.)
Tilting Angle	0-20 degrees with landscape setting	Vertical only	0-20 degrees with landscape setting
Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F) [for up to 1400 m (4593 ft) altitude] / 0 °C to 35 °C (32 °F to 95 °F) [for between 1400 m (4593 ft) and 2800 m (9186 ft) altitude], Humidity: 20 % to 80 % (Non-condensation)	Temperature: 0 °C to 40 °C (32 °F to 104 °F) [for up to 1400 m (4593 ft) altitude] / 0 °C to 35 °C (32 °F to 95 °F) [for between 1400 m (4593 ft) and 2800 m (9186 ft) altitude], Humidity: 20 % to 80 % (Non-condensation)	Temperature: 0 °C to 40 °C (32 °F to 104 °F) [for up to 1400 m (4593 ft) altitude] / 0 °C to 35 °C (32 °F to 95 °F) [for between 1400 m (4593 ft) and 2800 m (9186 ft) altitude], Humidity: 20 % to 80 % (Non-condensation)
Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F), Humidity: 20 % to 80 % (Non-condensation)	Temperature: -20 °C to 60 °C (-4 °F to 140 °F), Humidity: 20 % to 80 % (Non-condensation)	Temperature: -20 °C to 60 °C (-4 °F to 140 °F), Humidity: 20 % to 80 % (Non-condensation)
Operating Time <sup>*1</sup>	18 h/day	18 h/day	18 h/day
Built-in wireless LAN function: Standard	2.4 GHz: IEEE802.11b/g/n, 5.0 GHz: IEEE802.11a/n	2.4 GHz: IEEE802.11b/g/n, 5.0 GHz: IEEE802.11a/n	2.4 GHz: IEEE802.11b/g/n, 5.0 GHz: IEEE802.11a/n
Infrastructure Mode	WPA2-PSK (TKIP/AES), WPA-PSK (TKIP/AES), WEP (64-bit /128-bit), WPA-EAP/WPA2-EAP (PEAP [MS-CHAP2/GTC]/EAP-FAST [MS-CHAP2/GTC]/EAP-TLS [MD5/MS-CHAP2]), 128-bit/64-bit)	WPA2-PSK (TKIP/AES), WPA-PSK (TKIP/AES), WEP (64-bit /128-bit), WPA-EAP/WPA2-EAP (PEAP [MS-CHAP2/GTC]/EAP-FAST [MS-CHAP2/GTC]/EAP-TLS [MD5/MS-CHAP2]), 128-bit/64-bit)	WPA2-PSK (TKIP/AES), WPA-PSK (TKIP/AES), WEP (64-bit /128-bit), WPA-EAP/WPA2-EAP (PEAP [MS-CHAP2/GTC]/EAP-FAST [MS-CHAP2/GTC]/EAP-TLS [MD5/MS-CHAP2]), 128-bit/64-bit)
<b>OPTIONS</b>			
Pedestal	TY-ST65P20	TY-ST65P20	TY-ST42P50
Wall-hanging Bracket	—	TY-WK65PR20 (Vertical)	TY-WK42PV20 (Vertical)/TY-WK42PR20 (Angled)
Ceiling-hanging Bracket	—	—	TY-CE42PS20
Mobile Stand	TY-ST80LF70	TY-ST65PB2	TY-ST50PB2
Easy Wireless Stick <sup>*2</sup>	ET-UW100	ET-UW100	ET-UW100
Digital Interface Box	ET-YFB100G	ET-YFB100G	ET-YFB100G
DIGITAL LINK Switcher <sup>*3</sup>	ET-YFB200G	ET-YFB200G	ET-YFB200G
Early Warning Software <sup>*4</sup>	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series
<b>FUNCTION BOARD</b>			
HD-SDI Terminal Board with Audio	TY-FB10HD	TY-FB10HD	TY-FB10HD
Dual Link HD-SDI Terminal Board	TY-FB11DHD	TY-FB11DHD	TY-FB11DHD
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 v3.0



Panasonic Wireless Projector for Android v2.4.0



<sup>\*1</sup> In case running for a long time, the moving image is recommended to be displayed. If you display a still picture for an extended period, the image retention might remain on the screen. However, image retention can gradually disappear by displaying a moving images.

<sup>\*2</sup> This product can be purchased in the U.S., Canada, Japan, Australia, and New Zealand.

<sup>\*3</sup> Long Reach Mode on ET-YFB200G is not supported. <sup>\*4</sup> Part number suffix may differ depending on the license type.

## On-screen Menu Bar Keeps You in Control

Don't lose the crowd—or your cool—in endless menus while you search for content or functions. With the BF1 Series, everything is to hand in a discreet menu bar at the bottom of the screen that offers instant access to source inputs, whiteboard tools, and other controls you use most frequently. Even when the pressure's on, you'll look like a pro.



### Colors Everyone Can See

Color Universal Design (CUD) ensures that colors are reproduced clearly and accurately for the many millions of people living with color-vision defects. The CUD setting is ON/OFF-selectable (default setting is OFF) according to user preference, and the display's power LED indicator color is also CUD-compliant.

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

Due to genetics or other vision disorders, some people can perceive colors differently. Individuals can have difficulty distinguishing between certain color combinations. CUD ensures that color information is accurately expressed for the comfort and convenience of all.



Note: CUD logo denotes product certification by Color Universal Design Organization in Japan.

## User-Friendly Menu Bar

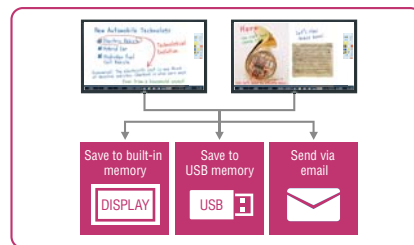
Frequently used functions such as input selection, pen tool, enlargement tool, and volume control can be found in the menu bar. Access detailed information or hide it for uninterrupted full-screen display.



## Easy to Save and Share

Produce up to 100 pages\*<sup>1</sup> of work on the whiteboard and save them to the built-in memory\*<sup>2</sup> 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\*<sup>3</sup>. Keeping everyone in the loop is simple.

\*<sup>1</sup> With built-in memory setting to ON. When individual file data size is large, the number of pages that can be saved may decrease. \*<sup>2</sup> Built-in memory ON/OFF is included. When OFF is selected, only one whiteboard page can be created. \*<sup>3</sup> Can be sent as JPEG format only.



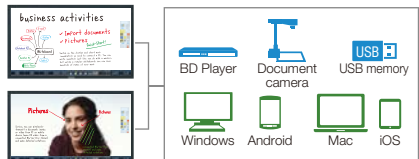
## Quick-Start Whiteboard

Start working on the built-in whiteboard right away—just switch on the display. Intuitive operation makes life easy for kids and less tech-savvy presenters.

## Write and Draw on Video and Still Images

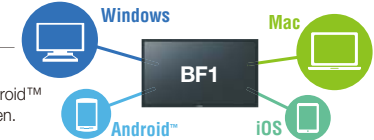
You can write and draw on almost any media you like, including video and still images from external devices. These dynamic multi-media capabilities make it easy for teams to share information, contribute ideas, and solve problems.

Note: Drawing on media transmitted via Intel® Pro WiDi, WiDi, and Miracast is not supported.



## Panasonic Wireless Solution

Intel® Pro WiDi supports secure high-bandwidth wireless transmission from compatible Windows® PCs. Panasonic apps for Windows®, Mac, iOS, and Android™ add a raft of extra easy-to-use functions including Multi-Live Mode in split-screen.



### Intel® Pro WiDi\*<sup>1</sup>



- Mirror video, documents, and websites from compatible Windows® PCs
- Fast and stable wireless transmission
- Managed Meeting Modes for secure or open presentations

\*<sup>1</sup>: Drawing on media transmitted via Mirroring Input (Intel®, Pro WiDi, WiDi, and Miracast) is not supported.

### Intel® Pro WiDi Includes Managed Meeting Modes

Managed Meeting modes allow only one presenter's device to share content, a presenter to curate content transmission from selectable devices, or free and open sharing from any participant's devices.

#### EXCLUSIVE

Connect only one device to prevent interruptions

x 1



#### INTERACTIVE

Up to 10 users can connect and take turns presenting

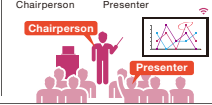
x 10



#### MODERATED

Chairperson controls display permissions from up to 10 participants

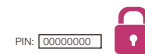
x 1 Chairperson x 9 Presenter



## Enhanced Security and Quality

### Prevents Mistakes

PIN entry prevents accidental projection for privacy and safety



### Smooth Video

Stutter-free media display, faster response times, and fewer dropouts



### Selectable Channels

Selectable 2.4 GHz and 5 GHz\* channels for areas with Wi-Fi® congestion



\* America/Europe/CIS only.

### Compatible with Miracast

Intel® Pro WiDi also supports transmission from Miracast-compatible devices



### Panasonic Wireless Manager



- Fast and stable wireless connection
- Connect 4 or 16 PCs in Multi-Live Mode

Download free from our global website at <http://panasonic.net/prodisplays/>

### Quick 3-Step Connection



### Panasonic Wireless Apps



- Dedicated wireless apps for iOS and Android™
- Fewer steps to connect
- Wide media compatibility and functionality

Download free via App Store (iOS) or Google Play (Android™).

### Easy Wireless Stick ET-UW100



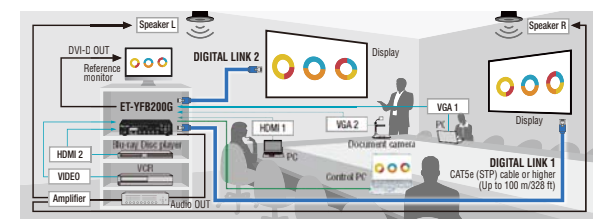
- Self-contained Easy Wireless Stick plugs into PC's USB
- Provides internet access while operating wirelessly

\* This optional product can be purchased in the U.S., Canada, Japan, Australia, and New Zealand.

## Simplified DIGITAL LINK Connection

DIGITAL LINK transmits uncompressed Full HD video, audio, and control commands through a single CAT 5e or higher STP cable for up to 100 m (328 ft). 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.

Note: Long Reach Mode on ET-YFB200G is not supported.



For more information, please visit our DIGITAL LINK website: [panasonic.net/prodisplays/solutions/technology/digital\\_link/](http://panasonic.net/prodisplays/solutions/technology/digital_link/)

### Other Features

- Expand and Customize with SLOT2.0
- PJ LINK™ Compliant
- Picture-in-Picture Capability
- Built-in Speaker
- Secondary Display
- Protective Glass and AG Screen Surface

# EF Series

Available from Autumn 2016  
(TH-84EF1/TH-75EF1)

NEW



84"

NEW



75"

NEW



32"

Model no.	TH-84EF1	TH-75EF1	TH-32EF1
<b>DISPLAY PANEL</b>			
Screen Size (Diagonal)/Aspect Ratio	84-inch (2135 mm)/16:9	75-inch (1893 mm)/16:9	32-inch (801 mm)/16:9
Panel Type	LCD IPS Panel/E-LED	LCD IPS Panel/D-LED	LCD IPS Panel/D-LED
Effective Display Area (W x H)	1860 x 1046 mm (73.2" x 41.1")	1650 x 928 mm (64.9" x 36.5")	698 x 393 mm (27.4" x 15.4")
Resolution (H x V)	1920 x 1080	1920 x 1080	1920 x 1080
Brightness	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>
Contrast Ratio	1400:1	1200:1	1400:1
Response Time	5.0 ms (G to G)	8 ms (G to G)	8 ms (G to G)
Viewing Angle (Horizontal/Vertical)	178°/178° (CR≥10)	178°/178° (CR≥10)	178°/178° (CR≥10)
<b>TERMINAL*1</b>			
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 DC 5V/1A (USB 3.0 is not supported.)		TYPE A USB Connector DC 5V/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	—		—
IR Transmitter In/Out	Mini Jack (M3) x 1 / x 1		Mini Jack (M3) x 1 / x 1
LAN	RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™		RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™
Function Slot	—		—
<b>GENERAL</b>			
Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz
Power Consumption	T.B.D.	T.B.D.	65 W
Power off Condition	T.B.D.	T.B.D.	Approx. 0.3 W
Stand-by Condition	T.B.D.	T.B.D.	Approx. 0.5 W
Dimensions (W x H x D)	1910 x 1102 x 78 mm (75.2" x 43.4" x 3.1")	1681 x 959 x 77mm (66.2" x 37.8" x 3.02")	727 x 426 x 64 mm (28.7" x 16.8" x 2.5")
Carton Size (W x H x D)	2058 x 1234 x 351 mm (81.0" x 48.6" x 13.8")	1830 x 1092 x 351mm (72.1" x 43.0" x 13.8")	818 x 547 x 139 mm (32.2" x 21.6" x 5.5")
Bezel Width	22.6 mm (0.89") (Left/Right), 25.6 mm (1.01") (Top/Bottom)	14.8 mm (0.58") (L/R/T/B)	11.9 mm (0.5") (Left/Right/Top), 17.2 mm (0.7") (Bottom)
Weight	Approx. 65.0 kg (143.3 lbs)	Approx. 56.5 kg (124.6 lbs)	Approx. 5.3 kg (11.7 lbs.)
Gross Weight	Approx. 77.0 kg (169.8 lbs)	Approx. 67.0 kg (147.7 lbs)	Approx. 8.0 kg (17.7 lbs.)
Pitch for Wall-Hanging	VESA compliant 600 x 500 mm (23.6" x 19.7")	VESA compliant 600 x 400 mm (23.6" x 15.8")	VESA compliant 100 x 100 mm (3.9" x 3.9")
Built-in Speaker	20 W [10W + 10 W] (10% THD)		20 W [10W + 10 W] (10% THD)
External Speaker	—		—
Orientation	T.B.D.		Landscape/Portrait
Tilting Angle	T.B.D.		0-20 degrees forward with landscape setting*2
Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)*4		Temperature: 0 °C to 40 °C (32 °F to 104 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)*4
Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)*4		Temperature: -20 °C to 60 °C (-4 °F to 140 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)*4
Operating Time*5	T.B.D.		16 h/day
<b>OPTION</b>			
Pedestal	—		TY-ST32PE1
Early Warning Software*6	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series

\*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 1400 m (4593 ft) and higher and below 2800 m (9186 ft) above sea level: 0 °C to 35 °C (32 °F to 95 °F).

\*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.

## Standard

### Simple and Flexible Media Signage

A USB media player is built right into the display, so you simply insert a USB memory stick for automatic video and still-image playback. Signage can be easily created without requiring a set-top box or a PC. You can also compile scenario files to designate the playback order and time. And you can freely revise both the content and display schedule.



### Extensive Connectivity for Professional Use

A full complement of input terminals are provided for versatile signage applications. In addition to supporting various input signals, it also features speakers for content that includes sound.

#### ■ Applicable Input signals

Video signal	PC signal
18 signals	59 signals



### Stylish Design with Excellent Visibility

The narrow frame 22.6-mm (0.89" : L/R) (TH-84EF1) and slim design draw attention to the image. And the flat-panel form doesn't feel oppressive when mounted on the wall. The high-visibility IPS panel makes images easier to see and boosts the signage effect. The depth of the 84-inch display is 78 mm (3.1"), which complies with the ADA Standard, making it ideal for installation in public spaces.





Model no.		TH-65LFE8	TH-55LFE8		TH-48LFE8	TH-43LFE8
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	65-inch (1638 mm)/16:9	55-inch (1387 mm)/16:9		48-inch (1209 mm)/16:9	43-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)	1428 x 803 mm (56.2" x 31.6")	1209 x 680 mm (47.6" x 26.7")		1054 x 592 mm (41.5" x 23.3")	940 x 529 mm (37.0" x 20.8")
	Resolution (H x V)	1920 x 1080	1920 x 1080		1920 x 1080	1920 x 1080
	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 (Horizontal/Vertical)		176°/176° (CR≥20)	178°/178° (CR≥20)		178°/178° (CR≥20)	178°/178° (CR≥10)
TERMINAL <sup>*1</sup>	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 <sup>*</sup> *VIERA LINK is not supported.			HDMI TYPE-A Connector x 2 <sup>*</sup> *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	—			—	
GENERAL	LAN	RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™			RJ45 x 1 10BASE-T/100BASE-TX, Compatible with PLink™	
	Function Slot	—			—	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz		220-240 V AC, 50 Hz/60 Hz	220-240 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)	1451 x 829 x 62 mm (57.2" x 32.7" x 2.5")	1239 x 712 x 62 mm (48.8" x 28.0" x 2.5")		1082 x 624 x 62 mm (42.6" x 24.6" x 2.5")	969 x 560 x 61 mm (38.2" x 22.1" x 2.4")
	Carton Size	1667 x 1052 x 280 mm (65.7" x 41.5" x 11.1")	1365 x 864 x 185 mm (53.7" x 34.0" x 7.3")		1192 x 773 x 171 mm (47.0" x 30.5" x 6.8")	1070 x 696 x 159 mm (42.2" x 27.4" x 6.3")
	Bezel Width	7.5 mm (0.3") (Left/Right/Top), 10.5 mm (0.41") (Bottom)	12.6 mm (0.5") (Left/Right/Top), 14.5 mm (0.6") (Bottom)		11.9 mm (0.5") (Left/Right/Top), 14.7 mm (0.6") (Bottom)	11.9 mm (0.5") (Left/Right/Top), 14.9 mm (0.6") (Bottom)
	Weight	Approx. 36.2 kg (79.9 lbs.)	Approx. 16.0 kg (35.3 lbs.)		Approx. 11.5 kg (25.4 lbs.)	Approx. 8.7 kg (19.2 lbs.)
	Gross Weight	Approx. 47.0 kg (103.7 lbs.)	Approx. 24.0 kg (53.0 lbs.)		Approx. 17.0 kg (37.5 lbs.)	Approx. 14.0 kg (30.9 lbs.)
	Pitch for Wall-Hanging	VESA Compliant 400 x 400 mm (15.8" x 15.8")			VESA Compliant 200 x 200 mm (7.9" x 7.9")	
	Built-in Speaker	20 W [10W + 10 W] (10% THD)			20 W [10W + 10 W] (10% THD)	
OPTIONS	External Speaker	—			—	
	Orientation	Landscape/Portrait			Landscape/Portrait	
	Tilting Angle	0-20 degrees forward with landscape setting <sup>*2</sup>			0-20 degrees forward with landscape setting <sup>*2</sup>	
	Operating Environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F) <sup>*3</sup> / Humidity: 20 % to 80 % (Non Condensation) <sup>*4</sup>			Temperature: 0 °C to 40 °C (32 °F to 104 °F) <sup>*3</sup> / Humidity: 20 % to 80 % (Non Condensation) <sup>*4</sup>	
	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F) <sup>*3</sup> / Humidity: 20 % to 80 % (Non Condensation) <sup>*4</sup>			Temperature: -20 °C to 60 °C (-4 °F to 140 °F) <sup>*3</sup> / Humidity: 20 % to 80 % (Non Condensation) <sup>*4</sup>	
	Operating Time <sup>*5</sup>	16 h/day			16 h/day	
	Pedestal	TY-ST65PE8	TY-ST43PE8		TY-ST43PE8	TY-ST43PE8
	Early Warning Software <sup>*6</sup>	ET-SWA100 Series	ET-SWA100 Series		ET-SWA100 Series	ET-SWA100 Series

\*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 (1400 m (4593 ft) and higher and below 2800 m (9186 ft) above sea level); 0 °C to 35 °C (32 °F to 95 °F).

\*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.



## 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 62 mm (2.5"), 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 7.5 mm (0.3") wide on the top and both sides, and 10.5 mm (0.41") 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]

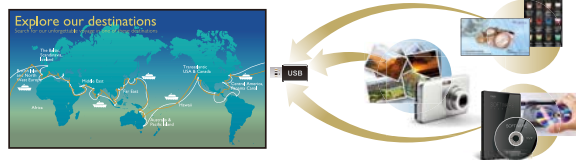
- The maximum size of file is 2 GB.
- You cannot play the files which are protected by Digital Rights Management (DRM).
- Both an image and the sound choose support form.
- Don't support reproduction of only an audio file.

[Applicable device]

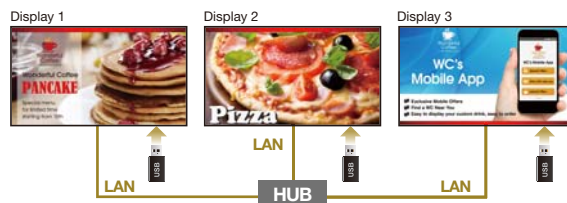
- Devices with security feature are not supported.
- Devices not formatted with FAT16 or FAT32 cannot be used.
- The maximum memory size of USB is 32 GB.

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

### Single Media Player



### Multi Media Player



Connecting more than one unit with LAN cable reproduces files in USB memory simultaneously.

\* Each display needs respective USB memory content.

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

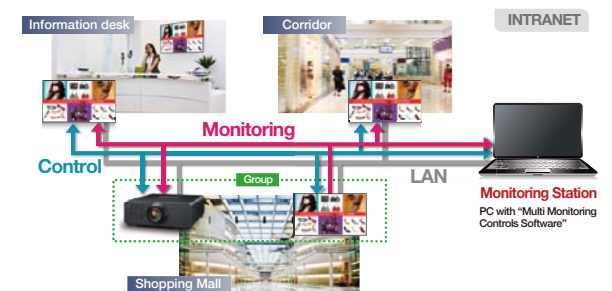
Multi Monitoring & Control Software makes it possible to change the content in the USB memory via LAN after installation. Content can be easily changed even when the display is installed in a high place or suspended from the ceiling. This enables smooth, easy operation.



\* 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>

## 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>

## 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



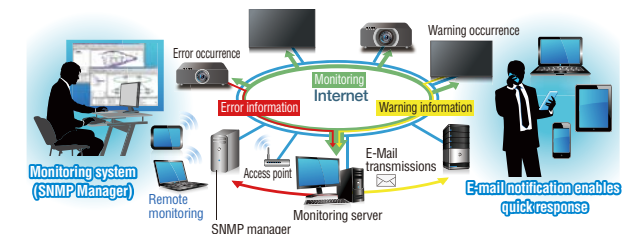
\*Tilt  
0-20 degrees forward  
with landscape setting.

## 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>

### Monitoring display and projectors

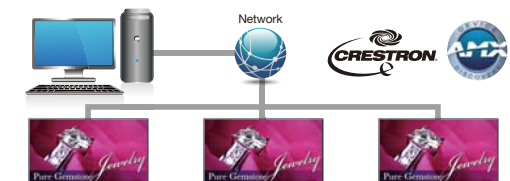


## A LAN Control function for Internet-based control

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 fields and locations.

## WFMZ-TV, US

LFV Series  
TH-55LFV50 x 16

### Street Level Studio Optimizes Space with Mountable Cameras, Video Wall Solutions.

#### Problem-solving with creative technologies

WFMZ-TV needed a video wall solution to serve as a backdrop for its anchors and also show WFMZ-TV's content to passersby when not broadcasting the news. Due to space limitations, the station required a video wall solution with not only a small footprint and thin bezel, but also one that included integrated content management software. Many video wall displays require an additional device for content management, but WFMZ-TV could not afford to sacrifice any additional real estate.

They tested multiple consumer displays, but none were thin or bright enough. The station found an ideal solution with Panasonic's 55" TH-55LFV50 LCD video wall professional displays, installed in a 4x4 configuration. These direct LED backlit professional displays are ideal for installation in bright locations. The displays offer exceptional 800-cd/m<sup>2</sup> brightness, and a high level of contrast for superior color reproduction. The TH-LFV50 professional displays are built for 24/7 operation and include a built-in cooling fan that prevents overheating in the upper screens of a multi-screen installation. The displays include a super narrow 5.3-mm bezel so borders can barely be seen, making nearly seamless images vibrant, natural and eye-catching. The displays also include integrated software to easily manage content on each screen, in virtually any configuration, eliminating the need for any additional equipment. Since broadcasting began from the studio last fall, feedback from viewers has been resoundingly positive.

"Viewers and passersby are impressed with the new studio" said Barry Fisher, WFMZ-TV General Manager. "It enables us to easily be a daily part of one of the communities we serve." The studio is used daily for the noon newscast and evening newscast during special events. "The operation and simplicity of the studio equipment have been beyond expectations."

#### Why Panasonic?

- Ideal for installation in bright locations
- 24/7 operation
- Super narrow bezel design



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

## Fuori Salone 2016, Italy

LFV Series  
TH-55LFV5 x 140

### 140 Panasonic Video Wall Displays Used to Create "KŪKAN" Installation at Fuori Salone

#### Japan's unique view of the world and the beauty of its nature has been displayed across seven giant pillars installed at Fuori Salone 2016

Fuori Salone is part of Milan Design Week, which attracts over 370,000 visitors and 160 participating countries. It has a strong influence on the design industry as a launch pad for the latest global design trends.

For this year's event, Panasonic commissioned 'KŪKAN', or the Invention of Space, which was introduced at an exhibition in the Brera district of the city, and combined Panasonic's imaging and audio technologies.

The installation saw 140 TH-55LFV5 panels arranged into seven pillars, each over six meters high. It combined the traditional culture of Japan with state-of-the-art technology, to bring to life the 'Wonder Japan Experience' that fuels the imagination of visitors.

Each of the seven dimensions traced the history of space culture from ancient times to modern day to create a 'space' that yields unlimited inspiration and leads to moments of invention of the space just beyond.

The installation picked up the 'People's Choice Award' at the Milano Design Award 2016, the official competition organized by districts and organizations hosting the Fuori Salone.

#### Why Panasonic?

- Super narrow bezel design
- Reliability
- High picture quality



			4K		Indoor										Video Wall				Outdoor		Touch Screen			Standard								
			TH-98LQ70 TH-98LQ70L	TH-84LQ70 TH-84LQ70L	TH-55AF1	TH-49AF1	TH-42AF1	TH-80LF50	TH-70LF50	TH-55LF80	TH-49LF80	TH-42LF80		TH-55LF8	TH-49LF8	TH-42LF8	TH-55LVF70	TH-55LVF60	TH-55LVF6	TH-47LVF5	TH-47LVFX60	TH-47LVFX6N	TH-80BF1	TH-65BF1	TH-50BF1	TH-84EF1	TH-75EF1	TH-32EF1	TH-65LFE8	TH-55LFE8	TH-48LFE8	TH-43LFE8
Screen Size (inch)			98	84	55	49	42	80	70	55	49	42		55	49	42	55	55	55	47	47	47	80	65	50	84	75	32	65	55	48	43
FUNCTION BOARD	BNC Dual Video	TY-FB9BD*1	-	-			-	-														Yes	Yes	Yes								
	HD-SDI with Audio	TY-FB10HD	-	-			-	Yes	Yes													Yes	Yes	Yes								
	HD-SDI	TY-FB9HD*1	-	-			-	-	-													Yes	Yes	Yes								
	Dual Link HD-SDI	TY-FB11DHD	-	-			-	-	-													Yes	Yes	Yes								
	Dual HDMI	TY-FB10HMD*1	-	-			-	Yes	Yes													Yes	Yes	Yes								
	DVI-D	TY-FB11DD	-	-			-	-	-													Yes	Yes	Yes								
	3G-SDI Terminal Board	TY-TBN03G	Yes	Yes				-	-													Yes	Yes	Yes								
MOUNTING OPTIONS	Pedestal	TY-ST103PF9	Yes	-			-	-														-	-	-								
		TY-ST85P12	-	Yes				-	-														-	-	-							
		TY-ST65P20					-	Yes	-													Yes	Yes	-								
		TY-ST58P20*1						-	Yes														-	-	-							
		TY-ST65PE8					-	-	-														-	-	-			Yes				
		TY-ST43PE8			Yes	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes							-	-	-				Yes	Yes	Yes	Yes
		TY-ST42P50					-	-	-														-	-	Yes							
		TY-ST32PE1					-	-	-														-	-	-			Yes				
	Wall-hanging bracket	TY-WK103PV9	Yes	-			-	-	-														-	-	-							
		TY-WK85PV12		Yes			-	-	-														-	-	-							
		TY-WK70PV50*1					-	Yes	Yes													Yes	-	-	-							
		TY-WK42PV20					-	-	-														-	-	Yes							
		TY-WK65PR20					-	-	-														-	Yes*2	-							
		TY-WK42PR20					-	-	-														-	-	Yes							
	Ceiling-hanging bracket	TY-CE103PS10	Yes*3	-			-	-	-														-	-	-							
		TY-CE85PS12		Yes*3			-	-	-														-	-	-							
		TY-CE42PS20					-	-	-														-	-	Yes							
Mobile stand	TY-ST85PB1	-	Yes			-	-	-														-	-	-								
	TY-ST80LF70					-	-	-														Yes	-	-	-							
	TY-ST65PB2					-	-	-														-	Yes	-	-							
	TY-ST50PB2					-	-	-														-	-	Yes	-	-						
Installation Mount	TY-VK55LV1	-	-			-	-	-							Yes	Yes	Yes	-	-	-	-	-	-	-	-							
	TY-VK47LV1					-	-	-							-	-	-	Yes	-	-	-	-	-	-	-							
Cover Frame Kit for 55"	TY-CF55VW50	-	-			-	-	-							Yes	Yes	Yes	-	-	-	-	-	-	-	-							
Cover Frame Kit for 47"	TY-CF47VW5	-	-			-	-	-							-	-	-	Yes	-	-	-	-	-	-	-							
OTHERS	DIGITAL LINK Switcher	ET-YFB200G	Yes	Yes	-	-	-	-		Yes	Yes	Yes		-	-	-	Yes	-	-	-	Yes	Yes	Yes*4	Yes*4	Yes*4	-	-	-	-	-	-	-
	Digital Interface Box	ET-YFB100G	Yes	Yes	-	-	-	-		Yes	Yes	Yes		-	-	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-
	Easy Wireless Stick	ET-UW100*5	-	-			-	-		-	-	-		-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	-	-
	Multi Window Processor	ET-MWP100	-	-			-	-		-	-	-		-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
SOFTWARE	Whiteboard Software for PC*6		-	-			-	-		-	-			-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	-	-
	Wireless Manager*6		-	-			-	-		-	-			-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	-
	Multi Monitoring & Control Software*6		-	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Video Wall Manager*6		-	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-
	Auto Display Adjustment Upgrade Kit	TY-VUK10	-	-	Yes*7	Yes*7	Yes*7	-	-	Yes*8	Yes*8	Yes*8		Yes*8	Yes*8	Yes*8	Yes*8	Yes*8	Yes	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Early Warning Software	ET-SWA100*9	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	

\*1: Production discontinued. Please contact the sales company for options regarding discontinued products.

\*2: The Wall Hanging Bracket (TY-WK65PR20) is suitable for both Angled and Vertical use. Also usable for Portrait mounting at 0 degrees.

For Vertical use only when using the TH-65BF1.

\*3: Tilt angle limited to 10 degree maximum.

\*4: Long Reach Mode on ET-YFB200G is not supported.

\*5: This product can be purchased in the U.S., Canada, Japan, Australia, and New Zealand.

\*6: Downloadable for free. For more information, please visit our Global website. <http://panasonic.net/prodisplays/download/software/index.html>

\*7: Supports Ver.1.2 or later

\*8: Supports Ver.1.1 or later

\*9: Part number suffix may differ depending on the license type.

		4K				Indoor								Video Wall				Outdoor		Touch Screen			Standard										
		TH-98LQ70	TH-84LQ70	TH-98LQ70L	TH-84LQ70L	TH-55AF1	TH-49AF1	TH-42AF1	TH-80LF50	TH-70LF50	TH-55LF80	TH-49LF80	TH-42LF80		TH-55LF8	TH-49LF8	TH-42LF8	TH-55LFXV70	TH-55LFXV60	TH-55LFXV6	TH-47LFXV5	TH-47LFX60	TH-47LFX6N	TH-80BF1	TH-65BF1	TH-50BF1	TH-84EF1	TH-75EF1	TH-32EF1	TH-65LFE8	TH-55LFE8	TH-48LFE8	TH-43LFE8
Size (inch)		98	84	98	84	55	49	42	80	70	55	49	42		55	49	42	55	55	55	47	47	47	80	65	50	84	75	32	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	24	24	24	18	18	18	TBD	TBD	16	16	16	16	16
	DIGITAL LINK	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes		-	-	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-
	Wireless Function	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	-
	Protective Glass	Yes	Yes	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-
	Function Slot	SLOT NX				-	-	-	SLOT2.0				-	-	-	-	-	-	-	-	-	-	Yes	Yes	SLOT2.0			-	-	-	-	-	-
4 Input Multi Display (up to FHD)	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
INSTALLATION	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	TBD	TBD	-	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	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	Yes	Yes	Yes	Yes	Yes	Yes
	Pre Calibration	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-
	Fan-less Design	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Monitor Out	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	-	
FUNCTIONS	Built-in Whiteboard	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	-	-	-	-
	USB Media Player	-	-	-	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1
	Cloning	-	-	-	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	-	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Memory Viewer	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	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	Yes
	Digital Zoom	-	-	-	-	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	Yes	-	-	-	-	-	-	-	-	-	-	-	-
	Frame Creation	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	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	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	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	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	-	-	-	-	-	-
	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	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	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	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	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	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	Yes	Yes	
Multi Monitoring & Control Software Compatible	-	-	-	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	-	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Video Wall Manager/ Auto Display Adjustment Upgrade Kit	-	-	-	-	Yes*3	Yes*3	Yes*3	-	-	Yes*4	Yes*4	Yes*4		Yes*4	Yes*4	Yes*4	Yes	Yes*4	Yes*4	Yes	-	-	-	-	-	Yes*5	Yes*5	Yes*5	-	-	-	-	-
Super High Quality Up-Scaling	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.1.2 or later

\*4 Supports Ver.1.1 or later

\*5 Supports Video Wall Manager only