

Panasonic

BUSINESS



Brandenburg Gate Museum



Professional **DISPLAYS**

Line-up Catalog February 2019



Worldwide
Olympic Partner



Worldwide
Paralympic Partner



Panasonic Professional Displays Lineup

Advanced Professional

LinkRay Compatible Models

SF1H Series 700cd/m²

55"	49"	42"
TH-55SF1H	TH-49SF1H	TH-42SF1H

SF2H Series 700cd/m²

80"	70"
TH-80SF2H	TH-70SF2H

LinkRay 24/7 Operation USB Media Player DIGITAL LINK Portrait

LF80 Series 700cd/m²

55"	49"	42"
TH-55LF80	TH-49LF80	TH-42LF80

24/7 Operation USB Media Player DIGITAL LINK Portrait

SQ1 Series 500cd/m²

NEW

98"	86"
TH-98SQ1	TH-86SQ1

4K PROFESSIONAL 24/7 Operation 4K DIGITAL LINK USB 4K Media Player Portrait Intel SDM 4K Daisy Chain

*Actual resolution : 3840 x 2160p

OpenPort PLATFORM® Models

AF1 Series 500cd/m²

55"	49"	42"
TH-55AF1	TH-49AF1	TH-42AF1

OpenPort PLATFORM 24/7 Operation USB Media Player Portrait

SF2 Series 450cd/m²

65"	55"	49"	43"
TH-65SF2	TH-55SF2	TH-49SF2	TH-43SF2

24/7 Operation USB Media Player DIGITAL LINK Portrait

* 65SF2E (for Europe/CIS) only.

Entry

EQ1 Series 350cd/m²

86"	75"
TH-86EQ1	TH-75EQ1

65"	55"
TH-65EQ1	TH-55EQ1

50"	43"
TH-50EQ1	TH-43EQ1



4K PROFESSIONAL *1 24/7 *2 Operation USB 4K Media Player Portrait 18h *3 Operation

*1: Actual resolution : 3840 x 2160p
*2: TH-86EQ1/75EQ1 only
*3: TH-43/50/55/65EQ1 only

EF1 Series 350cd/m² (75EF1: 410 cd/m²)

75"	65"	32"
TH-75EF1	TH-65EF1	TH-32EF1

LFE8 Series 350cd/m²

55"	48"	43"
TH-55LFE8	TH-48LFE8	TH-43LFE8

USB Media Player Portrait 16h Operation [Except 75EF1]

Video Wall

VF1H 700cd/m²

55"
TH-55VF1H

LFV70 700cd/m²

55"
TH-55LFV70

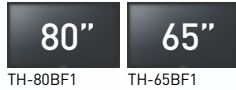
LFV8 500cd/m² (TH-49LFV8: 450 cd/m²)

55"	49"
TH-55LFV8	TH-49LFV8

24/7 Operation USB Media Player (Except LFV8) 4K Daisy Chain (LFV8 Series only) DIGITAL LINK (VF1H/LFV70 only) 1.8mm (VF1H only) 3.5mm (LFV70/LFV8 only) Portrait

BF1 Series

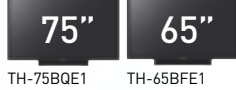
350cd/m²



TH-80BF1 TH-65BF1

BQE1/BFE1

400cd/m²



TH-75BQE1 TH-65BFE1

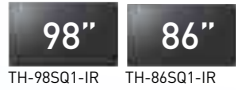


[BQE1 only] *Actual resolution: 3840 x 2160p [BFE1 Series only] [BF1 Series only] [BF1 Series only]

Infrared Technology

SQ1-IR Series

500cd/m²



TH-98SQ1-IR TH-86SQ1-IR



*Actual resolution: 3840 x 2160p

EQ1-IR Series

350cd/m²



TH-86EQ1-IR TH-75EQ1-IR TH-65EQ1-IR TH-55EQ1-IR



TH-50EQ1-IR TH-43EQ1-IR



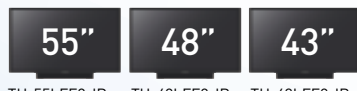
*1: Actual resolution: 3840 x 2160p *2: TH-86EQ1/75EQ1-IR only *3: TH-43/50/55/65EQ1-IR only

EF1-IR/LFE8-IR Series

350cd/m²



TH-75EF1-IR TH-65EF1-IR



TH-55LFE8-IR TH-48LFE8-IR TH-43LFE8-IR

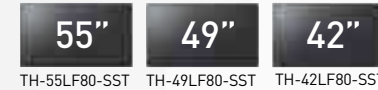


[Except 75EF1-IR]

ShadowSense Technology

LF80-SST Series

700cd/m²



TH-55LF80-SST TH-49LF80-SST TH-42LF80-SST



AF1-SST Series

500cd/m²



TH-55AF1-SST TH-49AF1-SST TH-42AF1-SST



THE BRANDENBURG GATE MUSEUM

Berlin, Germany

Panasonic takes visitors back in time at The Brandenburg Gate Museum

Panasonic has helped the Brandenburg Gate Museum with its immersive experience space by providing them with 87 full HD screens. It is one of the largest Panasonic videowalls in Europe and is used for everything from political conferences, gaming demonstrations and university productions.



Solution

Using 87 Panasonic display screens to tell the incredible history of the city while offering a flexible working environment, for large corporations.



Equipment Installed

TH-55LFE8 x 87

SF1H/SF2H Series



Advanced Professional

Model no.	TH-55SF1H	TH-49SF1H	TH-42SF1H	TH-80SF2H	TH-70SF2H
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	80-inch (2032 mm)/16:9	70-inch (1765 mm)/16:9
Panel Type	IPS Panel/E-LED	IPS Panel/E-LED	IPS Panel/E-LED	VA Panel/E-LED	VA 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")	1771 x 996 mm (69.7" x 39.2")	1538 x 865 mm (60.5" x 34.0")
Resolution (H x V)	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Brightness (Typ)*	700 cd/m ²	700 cd/m ²	700 cd/m ²	700 cd/m ²	700 cd/m ²
Contrast Ratio	1300:1	1300:1	1300:1	5000:1	5000:1
Dynamic Contrast Ratio	50000:1	50000:1	50000:1	50000:1	50000:1
Response Time	8 ms [G to G]	8 ms [G to G]	8 ms [G to G]	4.0 ms [G to G]	8.0 ms [G to G]
Viewing Angle (Horizontal/Vertical)	178°/178° [CR≥10]	178°/178° [CR≥10]	178°/178° [CR≥10]	176°/176° [CR≥10]	176°/176° [CR≥10]
Panel Surface Treatment	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 5 %)	Anti-Glare (Haze 12 %)
TERMINAL					
VIDEO In	BNC x 1 (Shared with Component /RGB Y/G)			4-pole Mini Jack [M3] x 1 (Audio In shared with DVI-D In/PC In/Video In)	
Audio In (L/R)	Stereo Mini Jack [M3] x 1 (Shared with Component In)			HDMI Type A Connector x 2	
HDMI In	HDMI Type A Connector x 2			—	
Component/RGB In	BNC x 1 set (Shared with Video In)			—	
Audio In (L/R)	Stereo Mini Jack [M3] x 1 (Shared with Video In)			DVI-D 24-pin x 1 (DVI Revision 1.0 compliant), HDCP 1.1 compatible	
DVI-D In	DVI-D 24-pin x 1			4-pole Mini Jack [M3] x 1 (Shared with PC/VIDEO In)	
Audio In (L/R)	Stereo Mini Jack [M3] x 1 (Shared with PC In)			DVI-D 24-pin x 1 (DVI Revision 1.0 compliant), HDCP 1.1 compatible	
DVI-D Out	DVI-D 24-pin x 1			Mini D-sub 15-pin x 1 (DDC2B compatible)	
PC In	Mini D-Sub 15-pin x 1 (Female)			4-pole Mini Jack [M3] x 1 (Shared with DVI-D/VIDEO In)	
Audio In (L/R)	Stereo Mini Jack [M3] x 1 (Shared with DVI-D In)			Stereo Mini Jack [M3] x 1	
Audio Out (L/R)	Stereo Mini Jack [M3] x 1			D-sub 9-pin x 1/x 1, RS-232C Compatible	
Serial In/Out	D-sub 9-pin x 1/x 1, RS-232C Compatible			RJ45 x 1, 100BASE-TX, Compatible with PLink™ (Shared with LAN)	
DIGITAL LINK	RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with LAN)			RJ45 x 1, 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)	
LAN	RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)			Stereo Mini Jack [M3] x 1 / x 1	
IR In/Out	Stereo Mini Jack [M3] x 1 / x 1			USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)	
USB	USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)				
GENERAL					
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
Power Consumption	190 W	175 W	155 W	380 W	235 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)	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" *)	1835 x 1060 x 82 mm (72.3" x 41.8" x 3.3")	1580 x 919 x 80 mm (62.2" x 36.2" x 3.2")
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")	1970 x 1191 x 351 mm (77.6" x 46.9" x 13.9")	1715 x 1050 x 351 mm (67.6" x 41.4" x 13.9")
Bezel Width	R/L/T/B: 6.3 mm (0.25")	R/L/T/B: 6.3 mm (0.25")	R/L/T/B: 6.3 mm (0.25")	R/L/T/B: 28.5 mm (1.12")	R/L: 18.6 mm (0.73"), T/B: 23.6 mm (0.92")
Weight	Approx. 24.9 kg (54.9 lbs.)	Approx. 19.2 kg (42.4 lbs.)	Approx. 15.5 kg (34.2 lbs.)	Approx. 62.0 kg (135.0 lbs.)	Approx. 45.0 kg (99.0 lbs.)
Gross Weight	Approx. 33.0 kg (72.8 lbs.)	Approx. 26.0 kg (57.4 lbs.)	Approx. 20.0 kg (44.1 lbs.)	Approx. 73.0 kg (159.0 lbs.)	Approx. 55.0 kg (119.0 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 200 x 200 mm (7.9" x 7.9")	VESA compliant 600 x 400 mm (23.6" x 15.8")	VESA compliant 400 x 400 mm (15.8" x 15.8")
Built-in Speakers	20 W [10 W + 10 W]	20 W [10 W + 10 W]	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: landscape setting only)	
Tilting Angle	0-45 degrees forward/backward with landscape/portrait setting*1 [Angle adjustment is not possible for forward/backward tilting installation.]			0-20 degrees forward/backward with landscape/portrait setting [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	TY-ST75PE9	TY-ST75PE9
Digital Interface Box	ET-YFB100G	ET-YFB100G	ET-YFB100G	ET-YFB100G	ET-YFB100G
DIGITAL LINK Switcher	ET-YFB200G	ET-YFB200G	ET-YFB200G	ET-YFB200G	ET-YFB200G
Early Warning Software*5	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series
Auto Display Adjustment Upgrade Kit*6	TY-VUK10	TY-VUK10	TY-VUK10	TY-VUK10	TY-VUK10
Multi Window Processor	ET-MWP100G	ET-MWP100G	ET-MWP100G	ET-MWP100G	ET-MWP100G

+ The brightness of the display panel is equivalent to about 75% its full capacity, when the Light ID is transmitted. The displayed image may flicker, but this is due to a change in the brightness during Light ID transmission and not due to trouble.

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

*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.

*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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type.

*6: Download the latest Video Wall Manager from Global Website in advance. (<https://panasonic.net/cns/prodisplays/download/software/vwm/>)

LF80 Series



Model no.		TH-55LF80	TH-49LF80	TH-42LF80
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	IPS Panel/E-LED	IPS Panel/E-LED	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 (Typ)	700 cd/m ²	700 cd/m ²	700 cd/m ²
	Contrast Ratio	1300:1	1300:1	1300:1
	Dynamic Contrast Ratio	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]
Panel Surface Treatment		Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)
TERMINAL	VIDEO In	BNC x 1 [Shared with Component /RGB Y/G]		BNC x 1 [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/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 x 1 [Female]		Mini D-Sub 15-pin x 1 [Female]
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with DVI-D In]		Stereo Mini Jack (M3) x 1 [Shared with DVI-D In]
	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	RJ45 x 1 100BASE-TX, Compatible with PJLink™ [Shared with LAN]		RJ45 x 1 100BASE-TX, Compatible with PJLink™ [Shared with LAN]
GENERAL	LAN	RJ45 x 1 100BASE-TX, Compatible with PJLink™ [Shared with DIGITAL LINK]		RJ45 x 1 100BASE-TX, Compatible with PJLink™ [Shared with DIGITAL LINK]
	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.]
	Power Requirements	220-240 V AC, 50 Hz/60 Hz		220-240 V AC, 50 Hz/60 Hz
	Power Consumption	190 W		155 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")
OPTIONS	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)*3 : 0 °C to 35 °C (32 °F to 95 °F)*4 / 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] / 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
	Pedestal	TY-ST43PE8		TY-ST43PE8
	Wall-hanging Bracket	—		—
	Digital Interface Box	ET-YFB100G		ET-YFB100G
	DIGITAL LINK Switcher	ET-YFB200G		ET-YFB200G
	Early Warning Software*6	ET-SWA100 Series		ET-SWA100 Series
	Auto Display Adjustment Upgrade Kit*7	TY-VUK10		TY-VUK10
	Multi Window Processor	ET-MWP100G		ET-MWP100G

*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.

*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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type.

*7: Download the latest Video Wall Manager from Global Website in advance. (<https://panasonic.net/cns/prodisplays/download/software/vwm/>)

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

SQ1 Series



Model no.		TH-98SQ1	TH-86SQ1
DISPLAY PANEL	Screen Size [Diagonal]/Aspect Ratio	98-inch [2476.9 mm]/16:9	86-inch [2174.2 mm]/16:9
	Panel Type	IPS / Direct LED	IPS / Edge LED
	Effective Display Area [W x H]	2158.8 x 1214.3 mm [84.99" x 47.80"]	1895.0 x 1065.9 mm [74.60" x 41.96"]
	Resolution [H x V]	3840 x 2160	3840 x 2160
	Brightness [Typ]	500 cd/m ²	500 cd/m ²
	Contrast Ratio	1300:1	1200:1
	Dynamic Contrast Ratio	50000:1	50000:1
	Response Time	8 ms [G to G]	8 ms [G to G]
	Viewing Angle [Horizontal/Vertical]	178°/178° (CR≥10)	178°/178° (CR≥10)
	Panel Surface Treatment	Anti-Glare (Haze 28 %)	Anti-Glare (Haze 28 %)
TERMINAL	HDMI In	HDMI TYPE-A Connector x 2 ^{*1}	
	DisplayPort In	DisplayPort x 1	
	DisplayPort Out	DisplayPort x 1	
	USB	USB Connector (TYPE-A) x 2, DC 5V/2 A, DC 5V/1A (USB 3.0 Supported)	
	DVI-D In	DVI-D 24-pin x 1	
	Audio In [L/R]	Stereo Mini Jack [M3] x 2 [Shared with PC In]	
	PC In	Mini D-sub 15-pin x 1 [Female] ^{*3}	
	Audio In [L/R]	Stereo Mini Jack [M3] x 2 [Shared with DVI-D In]	
	Audio Out	Stereo Mini Jack [M3] x 1	
	Serial In	D-sub 9-pin x 1, RS232C Compatible	
GENERAL	LAN	RJ45 x 1, 10 BASE-T / 100 BASE-TX, Compatible with PLink™	
	DIGITAL LINK	RJ45 x 1, 100 BASE-TX, Compatible with long reach mode and PLink™	
	IR In/Out	Stereo Mini Jack [M3] x 1 / x 1	
	Function Slot	x1 [Intel® SDM Specification Capability]	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	
	Power Consumption	685 W	480 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]	2194 x 1249 x 90 *mm [86.35" x 49.15" x 3.54" *]	1928 x 1099 x 86 *mm [75.91" x 43.27" x 3.39" *]
	Carton Size [W x H x D]	2513 x 1704 x 450 mm [98.9" x 67.1" x 17.7"]	2224 x 1427 x 373 mm [87.6" x 56.2" x 14.7"]
OPTIONS	Bezel Width	16.0 mm [0.63"] [T/B/L/R]	15.2 mm [0.6"] [T/B/L/R]
	Weight	Approx. 90.0 kg [198.5 lbs.]	Approx. 66.0 kg [145.5 lbs.]
	Gross Weight	Approx. 138.0 kg [304.3 lbs.]	Approx. 89.0 kg [196.3 lbs.]
	Pitch for Wall-Hanging	800 x 500 mm [31.5" x 19.7"] VESA Compliant	600 x 400 mm [23.6" x 15.8"] VESA Compliant
	Protective Glass	—	
	Built-in Speaker	20 W [10 W + 10 W]	
	Orientation	Landscape/Portrait	
	Tilting Angle	0-20 degrees forward/backward with landscape/portrait setting	
	Operating Environment	Temperature : 0 °C to 40 °C [32°F to 104°F] / 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]	

*1: HDCP1.4 supported. Embedded audio supported. (SQ1: HDCP2.2 supported) *2: HDCP1.3 supported. Embedded audio supported. *3: RGB/YpPr 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 model] 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.

AF1 Series



Model no.		TH-55AF1	TH-49AF1
DISPLAY PANEL	Screen Size [Diagonal]/Aspect Ratio	55-inch [1387 mm]/16:9	49-inch [1232 mm]/16:9
	Panel Type	IPS Panel/E-LED	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"]
	Resolution [H x V]	1920 x 1080	1920 x 1080
	Brightness [Typ]	500 cd/m ²	500 cd/m ²
	Contrast Ratio	1300:1	1300:1
	Dynamic Contrast Ratio	50000:1	50000:1
	Response Time	8 ms [G to G]	8 ms [G to G]
	Viewing Angle [Horizontal/Vertical]	178°/178° (CR≥10)	178°/178° (CR≥10)
	Panel Surface Treatment	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)
PLATFORM	OS	Android 4.4.3	
	CPU	Cortex-A9, 1.0 GHz [Quad]	
	Memory	RAM 1 GB / ROM 8 GB	
	VIDEO In	BNC x 1 [Shared with Component In]	
	Audio In [L/R]	Stereo Mini Jack [M3] x 1 [Shared with Component In]	
	HDMI In	HDMI Type A Connector x 2	
	Component/RGB In	BNC x 1 set [Shared with VIDEO In]	
	Audio In [L/R]	Stereo Mini Jack [M3] x 1 [Shared with Video In]	
	DVI-D In	DVI-D 24-pin x 1	
	Audio In [L/R]	Stereo Mini Jack [M3] x 1 [Shared with PC In]	
TERMINAL	DVI-D Out	DVI-D 24-pin x 1	
	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]	Stereo Mini Jack [M3] x 1	
	Serial In/Out	D-sub 9-pin x 1/x 1, RS-232C Compatible	
	USB	USB Connector (TYPE A) x 1, DC 5 V/1 A [USB3.0 is not supported]	
	IR In/Out	Stereo Mini Jack [M3] x 1 / x 1	
	LAN	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	
	Micro-USB	Micro USB Connector x 1	
GENERAL	microSD card slot	microSD, microSDHC x 1	
	Wireless LAN	IEEE 802.11a/b/g/n	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz
	Power Consumption	190 W	175 W
	Power Off Condition	Approx. 0.3 W	Approx. 0.3 W
	Stand-by Condition	Approx. 0.5 W [When [OpenPort PLATFORM standby] is set to [Off]] Approx. 20 W [When [OpenPort PLATFORM standby] is set to [On]]	Approx. 0.5 W [When [OpenPort PLATFORM standby] is set to [Off]] Approx. 20 W [When [OpenPort PLATFORM standby] is set to [On]]
	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" *]
	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"]
	Bezel Width	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.]
OPTIONS	Gross Weight	Approx. 33.0 kg [72.8 lbs.]	Approx. 26.0 kg [57.4 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"]
	Built-in Speakers	20 W [10 W + 10 W]	
	Orientation	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.)	
	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]	
	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	
	Pedestal	TY-ST43PE8	TY-ST43PE8
	Early Warning Software ^{*5}	ET-SWA100 Series	ET-SWA100 Series
OPTIONS	Auto Display Adjustment Upgrade Kit ^{*6}	TY-VUK10	TY-VUK10
	Multi Window Processor	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. *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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type. *6: Download the latest Video Wall Manager from Global Website in advance. (<https://panasonic.net/cns/prodisplays/download/software/vwm/>)

AF1 Series



Model no.		TH-42AF1
DISPLAY PANEL	Screen Size [Diagonal]/Aspect Ratio	42-inch (1064 mm)/16:9
	Panel Type	IPS Panel/E-LED
	Effective Display Area (W x H)	927 x 521 mm (36.5" x 20.5")
	Resolution (H x V)	1920 x 1080
	Brightness (Typ)	500 cd/m ²
	Contrast Ratio	1300:1
	Dynamic Contrast Ratio	50000:1
	Response Time	8 ms (G to G)
	Viewing Angle (Horizontal/Vertical)	178°/178° (CR>10)
	Panel Surface Treatment	Anti-Glare (Haze 10 %)
PLATFORM	OS	Android 4.4.3
	CPU	Cortex-A9, 1.0 GHz (Quad)
	Memory	RAM 1 GB / ROM 8 GB
TERMINAL	VIDEO In	BNC x 1 (Shared with Component In)
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 (Shared with Component In)
	HDMI In	HDMI Type A Connector x 2
	Component/RGB In	BNC x 1 set (Shared with VIDEO In)
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 (Shared with Video In)
	DVI-D In	DVI-D 24-pin x 1
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 (Shared with PC In)
	DVI-D Out	DVI-D 24-pin x 1
	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)	Stereo Mini Jack (M3) x 1
	Serial In/Out	D-sub 9-pin x 1/x 1, RS-232C Compatible
	USB	USB Connector (TYPE A) x 1, DC 5 V/1 A (USB3.0 is not supported)
	IR In/Out	Stereo Mini Jack (M3) x 1 / x 1
OpenPort PLATFORM	LAN	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
	Micro-USB	Micro USB Connector x 1
	microSD card slot	microSD, microSDHC x 1
	Wireless LAN	IEEE 802.11a/b/g/n
GENERAL	Power Requirements	220-240 V AC, 50 Hz/60 Hz
	Power Consumption	155 W
	Power Off Condition	Approx. 0.3 W
	Stand-by Condition	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off]) Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On])
	Dimensions (W x H x D)	947 x 541 x 72*mm [37.3" x 21.3" x 2.8"*]
	Carton Size (W x H x D)	1123 x 743 x 203 mm [44.3" x 29.3" x 8.0"]
	Bezel Width	6.3 mm [0.25"]
	Weight	Approx. 15.6 kg [34.4 lbs.]
	Gross Weight	Approx. 21.0 kg [46.3 lbs.]
	Pitch for Wall-Hanging	VESA Compliant 200 x 200 mm [7.9" x 7.9"]
	Built-in Speakers	20 W [10 W + 10 W]
	Orientation	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.)
	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)
	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
OPTIONS	Pedestal	TY-ST43PE8
	Early Warning Software*5	ET-SWA100 Series
	Auto Display Adjustment Upgrade Kit*6	TY-VUK10
	Multi Window Processor	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. *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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type. *6: Download the latest Video Wall Manager from Global Website in advance. (<https://panasonic.net/cns/prodisplays/download/software/vwm/>)

Feature video



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



AF1 Partners

OpenPort PLATFORM supports applications developed and mutually checked with Panasonic by the following global partners.



* Listed in alphabetical order.

SF2 Series



Model no.		TH-65SF2	TH-55SF2	TH-49SF2	TH-43SF2
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	65-inch (1639 mm)/16:9	55-inch (1387 mm)/16:9	49-inch (1232 mm)/16:9	43-inch (1079 mm)/16:9
	Panel Type	IPS Panel/E-LED	IPS Panel/E-LED	IPS Panel/E-LED	IPS Panel/E-LED
	Effective Display Area (W x H)	1428 x 803 mm [52.6" x 31.6"]	1209 x 680 mm [47.6" x 26.7"]	1073 x 604 mm [42.2" x 23.7"]	941 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 [Typ]	450 cd/m ²	450 cd/m ²	450 cd/m ²	450 cd/m ²
	Contrast Ratio	1300:1	1100:1	1100:1	1100:1
	Dynamic Contrast Ratio	50000:1	50000:1	50000:1	50000:1
	Response Time	10 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 1 %)	Anti-Glare (Haze 1 %)	Anti-Glare (Haze 1 %)	Anti-Glare (Haze 1 %)
TERMINAL	VIDEO In/Audio In	4-pole Mini Jack [M3] x 1		4-pole Mini Jack [M3] x 1	
	HDMI In	HDMI Type A Connector x 2		HDMI Type A Connector x 2	
	Component/RGB In	—		—	
	Audio In (L/R)	—		—	
	DVI-D In	DVI-D 24-pin x 1 [DVI Revision 1.0 compliant], HDCP 1.1 compatible		DVI-D 24-pin x 1 [DVI Revision 1.0 compliant], HDCP 1.1 compatible	
	Audio In (L/R)	4-pole Mini Jack [M3] x 1 [Shared with PC/VIDEO In]		4-pole Mini Jack [M3] x 1 [Shared with PC/AV In]	
	DVI-D Out	DVI-D 24-pin x 1 [DVI Revision 1.0 compliant], HDCP 1.1 compatible		DVI-D 24-pin x 1 [DVI Revision 1.0 compliant], HDCP 1.1 compatible	
	PC In	Mini D-Sub 15-pin x1 [DDC2B compatible]		Mini D-Sub 15-pin x 1 [DDC2B compatible]	
	Audio In (L/R)	4-pole Mini Jack [M3] x 1 [Shared with DVI-D/VIDEO In]		4-pole Mini Jack [M3] x 1 [Shared with DVI-D/AV In]	
	Audio Out (L/R)	Stereo Mini Jack [M3] x 1		Stereo Mini Jack [M3] x 1	
GENERAL	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	RJ45 x 1, 100BASE-TX, Compatible with PLink™ for TH-65SF2E/W and TH-55SF2W [Shared with LAN]		RJ45 x 1, 100BASE-TX, Compatible with PLink™ for TH-49/43SF2W [Shared with LAN]	
	LAN	RJ45 x 1, 100BASE-TX, Compatible with PLink™ for TH-65SF2E/W and TH-55SF2W [Shared with DIGITAL LINK]		RJ45 x 1, 100BASE-TX, Compatible with PLink™ for TH-49/43SF2W	
	IR In/Out	Stereo Mini Jack [M3] x 1 / x 1		[Shared with DIGITAL LINK]; 10BASE-T/100BASE-TX, Compatible with PLink™ for TH-49/43SF2E 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]	
	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	155 W	115 W	110 W	95 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)	1452 x 834 x 64 mm [57.2" x 32.9" x 2.5"]	1234 x 710 x 46 mm [48.5" x 28.0" x 1.8"]	1098 x 634 x 46 mm [43.2" x 24.9" x 1.8"]	965 x 559 x 46 mm [38.0" x 22.0" x 1.8"]
OPTIONS	Carton Size (W x H x D)	1648 x 1076 x 280 mm [64.9" x 42.4" x 11.1"]	1448 x 952 x 223 mm [57.0" x 37.5" x 8.8"]	1292 x 883 x 203 mm [50.9" x 34.8" x 8.0"]	1141 x 779 x 203 mm [44.9" x 30.7" x 8.0"]
	Bezel Width	T/R/L: 9.5 mm [0.38"], B: 15.7 mm [0.62"]	T/R/L: 9.5 mm [0.38"], B: 15.5 mm [0.61"]	T/R/L: 9.5 mm [0.38"], B: 15.5 mm [0.61"]	T/R/L: 9.5 mm [0.38"], B: 15.5 mm [0.61"]
	Weight	Approx. 29.8 kg [65.7 lbs.]	Approx. 18.0 kg [39.7 lbs.]	Approx. 14.7 kg [32.4 lbs.]	Approx. 10.7 kg [23.6 lbs.]
	Gross Weight	Approx. 41.0 kg [90.4 lbs.]	Approx. 26.0 kg [57.3 lbs.]	Approx. 21.0 kg [46.3 lbs.]	Approx. 15.0 kg [33.1 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"]
	Built-in Speakers	20W [10 W + 10 W]	20 W [10 W + 10 W]	20 W [10 W + 10 W]	20 W [10 W + 10 W]
	Orientation*1	Landscape/Portrait [Angle adjustment 0 - 45 degrees for both left and right with landscape setting. When installing the portrait setting, be sure that the Power Indicator comes to the upside.]		Landscape/Portrait [Angle adjustment 0 - 45 degrees for both left and right with landscape setting. When installing the portrait setting, be sure that the Power Indicator comes to the upside.]	
	Tilting Angle*1	Landscape setting: 0 - 45 degrees forward/backward Portrait setting: 0 - 45 degrees forward/backward		Landscape setting: 0 - 45 degrees forward/backward Portrait setting: 0 - 45 degrees forward/backward	
	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]	
OPTIONS	Operating Time*5	24 h/day		24 h/day	
	Pedestal	TY-ST55PE9	TY-ST55PE9	TY-ST43PE9	TY-ST43PE9
	Digital Interface Box	ET-YFB100G	ET-YFB100G*6	ET-YFB100G*6	ET-YFB100G*6
	DIGITAL LINK Switcher	ET-YFB200G	ET-YFB200G*6	ET-YFB200G*6	ET-YFB200G*6
	Early Warning Software*7	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series
	Auto Display Adjustment Upgrade Kit*8	TY-VUK10	TY-VUK10	TY-VUK10	TY-VUK10
	Multi Window Processor	ET-MWP100G	ET-MWP100G	ET-MWP100G	ET-MWP100G

*1: Please contact your sales representative with regard to the tilt angle before installation. Note that a gap of 0.5 mm or more is required when installing multiple displays.*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. *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: SF2W model only. *7: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type. *8: Download the latest Video Wall Manager from Global Website in advance.
[<https://panasonic.net/cns/prodisplays/download/software/vwm/>]

EQ1 Series



Model no.		TH-86EQ1	TH-75EQ1		TH-65EQ1	TH-55EQ1
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	86-inch [2174 mm] /16:9	75-inch [1892 mm] /16:9		65-inch [1639 mm] /16:9	55-inch [1387 mm] /16:9
	Panel Type	IPS/Edge LED	IPS/Edge LED		VA/Direct LED	VA/Direct LED
	Effective Display Area (W x H)	1895 x 1065 mm [74.6" x 41.9"]	1649 x 927 mm [64.9" x 36.5"]		1428 x 803 mm [56.2" x 31.6"]	1209 x 680 mm [47.6" x 26.7"]
	Resolution (H x V)	3840 x 2160	3840 x 2160		3840 x 2160	3840 x 2160
	Brightness (Typ)	350 cd/m ²	350 cd/m ²		350 cd/m ²	350 cd/m ²
	Contrast Ratio	1200:1	1200:1		4000:1	4000:1
	Dynamic Contrast Ratio	50000:1	50000:1		50000:1	50000:1
	Response Time	8 ms [G to G]	8 ms [G to G]		8 ms [G to G]	8 ms [G to G]
TERMINAL	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 28 %]	Anti-Glare [Haze 28 %]		Anti-Glare [Haze 2 %]	Anti-Glare [Haze 2 %]
	HDMI In	HDMI TYPE-A Connector x 2 (HDCP2.2 supported)			HDMI TYPE-A Connector x 2 (HDCP2.2 supported)	
	VIDEO/AV In	4-pole Mini Jack (M3) x 1 [Audio: Stereo Mini Jack (M3) x 1(Shared with DVI-D/PC In)]			4-pole Mini Jack (M3) x 1 [Audio: Stereo Mini Jack (M3) x 1(Shared with DVI-D/PC In)]	
	DVI-D In	DVI-D 24-pin x 1, DVI Revision 1.0 Compatible (HDCP 1.1 supported)			DVI-D 24-pin x 1, DVI Revision 1.0 Compatible (HDCP 1.1 supported)	
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with AV/PC In]			Stereo Mini Jack (M3) x 1 [Shared with AV/PC In]	
	PC In	Mini D-sub 15-pin x 1 [Compatible with DDC 2B]			Mini D-sub 15-pin x 1 [Compatible with DDC 2B]	
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with AV/DVI-D In]			Stereo Mini Jack (M3) x 1 [Shared with AV/DVI-D In]	
GENERAL	USB	USB Connector (TYPE A) x 1, DC 5 V/2 A (USB 3.0 supported)			USB Connector (TYPE A) x 1, DC 5 V/2 A (USB 3.0 supported)	
	Serial In	D-sub 9-pin x 1, RS-232C Compatible			D-sub 9-pin x 1, RS-232C Compatible	
	DIGITAL LINK	—			—	
	LAN	RJ45 x 1, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PLink™			RJ45 x 1, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PLink™	
	IR In/Out	Stereo Mini Jack (M3) x 1 / x 1			Stereo Mini Jack (M3) x 1 / x 1	
	Audio Out	Stereo Mini Jack (M3) x 1 / Variable Output [-∞ - 0 dB] [at 1 kHz 0 dB Input, 10 kΩ Loaded]			Stereo Mini Jack (M3) x 1 / Variable Output [-∞ - 0 dB] [at 1 kHz 0 dB Input, 10 kΩ Loaded]	
	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	363 W	296 W		185 W	195 W
OPTIONS	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)	1928 x 1099 x 86 mm [76.0" x 43.3" x 3.4"]	1681 x 959 x 73 mm [66.2" x 37.8" x 2.9"]		1459 x 835 x 82 mm [57.5" x 32.9" x 3.3"]	1240 x 712 x 62 mm [48.9" x 28.1" x 2.5"]
	Carton Size (W x H x D)	2224 x 1427 x 373 mm [87.6" x 56.2" x 14.7"]	1832 x 1283 x 280 mm [72.2" x 50.6" x 11.1"]		1655 x 1078 x 280 mm [65.2" x 42.5" x 11.1"]	1365 x 864 x 185 mm [53.8" x 34.1" x 7.3"]
	Bezel Width	15.2 mm [0.6"] (T/B/L/R)	14.8 mm [0.6"] (T/B/L/R)		3.5 mm [0.6"] (T/R/L), 14.5 mm [0.6"] (B)	12.9 mm [0.6"] (T/R/L), 14.7 mm [0.6"] (B)
	Weight	Approx. 66.0 kg [145.5 lbs.]	Approx. 56.0 kg [123.5 lbs.]		Approx. 27.0 kg [59.6 lbs.]	Approx. 17.0 kg [37.5 lbs.]
	Gross Weight	Approx. 89.0 kg [196.3 lbs.]	Approx. 71.0 kg [156.6 lbs.]		Approx. 39.0 kg [86.0 lbs.]	Approx. 24.0 kg [52.9 lbs.]
	Pitch for Wall-Hanging	600 x 400 mm [23.6" x 15.8"] VESA Compliant			400 x 400 mm [15.8" x 15.8"] VESA Compliant	
TERMINAL	Built-in Speaker	20 W [10 W + 10 W]			20 W [10 W + 10 W]	
	Orientation*1	Landscape/Portrait			Landscape/Portrait	
	Tilting Angle*2	0-20 degrees forward/backward with landscape/portrait setting			0-20 degrees forward/backward with landscape/portrait 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] / Altitude 1400-2800 m [4593 ft to 9186 ft] / Humidity: 20 % - 80 % [No 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] / Altitude 1400-2800 m [4593 ft to 9186 ft] / Humidity: 20 % to 80 % [No 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*3	24 h/day			18 h/day	
	Pedestal	—	TY-ST75PE9		TY-ST55PE9	TY-ST43PE8
	Wall-hanging Bracket	TY-WK98PV1	TY-WK98PV1		TY-WK98PV1	—
OPTIONS	Early Warning Software*4	ET-SWA100 Series	ET-SWA100 Series		ET-SWA100 Series	ET-SWA100 Series

*1: When mounting portrait setting, be sure to mount with the main unit's power lamp facing downward.

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

*3: 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.

*4: Multi Monitoring & Control Software Ver.2.0 or later is required. Suffix of the part number may differ depending on the licence type.



	Model no.	TH-50EQ1	TH-43EQ1
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	50-inch (1257 mm) /16:9	43-inch (1079 mm) /16:9
	Panel Type	VA/Direct LED	VA/Direct LED
	Effective Display Area (W x H)	1095 x 616 mm (43.1" x 24.2")	941 x 529 mm (37.0" x 20.8")
	Resolution (H x V)	3840 x 2160	3840 x 2160
	Brightness (Typ)	350 cd/m ²	350 cd/m ²
	Contrast Ratio	4000:1	4000:1
	Dynamic Contrast Ratio	50000:1	50000:1
	Response Time	8 ms [G to G]	8 ms [G to G]
	Viewing Angle (Horizontal/Vertical)	178°/178° [CR≥10]	178°/178° [CR≥10]
	Panel Surface Treatment	Anti-Glare [Haze 2 %]	Anti-Glare [Haze 2 %]
TERMINAL	HDMI In	HDMI TYPE-A Connector x 2 (HDCP2.2 supported)	
	VIDEO/AV In	4-pole Mini Jack (M3) x 1 (Audio: Stereo Mini Jack (M3) x 1[Shared with DVI-D/PC In])	
	DVI-D In	DVI-D 24-pin x 1, DVI Revision 1.0 Compatible (HDCP 1.1 supported)	
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with AV/PC In]	
	PC In	Mini D-sub 15-pin x 1 [Compatible with DDC 2B]	
	Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with AV/DVI-D In]	
	USB	USB Connector (TYPE A) x 1, DC 5 V/2 A (USB 3.0 supported)	
	Serial In	D-sub 9-pin x 1, RS-232C Compatible	
	DIGITAL LINK	—	
	LAN	RJ45 x 1, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PLink™	
GENERAL	IR In/Out	Stereo Mini Jack (M3) x 1 / x 1	
	Audio Out	Stereo Mini Jack (M3) x 1 / Variable Output [-∞ - 0 dB] [at 1 kHz 0 dB Input, 10 kΩ Loaded]	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz
	Power Consumption	178 W	162 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)	1124 x 647 x 70 mm (44.3" x 25.5" x 2.8")	969 x 560 x 61 mm (38.2" x 22.1" x 2.4")
	Carton Size (W x H x D)	1238 x 795 x 185 mm (48.7" x 31.3" x 7.3")	1070 x 696 x 159 mm (42.1" x 27.4" x 6.3")
	Bezel Width	11.9 mm (0.5") [T/R/L], 14.4 mm (0.6") [B]	11.9 mm (0.5") [T/R/L], 14.9 mm (0.6") [B]
	Weight	Approx. 14.0 kg [30.9 lbs.]	Approx. 9.0 kg [19.9 lbs.]
OPTIONS	Gross Weight	Approx. 20.0 kg [44.1 lbs.]	Approx. 14.0 kg [30.9 lbs.]
	Pitch for Wall-Hanging	400 x 400 mm (15.8" x 15.8") VESA Compliant	200 x 200 mm (7.9" x 7.9") VESA Compliant
	Built-in Speaker	20W [10W + 10W]	
	Orientation*1	Landscape/Portrait	
	Tilting Angle*2	0-20 degrees forward/backward with landscape/portrait 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] / Humidity: 20 % to 80 % (No condensation)	
	Storage Environment	Temperature: -20 °C to 60 °C [-4 °F to 140 °F] / Humidity: 20 % to 80 % (Non condensation)	
	Operating Time*3	18 h/day	
	Pedestal	TY-ST43PE8	TY-ST43PE8
	Wall-hanging Bracket	-	-
OPTIONS	Early Warning Software*4	ET-SWA100 Series	ET-SWA100 Series

*1: When mounting portrait setting, be sure to mount with the main unit's power lamp facing downward.

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

*3: 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.

*4: Multi Monitoring & Control Software Ver.2.0 or later is required. Suffix of the part number may differ depending on the licence type.

Sample applications, such as signage, conference monitors, etc., selected to match the needs

Eye-catching videos of new fashion collections

By placing a large display horizontally, images of models in nearly life-size scale can be displayed. The texture of materials in dresses and accessories can even be rendered.

*Life-size displays: Place an 86-inch single screen vertically.



Use USB memory to operate self-made signage

Signage can be used in a standalone configuration without having to assemble a network. The main unit's remote control can also be used for simple playlist production, so you can operate signage without using a PC or set-top box.



More efficient and clear images to share information

Display complicated drawings or detailed materials in an easy-to-read manner. Sharing information among participants will be more smooth. No more need to enlarge tables for easier viewing.



Making the better use of a larger screen

Making the better use of a larger screen
The screen can be used for more efficient video conferences. Images of materials can also be refreshed in real-time during the conference.

*Separate contracts are required for video and web conference systems.



EF1 Series



	Model no.	TH-75EF1		TH-65EF1		TH-32EF1
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	75-inch [1892 mm]/16:9		65-inch [1638 mm]/16:9		32-inch [801 mm]/16:9
	Panel Type	IPS Panel/E-LED		VA Panel/D-LED		IPS Panel/D-LED
	Effective Display Area (W x H)	1649 x 927 mm [65.0" x 36.5"]		1428 x 803 mm [56.2" x 31.6"]		698 x 392 mm [27.4" x 15.4"]
	Resolution (H x V)	1920 x 1080		1920 x 1080		1920 x 1080
	Brightness (Typ)	410 cd/m ²		350 cd/m ²		350 cd/m ²
	Contrast Ratio	1200:1		4000:1		1400:1
	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≥20]		178°/178° [CR≥10]
	Panel Surface Treatment	Anti-Glare (Haze 3 %)		Anti-Glare (Haze 2 %)		Anti-Glare (Haze 1 %)
TERMINAL *1	VIDEO In	4-pole Mini Jack [M3] x 1		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.		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		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]
	PC In	Mini D-sub 15-pin x 1		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]		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.)		TYPE A USB Connector DC 5V/1A (USB 3.0 is not supported.)
	Serial In	D-sub 9-pin x 1, RS-232C Compatible		D-sub 9-pin x 1, RS-232C Compatible		D-sub 9-pin x 1, RS-232C Compatible
GENERAL	DIGITAL LINK	—		—		—
	IR In/Out	Mini Jack [M3] x 1 / x 1		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™		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
	Power Consumption	285 W		175 W		65 W
	Power off Condition	Approx. 0.3 W		Approx. 0.3 W		Approx. 0.3 W
	Stand-by Condition	Approx. 0.5 W		Approx. 0.5 W		Approx. 0.5 W
	Dimensions (W x H x D)	1681 x 959 x 77 mm [66.2" x 37.8" x 3.02"]		1459 x 835 x 82 mm [57.5" x 32.9" x 3.3"]		727 x 426 x 64 mm [28.7" x 16.8" x 2.5"]
	Carton Size (W x H x D)	1831 x 1227 x 361 mm [72.1" x 48.3" x 14.3"]		1655 x 1078 x 280 mm [65.2" x 42.5" x 11.1"]		818 x 547 x 139 mm [32.2" x 21.6" x 5.5"]
	Bezel Width	14.8 mm [0.58"] [L/R/T/B]		13.9 mm [0.55"] [L/R/T], 14.9 mm [0.59"] [B]		11.9 mm [0.5"] [L/R/T], 17.2 mm [0.7"] [B]
	Weight	Approx. 55.0 kg [121.3 lbs.]		Approx. 24.0 kg [52.9 lbs.]		Approx. 5.3 kg [11.7 lbs.]
OPTIONS	Gross Weight	Approx. 85.0 kg [187.4 lbs.]		Approx. 35.0 kg [77.2 lbs.]		Approx. 8.0 kg [17.7 lbs.]
	Pitch for Wall-Hanging	VESA compliant 600 x 400 mm [23.6" x 15.8"]		VESA compliant 400 x 400 mm [15.8" 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]		20 W [10W + 10 W] [10% THD]
	External Speaker	—		—		—
	Orientation	Landscape		Landscape/Portrait		Landscape/Portrait
	Tilting Angle	0-20 degrees forward with landscape setting*2		0-20 degrees forward with landscape setting*2		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]		Temperature: 0 °C to 40 °C [32 °F to 104 °F]*3 / Humidity: 20 % to 80 % [Non Condensation]		Temperature: 0 °C to 40 °C [32 °F to 104 °F]*3 / Humidity: 20 % to 80 % [Non Condensation]
	Storage Environment	Temperature: -20 °C to 60 °C [-4 °F to 140 °F]*3 / Humidity: 20 % to 80 % [Non Condensation]		Temperature: -20 °C to 60 °C [-4 °F to 140 °F]*3 / Humidity: 20 % to 80 % [Non Condensation]		Temperature: -20 °C to 60 °C [-4 °F to 140 °F]*3 / Humidity: 20 % to 80 % [Non Condensation]
	Operating Time*4	16 h/day		16 h/day		16 h/day
	Pedestal	—		—		TY-ST32PE1
	Early Warning Software*5	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: https://panasonic.net/cns/prodisplays/download/spec_manual/

*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 (4393 ft) and higher and below 2800 m (9186 ft) above sea level: 0 °C to 35 °C [32 °F to 95 °F].

*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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type.

LFE8 Series



Model no.		TH-55LFE8	TH-48LFE8	TH-43LFE8
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	55-inch (1387 mm)/16:9	48-inch (1209 mm)/16:9	43-inch (1079 mm)/16:9
	Panel Type	IPS Panel/D-LED	VA Panel/D-LED	VA Panel/D-LED
	Effective Display Area (W x H)	1209 x 680 mm (47.6" x 26.8")	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
	Brightness (Typ)	350 cd/m ²	350 cd/m ²	350 cd/m ²
	Contrast Ratio	1200:1	4000:1	3000:1
	Response Time	9 ms [G to G]	8 ms [G to G]	6.5 ms [G to G]
	Viewing Angle (Horizontal/Vertical)	178°/178° [CR≥20]	178°/178° [CR≥20]	178°/178° [CR≥10]
	Panel Surface Treatment	Anti-Glare (Haze 1 %)	N/A	N/A
TERMINAL *1	VIDEO In	4-pole Mini Jack [M3] x 1		4-pole Mini Jack [M3] x 1
	Audio In(L/R)	—		—
	HDMI In	HDMI TYPE-A Connector x 2* *VIERA LINK is not supported.		HDMI TYPE-A Connector x 2* *VIERA LINK is not supported.
	Component/RGB In	—		—
	Audio In (L/R)	—		—
	DVI-D In	DVI-D 24-pin x 1		DVI-D 24-pin x 1
	Audio In (L/R)	Stereo Mini Jack [M3] x 1 (Shared with PC In)		Stereo Mini Jack [M3] x 1 (Shared with PC In)
	PC In	Mini D-sub 15-pin x 1		Mini D-sub 15-pin x 1
	Audio In (L/R)	Stereo Mini Jack [M3] x 1 (Shared with DVI-D In)		Stereo Mini Jack [M3] x 1 (Shared with DVI-D In)
	PC Out	—		—
	USB	TYPE A USB Connector 5V DC/1A (USB 3.0 is not supported.)		TYPE A USB Connector 5V DC/1A (USB 3.0 is not supported.)
	Serial In	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
	Power Consumption	170 W		135 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)	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	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	12.6 mm [0.5"] (L/R/T), 14.5 mm [0.6"] (B)	11.9 mm [0.5"] (L/R/T), 14.7 mm [0.6"] (B)	11.9 mm [0.5"] (L/R/T), 14.9 mm [0.6"] (B)
	Weight	Approx. 16.0 kg [35.3 lbs.]	Approx. 11.5 kg [25.4 lbs.]	Approx. 8.7 kg [19.2 lbs.]
	Gross Weight	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"]		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*2		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)		Temperature: 0 °C to 40 °C (32 °F to 104 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)
	Storage Environment	Temperature: -20 °C to 60 °C (-4 °F to 140 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)		Temperature: -20 °C to 60 °C (-4 °F to 140 °F)*3 / Humidity: 20 % to 80 % (Non Condensation)
	Operating Time*4	16 h/day		16 h/day
	Pedestal	TY-ST43PE8		TY-ST43PE8
	Early Warning Software*5	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: https://panasonic.net/cns/prodisplays/download/spec_manual/

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

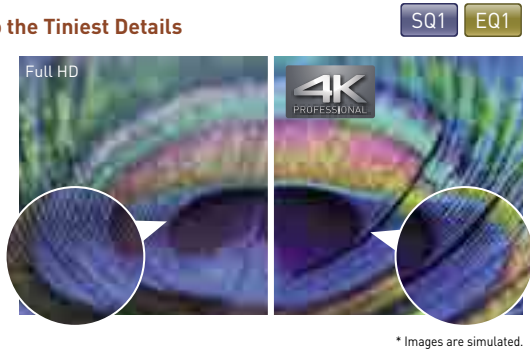
*3: Environmental temperature to use this unit at high altitudes (1400 m (4593 ft) and higher and below 2800 m (9186 ft) above sea level): 0 °C to 35 °C (32 °F to 95 °F).

*4: 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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type.

Elaborate 4K Picture Quality down to the Tiniest Details

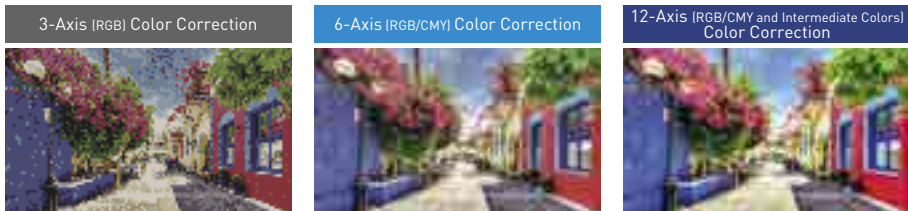
With approximately 8,290,000 pixels, about four times the pixels of a Full-HD display, images are highly detailed. This dynamic, large-screen display achieves true-to-life finely nuanced images. With an optimal viewing distance of 1.5 times the screen height, the 4K display renders the information you want to transmit with excellent clarity.



* Images are simulated.

High Color Reproduction (6-Axis & 12-Axis Color Correction)

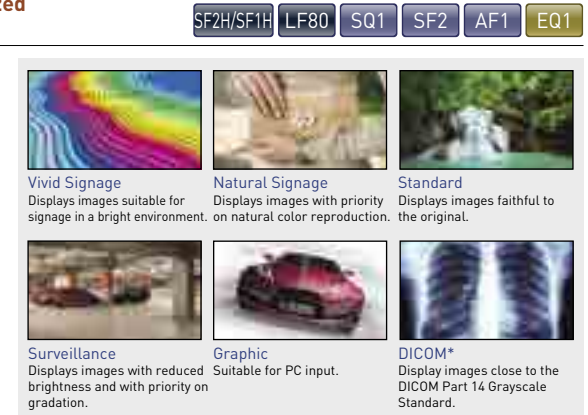
The color space on LCD displays tends to narrow when the luminance level drops, and it's often accompanied by color phase shifts. Six Axis Coordinate Correction applies image processing to balance the six axes of the three primary colors (RGB) and their complementary colors (CMY). Further, in the SQ1 Series, the color temperature, shade, and brightness parameters of individual images can be adjusted for red, green, and blue, and their complementary colors, cyan, magenta, and yellow. This keeps the intermediate shades of extremely fine colors vibrant and lifelike.



* Images are simulated.

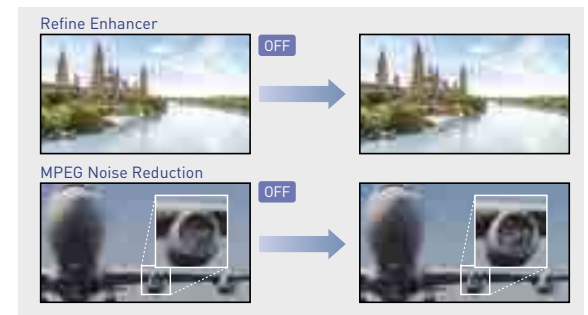
Easy Display of Images Optimized for the Display Content

Conventional display panels are preset with display modes such as Standard and Dynamic. The SQ1, SF2H/SF1H, LF80, SF2, AF1, and EQ1 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.

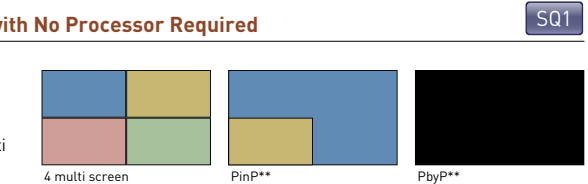
- Refine Enhancer**
 Corrects blurry image contours resulting from resizing, etc., to improve the image resolution.
- MPEG Noise Reduction**
 Noise reduction suppresses the block noise and mosquito noise that are characteristic of digital video signals. This faithfully reproduces the inherent beauty of the image.



Multi Input Screen Capability with No Processor Required

Multi Input Screen Capability with No Processor Required The SQ1/LQ70 Series can simultaneously display multiple images on a single screen. The LQ70 Series can display 4 multi screens. In addition to 4 multi screens, the SQ1 Series can display 2 screens, such as PinP and PbyP. This is ideal for checking details in various applications, such as videoconferences, digital signage, and surveillance monitoring.

* The Multi Input Screen of the LQ70 Series does not support 4K images.
 ** PinP and PbyP are supported only by the SQ1 Series.



Brilliant, High-Quality 700 cd/m² Images for Bright Lobbies

The SF2H/SF1H, and LF80 Series provides highly visible signage even in open spaces with natural lighting. Blending into surrounding spaces, it has an eye-catching effect even when people are moving.



Portrait Installation Capability

* Expect the TH-75EF1

When the Large size display 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.



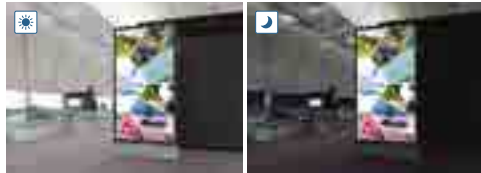
Efficiency and Reliability for Continuous 24-hour Operation

SF2H/SF1H LF80 SQ1 SF2 AF1 EQ1

*The TH-85/75EQ1 only

The use of highly durable panel materials and quality electronic components ensures dependable 24-hour operation seven days a week.

* Display of moving images is recommended when panels are in use for long periods to prevent image retention. Note that image burn-in can be gradually rectified with the periodical display of moving images.



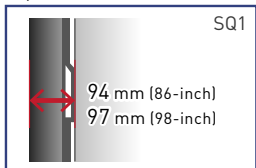
A Stylish and slim design Accentuates the Image

SQ1 EQ1

The stylish and slim design complies with the ADA standard (a depth of less than 4-inch (approx.100 mm) with brackets) in all important aspects. The narrow bezel displays higher-impact images, further enhancing the 4K picture quality. The slim profile isn't the least oppressive even when installed in a hanging configuration.

* The availability of the TY-WK98PV1 varies depending on the country.

Depth at wall installation



* ADA stands for the "Americans with Disabilities Act," a United States law made to protect people with disabilities from discrimination.

Fanless Design

SF2H/SF1H LF80 SQ1 SF2 AF1 EQ1 EF1 LFE8

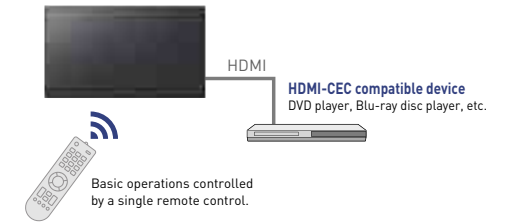
Standard models robust fanless design prevents problems caused by the intake of dusty air. The displays can be safely installed and operated in high-traffic environments.

HDMI CEC Device Linking Supported

SF2H SQ1 SF2 EQ1

HDMI-CEC compatible devices can be connected to the display by an HDMI cable, enabling the basic operations (such as power ON/OFF) of the compatible devices to be controlled by the display's remote control. Power ON/OFF of the display can also be switched using only the remote control (or main unit buttons) of the HDMI-CEC compatible devices.

* The control of all devices cannot be guaranteed.



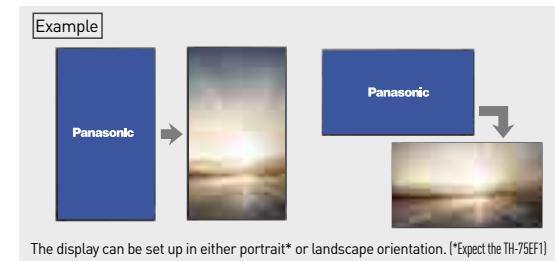
Customizable Original Screen

SF2H SQ1 SF2 EQ1 75/65EF1

An original image created by your company or other desired picture can be displayed when the unit is turned on and when there is no input signal. The image data for the original screen can be transferred and stored in the display unit via a USB memory. This function allows a company logo mark, brand image, etc., to be displayed when there is no input signal.

• Certain limitations apply to the format for original screen.

* The SQ1/EQ1 Series is compatible with 3480 x 2160 and 1920 x 1080 resolution.



4K Daisy Chain can be Constructed with Even Higher Resolution Multi-Screens

SQ1

The SQ1 Series is equipped with DisplayPort input/output terminals. Construct a multi-screen that can output 4K images by installing multiple units and connecting them in a daisy chain.

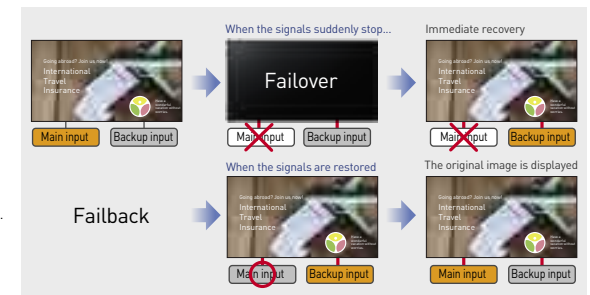


Failover and Failback Safeguards for Mission Critical Situations

SF2H/SF1H LF80 SQ1 SF2 AF1 EQ1

These models are equipped with a variety of signal input terminals. 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 centers. If the main signals are restored, the original image is displayed.

* The usable combinations of main and backup signals are limited. For details, see the product website.



Simple Signage Operation with No STB

SF2H/SF1H

LF80

SQ1

SF2

EQ1

EF1

LFE8

The display can automatically start showing pictures when a USB memory containing data is inserted. The display unit can be used as digital signage without a set-top box or PC. And the content can be displayed smoothly without including the black screen display. What's more, the order of content playback and playback time can be programmed. Content can also be rewritten and multiple displays can be operated via LAN.*

- If it is difficult to insert a USB memory due to installation conditions, use a commercially available extension cable.
- Some files cannot be played back even if they are in the supported format. Regarding restrictions, see the operation manual.
- * Multi Monitoring & Control Software (free) is required.

■ Applicable format

Still Image	JPG, JPEG, JPE, BMP*
Motion Image	AVI, MKV, ASF, WMV, TS, MTS, MP4, 3GP, MOV, FLV, F4V

* BMP is supported only by the 65/75/84EF1, EQ1, SF2 Series.

* The SQ1/EQ1 Series is compatible with the 4K signal.

Playback by one unit

Simultaneous playback by multiple units

One of up to four display units becomes the parent unit, and the other units display images in sync with the parent unit. This enables the display of images in perfect sync when the panels are arranged next to each other.

Play USB Content Instantly

SF2H

SQ1

SF2

EQ1

Playing Full HD video, still images, and digital documents from USB storage devices couldn't be easier. Just insert a thumb drive into the USB port and start presenting without needing to connect a PC. The Memory Viewer app enables image* (JPEG, BMP) and video* (WMV, AVI, MOV, MP4, MPG) selection from handy thumbnail previews.

- * In some cases, files may not be viewable even if they are encoded in a supported format.

■ Applicable format

Still Image	JPG, JPEG, JPE, BMP
Motion Image	AVI, MKV, ASF, WMV, GS, MGS, MP4, 3GP, MOV, FLV, F4V



Cloning Function Speeds Up Multiple Display Setup

SF2H/SF1H

LF80

SQ1

SF2

AF1

EQ1

EF1

LFE8

When installing multiple displays, the Cloning function lets you use a USB memory (or LAN network) to copy the settings of a parent display to other units, thus greatly shortening the setup time.

- [Date & Time], [Network Settings], [LAN Settings] and Display ID cannot be copied.
- The Cloning function works only for displays with the same screen size.

- * Only the SF2 Series can be copied using a LAN network.

Parent Display

Copy installation data

• Data that can be copied

Setting and set values of [Picture], [sound], [Setup], [Position], and [Options] menus.*

*[Options] are not supported by SQ1/EQ1.

USB Memory Network Settings

SQ1

SF2

EQ1

Using a USB memory device, the network setting can be made for multiple displays. Individual IP addresses for each unit are automatically set.

Automatically set individual IP addresses

Note: Setting images are simulated.

Make Your Signage Easy with Panasonic Application

SF2H/SF1H

SQ1

SF2

EQ1

The SQ1, SF2H/SF1H, SF2, and EQ1 Series features a USB Media Player function that allows easy signage playback. Content Management Software is an application software for scheduling digital signage playback on a computer. It also allows power ON/OFF to be set.

For more information about Content Management Software Version 3.2, please visit: <https://panasonic.net/cns/prodisplays/download/software/>

Play Content Automatically with Scheduling Function

Content Management Software for PC Version 3.2 (free) enables easy playlist creation with media support including combinations of still and video images. You can set up schedules for playing and closing your media playlist at predetermined dates and times.

Convenient Playlist and Schedule Syncing

Playlists and schedules created with Content Management Software can be transferred to displays with USB memory, or via LAN. Synchronized playback on multiple displays is also supported.

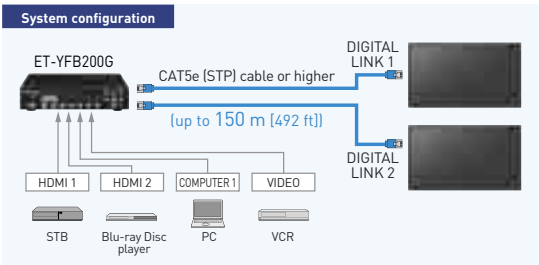
DIGITAL LINK Function Enables Simple Installation and Low System Costs

SF2H LF80 SQ1 SF2

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*1. Easy cabling also reduces labor during setup. This provides transmission of high-quality images and sounds, as well as remote control.

*1 When connected with the [Long reach] mode, the maximum transmission distance is 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. This supports 4K video over distances of up to 50 m (164 ft) with a single LAN cable.

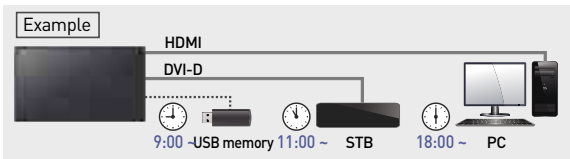
*2 TH-65SF2E (for Europe/CIS) and TH-65/55/49/43SF2W (for Asia, Middle East, Africa) only.



Timer-Programmable Switching of Device Connection

SF2H SQ1 SF2 EQ1 75/65EF1

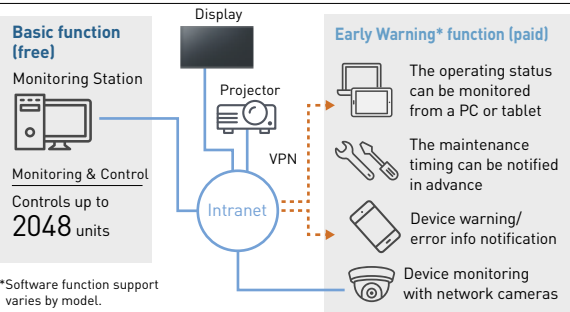
The timer function of the display unit can be used to change connected signal source devices at a desired time. This allows an easy change of displayed content according to the application or the progress of an event.



Multi Monitoring & Control Software

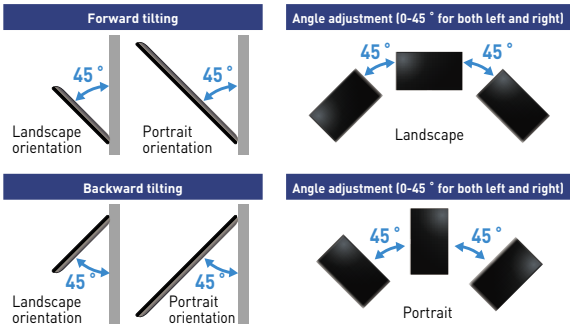
All models are supported

Compatible with Multi Monitoring & Control Software for addition of new functions, such as automatic searching for map displays and registered devices. Displays and peripheral equipment on the intranet can be controlled and their status can be monitored. Also error notification and error indication can be detected by an indication monitoring function (for a fee) for improved maintenance.



Choose the Installation to Match Your Application

Panasonic displays are 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.



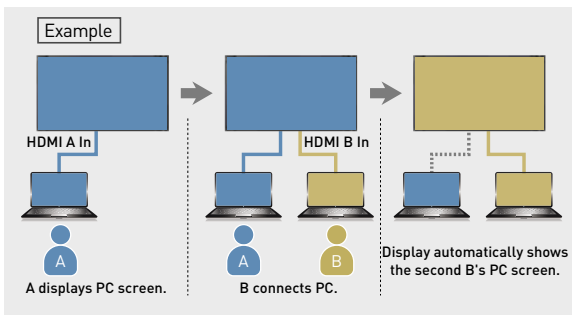
* The installable angle varies depending on the model. For details, see the specifications page for each model. For more information on the specifications page, please visit the download page. (https://panasonic.net/cns/prodisplays/download/spec_manual/)

Smooth Switching of Presenters

SF2H SQ1 SF2 EQ1 75/65EF1

These displays automatically switches source signals when the input signal for the current content stops or when an input signal other than the signal of the current content is received. When presenters change during a meeting, the displayed image can be switched easily by simply changing the cable connection, thus eliminating the need to operate the remote control.

* Only analog (PC input)/digital (HDMI input or DVI-D input) signal switcher is supported. (75/65EF1 only)
 * The 2 switching inputs must be set in advance.
 * This function may not operate correctly depending on the image playback device.
 * Digital-digital switching is supported by the SQ/EO Series.
 Analog-digital switching is supported by the SF2H/SF2/EF1 Series.



Built-in Speakers for the Playback of Content with Sound

All models are supported

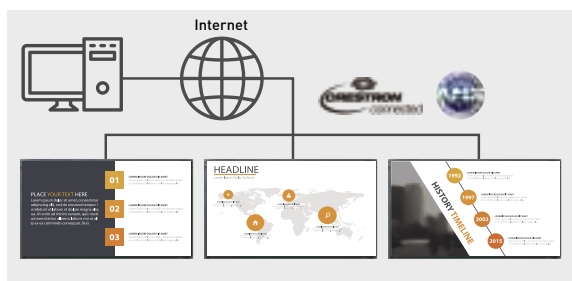
The display unit has built-in speakers so that it can playback content with sound without the connection of external speakers. This allows maximum use of a limited space for the installation of a large-screen display



Supports LAN Content Connection

SF2H/SF1H LF80 SQ1 SF2 EQ1 LFE8

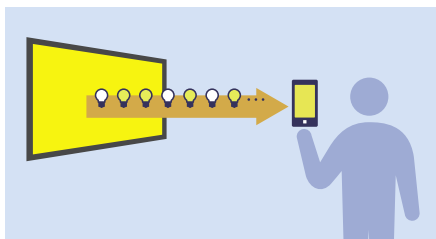
The display can be controlled by LAN or RS-232C. You can configure the display into your existing control system, and can control several devices simultaneously. It also supports AMX or Crestron Connected™ LAN control.



Built-in Light ID Transmission Function Sends and Receives Information

An originally developed, high-speed backlight control technology has achieved Light ID transmission from displays by modulating (blinking) light at high speed. The ID signals transmitted from the display are read by a smartphone* to relay a variety of information, such as traffic guidance or news about shops or products. The displayed content can also be provided in the smartphone owner's native language.

*The smartphone must satisfy usage conditions, such as the OS version and camera performance. A special application must also be installed.



Light ID Technology Features



Intuitive

Simply wave the smartphone toward a signboard or other signage.



High-Speed Data Receiving

Receives the signal within 0.3 seconds.



Receives Even in Crowds

Receives as long as the light reaches.

Applications for LinkRay

Panasonic provides a dedicated LinkRay Solution app for iOS/Android™. Users can download to supported smartphones and tablets free.

Standard Application (Free) LinkRay Solution



Supported Operating Systems

iOS Devices iOS 8.0 and later

Android Devices Android 5.0 and later

Note: Some devices may not operate correctly even if minimum requirements are met. To get the latest information concerning devices tested for compatibility, please visit the Panasonic LinkRay website.
<https://business.panasonic.co.uk/visual-system/linkray-technology>

Feature video



LinkRay [Introducing the Technology]



LinkRay [Use Cases]



LinkRay Solution@Live & Event Industrial Exhibition



Usage Case Examples & Benefits

Supporting Inbound Travelers in Any Language

LinkRay enables transportation hubs, such as airports, to improve service levels and reduce stress by delivering customized content in the language native to a visitor's device. This information could range from simple sign and map translation to providing directions with third party mapping apps to supplying information on available services within facilities. Navigating high-stress environments becomes easy for tourists, enhancing their experience.



Automatically adapts language according to device OS settings



Information Delivery that Enhances Value

Interactive content that enhances exhibits at cultural facilities, such as museums, art galleries, and tourist centers, as well as material supporting retail items, can be provided instantly, deepening understanding or supplying more detailed marketing material on products. This helps to drive sales. LinkRay technology reduces the need for extraneous POS materials, reducing cost and clutter, so items or exhibits can be displayed to maximum effect.



Signage for Exhibit



Information on Exhibit



Increase Buyer Motivation with Augmented Signage

Presenting detailed product information together with promotional coupons or discount codes instantly within a built-for-purpose app helps to create a sales-positive environment. Tailoring information for individual customers can help increase foot traffic in shops and increase click-throughs to online stores.



Digital Signage

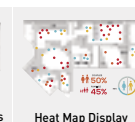
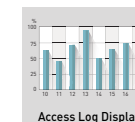


Coupon Delivery



Market Effectively by Visualizing Consumer Intention

Tools for analyzing the frequency of access to Light ID transmitters yields invaluable information that can be applied in various practical ways, such as adjustment of point-of-sale displays and optimization of shopfloor layouts to achieve desired sales outcomes.



[AF1 Series]

Evolving with Your Needs

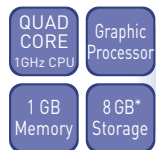
Android™- and HTML5-based OpenPort PLATFORM® Gives Freedom to Customize and Grow with Digital Signage Apps, Simplifies Everyday Use. The AF1 Series incorporates a high-performance SoC (System on a Chip) with a 1 GHz Quad-Core CPU, 1 GB RAM, 8 GB Storage. All this is supported by an alliance with a leading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



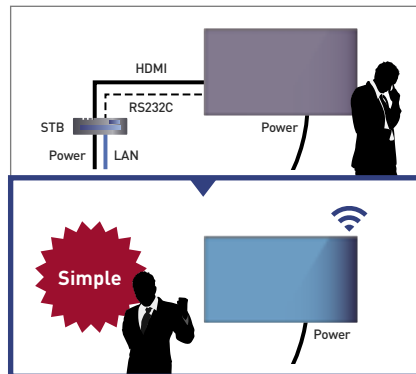
CPU, GPU, and memory are all included in an SoC (System on a Chip).

* 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.

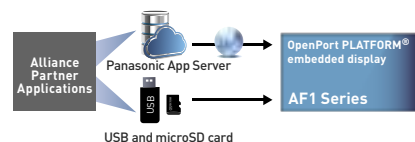
* Some setting and application operations cannot be performed using the remote control. In this case, use a USB mouse to operate.



Simple App Installation

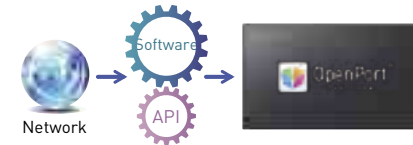
Applications are easily accessed and installed via Panasonic App Server*, which streamlines settings before operation. App installation is also enabled via USB drive or microSD card.

* 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.



business.panasonic.co.uk/visual-system/openport-platform/partners

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.

* Multi Monitoring & Control Software Ver2.0 or later is required. Part number suffix may differ depending on the license type.

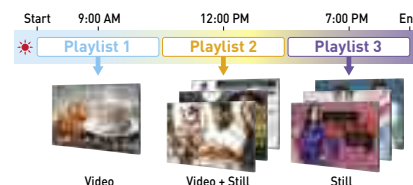
Make Your Signage Easy with Panasonic Application

AF1 Series displays include a builtin Signage Player Application* that eliminates need of an external Settop Box (STB). As well as saving space, your signage system becomes smart and simple.

* OpenPort PLATFORM® Version 2.0 firmware (or later) is required.

Play Content Automatically with Scheduling Function

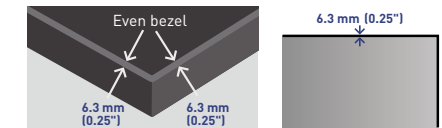
Content Management Software for PC Version 1.1 (free) enables easy playlist creation with media support including combinations of still and video images. You can set up schedules for playing and closing your media playlist at predetermined dates and times.



Standard

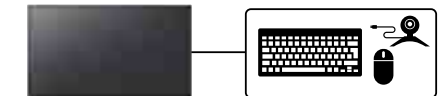
Bright and Stylish IPS Display

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.



For more information about Content Management Software Version 1.1, please visit:

<https://panasonic.net/cns/prodisplays/download/software/>

Convenient Playlist and Schedule Syncing

Playlists and schedules created with Content Management Software can be transferred to displays with USB memory, microSD Card, or via LAN. Synchronized playback on multiple displays is also supported.



VF1H/LFV Series



Video Wall

Model no.		TH-55VF1H	TH-55LFV70		TH-55LFV8	TH-49LFV8
DISPLAY PANEL	Screen Size (Diagonal)/Aspect Ratio	55-inch (1387mm)/16:9	55-inch (1387mm)/16:9		55-inch (1387 mm)/16:9	49-inch (1232 mm)/16:9
	Panel Type	IPS Panel/D-LED	IPS Panel/D-LED		IPS Panel/D-LED	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"]	1074 x 604 mm [42.3" x 23.8"]
	Resolution [H x V]	1920 x 1080	1920 x 1080		1920 x 1080	1920 x 1080
	Brightness [Typ]	700 cd/m ²	700 cd/m ²		500 cd/m ²	450 cd/m ²
	Contrast Ratio	1200:1	1200:1		1400:1	1300:1
	Dynamic Contrast Ratio	500000:1	500000:1		500000:1	500000:1
	Response Time	8.0 ms [G to G]	12 ms [G to G]		12 ms [G to G]	8.0 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-Glare (Haze 44%)		Anti-Glare (Haze 10 %)	Anti-Glare Low-Reflection (Haze 3 %)
TERMINAL	VIDEO In	BNC x 1 [Shared with Component In]			BNC x 1 [Shared with Component In]	
	Audio In [L/R]	Pin Jack x 1 set [Shared with Component In]			Pin Jack x 1 Set [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 [Shared with VIDEO In]			BNC x 1 set [Shared with VIDEO In]	
	Audio In [L/R]	Pin Jack x 1 set [Shared with VIDEO In]			Pin Jack x 1 Set [Shared with VIDEO In]	
	DVI-D In	DVI-D 24-pin x 2 [Female]			DVI-D 24-pin x 1 [Female]	
	Audio In [L/R]	Stereo Mini Jack [M3] x 1 [Shared with PC In]			Stereo Mini Jack [M3] x 1 [Shared with PC In]	
	DisplayPort In/Out	DisplayPort x 1 / — [DP1.1 support, Dual Mode only]			DisplayPort x 1 / x 1 [DP1.2 support, HDCP1.3 Compatible]	
	DVI-D Out	—			—	
	DVI-I Out	—			DVI-I 29-pin x 1 [Female]	
	PC In	Mini D-sub 15-pin x 1 [Female]			Mini D-Sub 15-pin x 1 [Female]	
	Audio In [L/R]	Stereo Mini Jack [M3] x 1 [Shared with DVI-D In]			Stereo Mini Jack [M3] x 1 [Shared with DVI-D In]	
	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 [USB 3.0 is not supported.]	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/500 mA] x 1 [USB 3.0 is not supported.]	
GENERAL	Audio Out [L/R]	Stereo Mini Jack [M3] x 1 set			Stereo Mini Jack [M3] x 1	
	Serial In/Out	D-sub 9-pin x 1 [Male]/ x 1, RS-232C Compatible			2.5 mm Stereo Mini Jack x 1/ x 1, RS-232C Compatible	
	IR In/Out	Stereo Mini Jack [M3] x 1 / x 1			Stereo Mini Jack [M3] x 1 / x 1	
	LAN In/Out	RJ45 x 1/x 1 [100BASE-TX, Compatible with PLink™] [Shared with DIGITAL LINK]			RJ45 x 1 [100BASE-T/100BASE-TX, Compatible with PLink™]/—	
	Power Requirements	220-240 V AC, 50 Hz/60 Hz			220-240 V AC, 50 Hz/60 Hz	
	Power Consumption	300 W			320 W	
	Stand-by Condition	Approx. 0.5 W			Approx. 0.5 W	
	Dimensions [W x H x D]	1211.4 x 682.2 x 99 mm [47.7" x 26.9" x 3.9"]	1213.4 x 684.2 x 95 mm [47.8" x 27.0" x 3.7"]		1213.4 x 684.2 x 95 mm [47.8" x 27.0" x 3.7"]	1077.7 x 607.9 x 103.9 mm [42.5" x 24.0" x 4.1"]
	Carton Size [W x H x D]	1544 X 973 X 301 mm [60.8" X 38.3" X 11.9"]	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"]	1374 x 901 x 373 mm [54.1" x 35.5" x 14.7"]
	Bezel Width	0.9 mm [0.036"] [T/R/L/B]	L/T: 2.25 mm [0.089"], R / B: 1.25 mm [0.050"]		L/T: 2.25 mm [0.089"], R / B: 1.25 mm [0.050"]	L/T: 2.25 mm [0.089"], R / B: 1.25 mm [0.050"]
OPTIONS	Bezel to Bezel*1	1.8 mm [0.07"] [Multi Screen]			3.5 mm [0.14"] [Multi Screen]	
	Weight	Approx. 25.0 kg [55.1 lbs.]			Approx. 30.0 kg [66.1 lbs.]	
	Gross Weight	Approx. 34.0 kg [75.0 lbs.]			Approx. 40.0 kg [88.2 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"]	
	External Speaker	8 Ω, 20 W [10 W + 10 W] [10% THD]			8 Ω, 20 W [10 W + 10 W] [10% THD]	
	Orientation*2	Landscape/Portrait			Landscape/Portrait	
	Tilting Angle*2	Vertical Only			Vertical Only	
	Operating Environment	Temperature: 0 °C to 40 °C [32 °F to 104 °F]*4 / 0 °C to 35 °C [32 °F to 95 °F]*5 / Humidity: 10 % to 90 % [Non-Condensation]			Temperature: 0 °C to 40 °C [32 °F to 104 °F]*4 / Humidity: 20 % to 80 % [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: 5 % to 95 % [Non Condensation]	
	Operating Time*6	24 h/day			24 h/day	
OPTIONS	Remote Control Kit	—			—	
	Cover Frame Kit	TY-CF55VW1			TY-CF55VW50	
	Installation Mount	TY-VK55LV2			TY-VK55LV2	
	Early Warning Software*7	ET-SWA100 Series			ET-SWA100 Series	
	Auto Display Adjustment Upgrade Kit*8	TY-VUK10			TY-VUK10	
OPTIONS	Multi Window Processor	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. Note that a gap of 0.5 mm or more is required when installing multiple displays.

*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: Multi Monitoring & Control Software Ver2.0 or later is required. Suffix of the part number may differ depending on the license type.

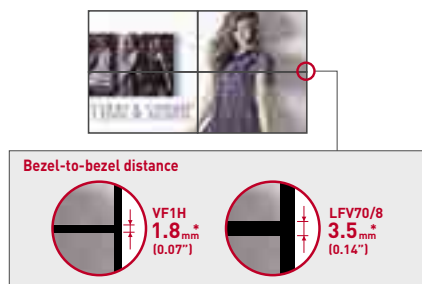
*8: Download the latest Video Wall Manager from Global Website in advance. [https://panasonic.net/cns/prodisplays/download/software/vwm/]

Narrow Bezel for Seamless Video Walls

VF1H LFFV70 LFFV8

Narrow frames on Panasonic's LCD Video Wall Series reduce bezel-to-bezel distance to a near-invisible 1.8 mm*. Even when viewed close-up, screen borders are almost indiscernible, resulting in truly spectacular large-format images.

* TH-55VF1H features 1.8 mm (0.07"), and TH-55LFFV70/8 3.5 mm (0.14"), bezel-to-bezel distance. Bezel-to-bezel distance refers to the combined top and bottom (or left and right) bezel-width of adjacent displays in video-wall configuration. The gap between displays is not included. Note that a gap of 0.5 mm or more is required when installing multiple displays.



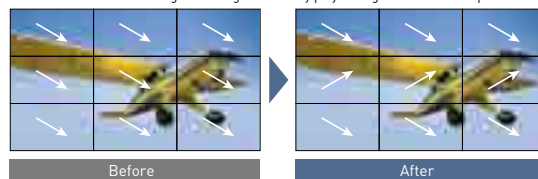
Improved Multi-Screen Video Visibility

VF1H

When high-speed video is played on multiple screens in a video wall, some image misalignment can occur between vertically adjacent panels. VF1H Series features a Reverse Scan Function that alternates the scanning direction of vertically adjacent displays to improve image alignment. Frame Control Function, meanwhile, adjusts the number of video frames displayed to reproduce images with natural fluidity.

Reverse Scan Function

Reverses direction of image scanning to smoothly play enlarged video on multiple screens

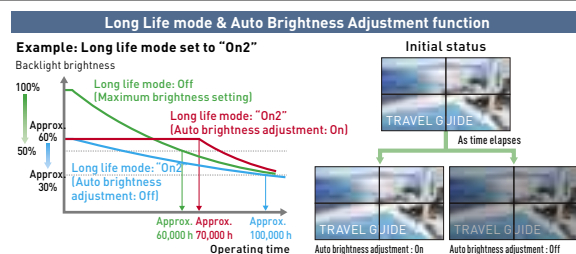


Note: Images are simulated.

Delivers Stable Brightness for Up to 8 Years*

VF1H

The VF1H Series incorporates Long Life mode and a new AutoBrightness Adjustment function. In Long Life mode, backlight brightness is optimized to extend product life. Auto Brightness Adjustment function corrects light output automatically according to the rate of backlight deterioration to maintain constant brightness for longer.



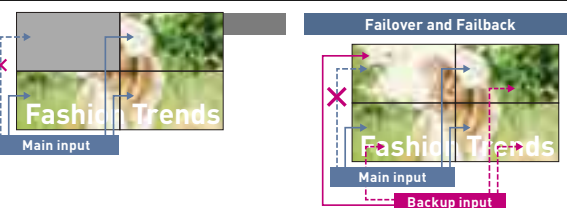
* Figure is approximate when operating continuously for 24 hours x 365 days.

Note: Assuming operating conditions of 25 °C (± 2 °C). Environmental conditions and conditions of usage may affect brightness longevity and operating period. "On2" delivers approximately 60 % maximum specified backlight brightness. Auto brightness adjustment cannot be turned on if panel illumination period has exceeded 1,000 hours. Note: Images and graphs are simulated.

Failover and Failback Safeguards Maintain Image Display

VF1H LFFV70

Digital signal inputs comprise one or two DVI-D terminals together with HDMI, DisplayPort, DIGITAL LINK*, and USB terminals. If primary audio-video signals are interrupted, the display immediately switches to an alternative input. This makes the Panasonic LCD Video Wall Series (except LFFV8) well suited for use in control rooms and in other applications where uninterrupted playback is essential.



If AV signals via the primary input is interrupted, images are no longer displayed.

If the primary AV signal is interrupted, the system automatically switches to a backup input so video display is maintained.

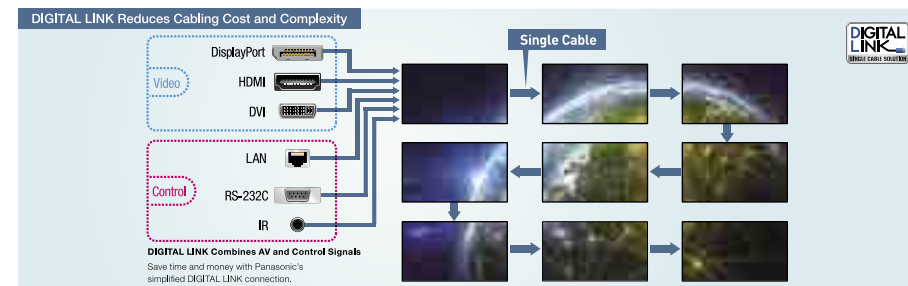
Note: Possible combinations of main/backup input signals are limited. For details, please visit the Panasonic website.

* DIGITAL LINK available on VF1H and LFFV70 only. Display Port available on LFFV70 only.

DIGITAL LINK Simplifies Installation at Lower Cost

VF1H LFFV70

Based on HDBase™ technology, the DIGITAL LINK connection on VF1H and LFFV70 Series displays supports audio, video, and control signal transmission over long distances, and can also be used to daisy-chain multiple displays via a single cable. This eliminates the need for video splitters and other routing devices. The LFFV 8 Series, meanwhile, supports daisy chain via DVI with separate video and control (serial or IR) connections. Note: CAT5e or higher STP cable required.



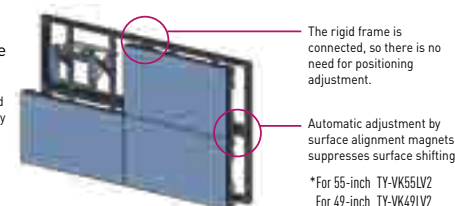
Installation Frame Simplifies Set-up

VF1H LFFV70 LFFV8

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.

*Landscape setting only.



Video Wall Manager Software and Auto Display Adjustment Upgrade Kit

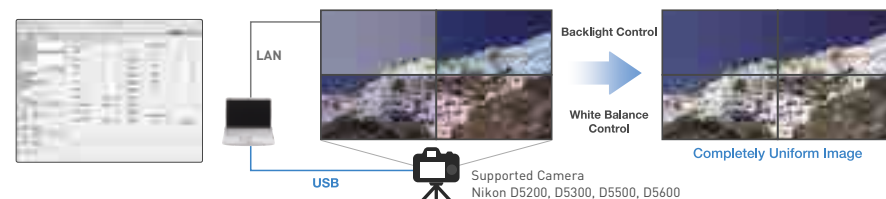
VF1H LFFV70 LFFV8

Panasonic's free Video Wall Manager software can be used with LCD Video Wall Series displays. With this software, you can calibrate display color using a color sensor*¹ (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/D5600)*².

*¹ LFFV8 series are not compatible with calibration using a color sensor.

*² Available only with normal zoom lens: AF-S DX NIKKOR 18-55 mm 1/3.5-5.6G VR, AF-S DX NIKKOR 18-140 mm 1/3.5-5.6G ED VR, AF-S DX NIKKOR 18-55 mm 1/3.5-5.6G VR II

With LFFV70 and TY-VUK10 connected



Auto Display Adjustment Upgrade Kit: <https://panasonic.net/cns/prodisplays/products/ty-vuk10/>

Other Features

- Optimized Image Modes (VF1H Series only)
- High-Performance Imaging Engine (VF1H Series only)

BF1/BQE1/BFE1 Series



Multi-Touch Screen

Model no.	TH-80BF1	TH-65BF1	TH-75BQE1	TH-65BFE1
Screen Size (Diagonal)/Aspect Ratio	80-inch [2032 mm]/16:9	65-inch [1638 mm]/16:9	75-inch [1893 mm]/16:9	65-inch [1638 mm]
Panel Type	VA Panel/E-LED	VA Panel/E-LED	VA Panel/D-LED	VA Panel/D-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")	1650 x 928 mm (64.9" x 36.5")	1428 x 803 mm (56.2" x 31.6")
Resolution (H x V)	1920 x 1080	1920 x 1080	3840 x 2160	1920 x 1080
Brightness (Typ)	350 cd/m ²	350 cd/m ²	400 cd/m ²	400 cd/m ²
Contrast Ratio/Dynamic Contrast Ratio	5000:1/50000:1	4000:1/50000:1	4000:1/—	4000:1/—
Response Time	4 ms [G to G]	6.5 ms [G to G]	8.0 ms [G to G]	8.0 ms [G to G]
Viewing Angle [Horizontal/Vertical]	176°/176° [CR≥10]	178°/178° [CR≥10]	178°/178° [CR≥10]	178°/178° [CR≥10]
Detection Method	Infrared Blocking Detection Method	Infrared Blocking Detection Method	Infrared Blocking Detection Method	Infrared Blocking Detection Method
Touch Operation	Up to 12-point multi-touch*1	Up to 12-point multi-touch*1	Up to 10-point multi-touch*2	Up to 10-point multi-touch*2
Os	—	—	Windows (7/8.1/10), Mac (OS X 10.10/10.11, macOS Sierra)	—
VIDEO In	BNC x 1	—	—	—
Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with Component/RGB In]	—	—	—
HDMI In	HDMI Type A Connector x 2	—	HDMI Type A Connector x 2	—
Component/RGB In	BNC x 1 set	—	—	—
Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with VIDEO In]	—	—	—
DVI-D In	DVI-D 24-pin [Digital] x 1	—	DVI-D 24-pin [Digital] x 1	—
Audio In (L/R)	Stereo Mini Jack (M3) x 1 [Shared with PC In]	—	Stereo Mini Jack (M3) x 1 [Shared with PC In]	—
PC In	Mini D-Sub 15-pin x1 [Female], Plug & Play [VESA DDC2B]	—	Mini D-Sub 15-pin x1 [Female], Plug & Play [VESA DDC2B]	—
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	—
PC Out	Mini D-Sub 15-pin x1	—	Mini D-Sub 15-pin x1	—
USB A	TYPE A USB Connector x 1 [For Memory Viewer]	—	USB 2.0 Type A Connector x 1 DV 5 V/1 A [USB 3.0 supported: TH-75BQE1 only]	—
USB B	TYPE B USB Connector x 1 [For Touch Panel]	—	DirectCable USB 2.0 Type A Connector x 1 DV 5 V/ 500 mA [For Touch Panel]	—
Serial In	D-Sub 9-pin x 1 for external control, RS-232C Compatible	—	D-Sub 9-pin x 1 for external control, RS-232C Compatible	—
IR In	—	—	Stereo Mini Jack (3.5 mm) x 1	—
DIGITAL LINK	RJ45 x 1 [Shared with LAN]	—	—	—
LAN	RJ45 x 1, 100BASE-TX, Compatible with PLink™ [Shared with DIGITAL LINK]	—	—	—
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
Power Consumption	350 W	215 W	370 W	205 W
Power Off Condition/Stand-by Condition	Approx. 0.3 W/Approx. 0.5 W	Approx. 0.3 W/Approx. 0.5 W	Approx. 0 W/Approx. 0.5 W	Approx. 0 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"]	1710 x 1072 x 102 mm [67.3" x 42.2" x 4.0"] [with speaker mounted]	1490 x 948 x 106 mm [58.7" x 37.4" x 4.2"] [with speaker mounted]
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"]	2010 x 1112 x 250 mm [79.2" x 43.8" x 9.9"]	1640 x 1044 x 226 mm [64.6" x 41.2" x 8.9"]
Weight	Approx. 81.0 kg [178.6 lbs.]	Approx. 58.0 kg [127.9 lbs.]	Approx. 66.0 kg [145.5 lbs.] [Approx. 68.0 kg [149.9 lbs.] with speaker mounted]	Approx. 44.0 kg [97.0 lbs.] [Approx. 46.0 kg [101.4 lbs.] with speaker mounted]
Gross Weight	Approx. 99.0 kg [219.0 lbs.]	Approx. 68.0 kg [150.0 lbs.]	Approx. 81.0 kg [178.6 lbs.]	Approx. 57.0 kg [125.7 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"]	VESA Compliant 400 x 400 mm [15.8" x 15.8"]	VESA Compliant 400x 400 mm [15.8" x 15.8"]
Protective Glass Thickness	Approx. 3.3 mm [0.13"]/Anti-glare [Haze 10%]	Approx. 2.9 mm [0.12"]/Anti-glare [Haze 10%]	Approx. 4 mm [0.16"]	Approx. 4 mm [0.16"]
Built-in Speaker	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]	20 W [10 W + 10 W] [10 % THD], W764 x H82 x D59 mm [W30.1" x H3.3" x D2.3"]	16 W [8 W + 8 W], W764 x H82 x D59 mm [W30.1" x H3.3" x D2.3"]
Orientation	Landscape/Portrait (When installing the display on portrait setting, be sure to install with the power indicator at the top side of the display.)	—	Landscape/Portrait	Landscape/Portrait
Tilting Angle	0-20 degrees with landscape setting	Up to 45 degrees backward in landscape orientation	Up to 20 degrees backward in landscape orientation	Up to 20 degrees backward in landscape orientation
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*3	18 h/day	—	16 h/day	—
Built-in wireless LAN function: Standard	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-CHAPv2/GTC] /EAP-FAST [MS-CHAPv2/GTC] /EAP-TTLS [MD5/MS-CHAPv2], 128-bit/64-bit]	—	—	—
Pedestal	TY-ST65P20*4	TY-ST65P20*4	TY-ST75PE9	TY-ST75PE9
Mobile Stand	TY-ST80LF70*4	TY-ST65PB2*4	—	—
Wall-hanging Bracket	—	TY-WK65PR20 [Vertical]*4	—	—
Easy Wireless Stick*5	ET-UW100	ET-UW100	—	—
Digital Interface Box	ET-YFB100G	ET-YFB100G	—	—
DIGITAL LINK Switcher*6	ET-YFB200G	ET-YFB200G	—	—
Early Warning Software*7	ET-SWA100 Series	ET-SWA100 Series	—	—

*1: When using Windows®. Up to 4-point using the Built-in Whiteboard Software. When using Mac single touch. *2: When using Windows®. When using Mac single touch. *3: 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.

*4: Production discontinued. Please contact the sales company for options regarding discontinued products. *5: This product can be purchased in the U.S., Canada, Japan, Australia, and New Zealand. *6: Long Reach Mode on ET-YFB200G is not supported. *7: Multi Monitoring & Control Software Ver2.0 or later is required. Part number suffix may differ depending on the license type.

[BF1/BQE1/BFE1 Series]

On-screen Menu Bar Keeps You in Control

BF1

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.

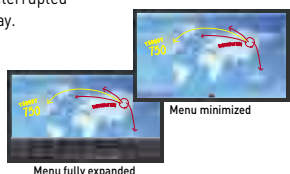


Note: CUD logo denotes product certification by Color Universal Design Organization in Japan.

User-Friendly Menu Bar

BF1

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

BF1

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

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

Quick-Start Whiteboard

BF1

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.

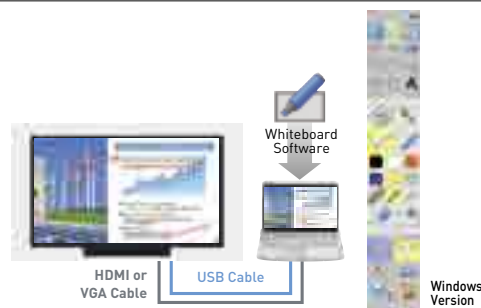
Whiteboard Software for Full Use of Educational Materials

BF1 BQE1 BFE1

This software can be used to display educational materials, and to make lessons easier to understand by jotting in notes.

- Presentation Functions* (Magnifying Glass, Pen/Marker)
- Electronic Pen, Finger-Touch Input
- Screen Capture/Recording Function*
- Simultaneous Operation of Multiple Points (BF1: Up to 12 points for Windows®, 4 points for Mac BQE/BFE1: Up to 10 points for Windows®, Single Touch for Mac)
- Reading and Writing of JPEG and Other Image Data
- Writing and Saving of PowerPoint® Data*

* For the latest software please visit our global website: <https://panasonic.net/cns/prodisplays/download/software/>



Multi-Touch Screen

Panasonic Wireless Solution

BF1

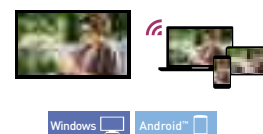
Panasonic's Wireless Display function supports secure high-bandwidth wireless transmission from compatible Windows® PCs. Proprietary apps for Windows®, Mac, iOS, and Android™ add a raft of easy-to-use functions, including Multi-Live Mode in split-screen.



Wireless Display with Wi-Fi-Certified Miracast[†]

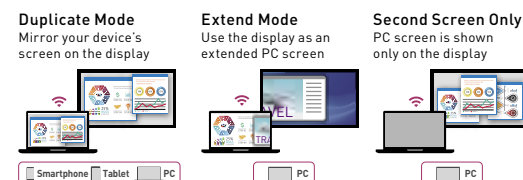
Share It On the Big Screen

Still images, video, and audio are all smoothly transmitted peer-to-peer from Windows® PCs and Android™ devices. Video content is supported at up to 1080p resolution, with high-bandwidth performance ensuring stutter-free video playback.



Selectable Display Modes

Display modes comprising Duplicate, Extend, and Second Screen allow your source device screen and the display to interact in different ways depending on your needs in the meeting space or classroom.

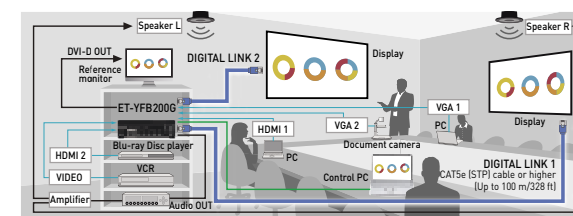


Simplified DIGITAL LINK Connection

BF1 DIGITAL LINK SINGLE CABLE SOLUTION

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.

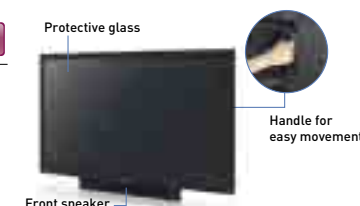


For more information, please visit our DIGITAL LINK website: https://panasonic.net/cns/prodisplays/solutions/technology/digital_link/#displays

Large, Easy-to-See Display Sizes for Classrooms and Conference Rooms

BQE1 BFE1

A large, 65-inch size that is easy to see in classrooms and conference rooms, and an even larger, 75-inch size are available. Select the one that matches the room size. Terminals for PC and HDMI input support highly detailed images (the TH-75BQE1 has 4K resolution) of lesson materials and other data. Even complicated drawings and small text are clear and legible as well.



Touch-Panel Provides Easy-to-Understand Information

Ideal for use as floor maps and signage to describe products in a showroom.

- Multi-touch input allows several people to write simultaneously.
- Easy-to-hear front speaker (included).
- Can be vertically installed. The speaker can also be mounted in the vertical configuration.
- Complies with VESA standards. Third-party mounting fixtures can be used.



SQ1-IR Series

(Infrared Touch Technology)



	Model no.	TH-98SQ1-IR	TH-86SQ1-IR
DISPLAY PANEL	Screen Size /Aspect Ratio	97.5-inch (2476.9 mm)	85.6-inch (2174.2 mm)
	Panel Type	IPS / Direct-LED	IPS / Edge-LED
	Effective Display Area (W x H)	84.99" x 47.80" (2158.8 x 1214.3 mm)	74.60" x 41.96" (1895.0 x 1065.9 mm)
	Resolution (H x V)	3840 x 2160	
	Brightness (Typ) ¹⁾	500 cd/m2	
	Contrast Ratio	1300:1	1200:1
	Dynamic Contrast Ratio	50,000:1	
	Response Time	8.0 ms (Typ) (G to G)	
	Viewing Angle (Horizontal/Vertical)	178°/178° (CR≥10)	
TOUCH	Panel Surface Treatment ²⁾	Anti-Glare (Haze 28%)	Anti-Glare (Haze 28%)
	Detection Method	Infrared Blocking Detection Method	
	Touch Operation	Up to 20-point multi-touch ³⁾	
GENERAL	Power Requirements	110-127 / 220-240 V AC, 50/60 Hz	
	On-mode Average Power Consumption	600.5	254.5
	Power off Condition	Approx. 0.3 W	
	Stand-by Condition	Approx. 0.5 W	
	Dimensions (W x H x D)	TBC	1973 x 1144 x 105 mm
	Carton Size	TBC	2224 x 1427 x 373 mm
	Weight	TBC	Approx. 116 kg (255.2 lbs.)
	Gross Weight	TBC	Approx. 139 kg (305.8 lbs.)
	Pitch for Wall-Hanging	800 x 500 mm (31.5" x 19.7") VESA Compliant	600 x 400 mm (23.6" x 15.8") VESA Compliant
OPTIONS	Protective Glass Thickness	6mm	
	Video Wall Manager compatible	Yes	
	SNMP Support	Ver. 3.0	
	Content Management Software	Ver. 3.0 or later. Windows only	
	Multi Monitoring & Control Software	Ver. 2.1 Windows only	
	Early Warning Software	ET-SWA100 Series	
	Whiteboard Software ⁴⁾	Downloadable for free	

Other features: please refer to page 10 for comprehensive product specifications

1) 2) Brightness and Haze level without protection glass

3) When using the Panasonic Whiteboard Software for Windows®. Up to 4-point using the Whiteboard Software for Mac.

4) Downloadable for free. For more information, please visit Global website. <https://panasonic.net/cns/prodispays/download/software/>

EQ1-IR Series

(Infrared Touch Technology)

Multi-Touch Screen



Model no.		TH-86EQ1-IR	TH-75EQ1-IR	TH-65EQ1-IR		TH-55EQ1-IR	TH-50EQ1-IR	TH-43EQ1-IR
DISPLAY PANEL	Screen Size /Aspect Ratio	86-inch (2175 mm)	75-inch (1893 mm)	65-inch (1639 mm)		55-inch (1388 mm)	50-inch (1258 mm)	43-inch (1080 mm)
	Panel Type	IPS Panel/ E-LED		VA panel / D-LED		VA panel / D-LED		
	Effective Display Area (W x H)	1895 x 1065 mm (74.6" x 41.9")	1649 x 927 mm (64.9" x 36.5")	1428 x 803 mm (56.2" x 31.6")		1209 x 680 mm (47.6" x 26.7")	1095 x 616 mm (43.1" x 24.2")	941 x 529 mm (37.0" x 20.8")
	Resolution (H x V)	3840 x 2160				3840 x 2160		
	Brightness (Typ) ¹⁾	350 cd/m2				350 cd/m2		
	Contrast Ratio	1200:1	1200:1	4000:1(Typ)		4000:1(Typ)		
	Dynamic Contrast Ratio	50000:1				50000:1		
	Response Time	8.0 ms (Typ) [G to G]				8.0 ms (Typ) [G to G]		
	Viewing Angle (Horizontal/Vertical)	178°/178° (CR≥10)				178°/178° (CR≥10)		
	Panel Surface Treatment ²⁾	Anti-Glare (Haze 28%)	Anti-Glare (Haze 28%)	Anti-Glare (Haze 2%)		Anti-Glare (Haze 2%)	Anti-Glare (Haze 2%)	Anti-Glare (Haze 2%)
TOUCH	Detection Method	Infrared Blocking Detection Method				Infrared Blocking Detection Method		
	Touch Operation	Up to 20-point multi-touch ³⁾				Up to 20-point multi-touch ³⁾		
GENERAL	Power Requirements	110-127 V AC, 50/60 Hz, 220-240 V AC, 50/60 Hz				110-127 V AC, 50/60 Hz, 220-240 V AC, 50/60 Hz		
	On-mode Average Power Consumption	232.5 W	196.5 W	164.5 W		142.5 W	125.5 W	113.5 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)	1973 x 1144 x 105 mm	1732 x 1011 x 77 mm	1507 x 883 x 97 mm		1293 x 763 x 77 mm	1172 x 693 x 85 mm	1030 x 619 x 77 mm
	Carton Size	2224 x 1427 x 373 mm	2059 x 1369 x 361 mm	1655 x 1078 x 280 mm		1365 x 864 x 185 mm	1238 x 795 x 185 mm	1070x 696 x 159 mm
	Weight	Approx. 116 kg (255.2 lbs.)	Approx. 85 kg (187.4 lbs.)	Approx. 55 kg (97.0 lbs.)		Approx. 35.5 kg (78.3 lbs.)	Approx.26.5 kg (58.3 lbs.)	Approx.14 kg (30.9 lbs.)
	Gross Weight	Approx. 139 kg (305.8 lbs.)	Approx. 122 kg (268.9 lbs.)	Approx. 66 kg (145.2 lbs.) TBD		Approx. 44.0 kg (97.0 lbs.)	Approx. 31 kg (70.4 lbs)	Approx.23 kg (50.7 lbs.)
	Pitch for Wall-Hanging	600 x 400 mm (23.6"" x 15.8"")	400 x 400 mm (15.8" x 15.8")	400 x 400 mm (15.8" x 15.8")		400 x 200 mm (15.8" x 7.9")	400 x 200 mm (15.8" x 15.8")	200 x 200 mm (7.9" x 7.9")
	Protective Glass Thickness	VESA Compliant" 6mm		VESA Compliant 4mm		VESA Compliant	VESA Compliant 4mm	VESA Compliant
OPTIONS	Pedestal		TY-ST75PE9	TY-ST55PE9		TY-ST43PE8		
	SNMP support	Ver. 3.0				Ver. 3.0		
	Content Management Software	Ver. 3.0 or later. Windows only				Ver. 3.0 or later. Windows only		
	Multi Monitoring & Control Software	Ver. 2.1 Windows only				Ver. 2.1 Windows only		
	Early Warning Software	ET-SWA100 Series				ET-SWA100 Series		
	Whiteboard Software ⁴⁾	Downloadable for free				Downloadable for free		

Other features: please refer to pages 16-18 for comprehensive product specifications

1) 2) Brightness and Haze level without protection glass

3) When using the Panasonic Whiteboard Software for Windows®. Up to 4-point using the Whiteboard Software for Mac.

4) Downloadable for free. For more information, please visit Global website. <https://panasonic.net/cns/prodispays/download/software/>

EF1-IR/LFE8-IR Series



Model no.		TH-75EF1-IR	TH-65EF1-IR		TH-55LFE8-IR	TH-48LFE8-IR	TH-43LFE8-IR
DISPLAY PANEL	Screen Size /Aspect Ratio	75-inch (1892 mm)/16:9	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	IPS Panel/E-LED	VA Panel/D-LED		IPS Panel/D-LED	VA Panel/D-LED	
	Effective Display Area (W x H)	1649 x 927 mm (65.0" x 36.5")	1428 x 803 mm (56.2" x 31.6")		1209 x 680 mm (47.6" x 26.8")	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		
	Brightness (Typ) *1	410 cd/m2	350 cd/m2		350 cd/m2		
	Contrast Ratio	1200:1	4000:1		1200:1	4000:1	3000:1
	Response Time	8 ms (G to G)	8 ms (G to G)		9 ms (G to G)	8 ms (G to G)	6.5 ms (G to G)
Viewing Angle (Horizontal/Vertical)		178°/178° (CR≥10)	178°/178° (CR≥20)		178°/178° (CR≥20)		178°/178° (CR≥10)
TOUCH	Detection Method	Infrared Blocking Detection Method			Infrared Blocking Detection Method		
	Touch Operation	Up to 20-point multi-touch ²			Up to 20-point multi-touch ²		
GENERAL	Power Requirements	220-240 V AC, 50 Hz/60 Hz			220-240 V AC, 50 Hz/60 Hz		
	Average Power Consumption	541.5W	300.5W		176.5W	165.5W	136.5W
	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)	1732 x 1011 x 77 mm (68.2" x 39.8" x 3.0")	1507 x 883 x 97 mm (59.3" x 37.7" x 3.0")		1293 x 763 x 77 mm (50.9" x 30.0" x 3.0")	1131 x 670 x 76 mm (44.5" x 26.4" x 3.0")	1030 x 619 x 77 mm (40.5" x 24.4" x 3.0")
	Carton Size	1831 x 1227 x 361 mm (72.1" x 48.3" x 14.3")	1655 x 1078 x 280 mm (65.2" x 42.5" 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")
	Weight	Approx. 85 kg (187.4 lbs.)	Approx. 55 kg (97.0 lbs.)		Approx. 35.5 kg (78.3 lbs.)	Approx. 24kg (52.9 lbs.)	Approx. 14 kg (30.9 lbs.)
	Gross Weight	Approx. 122 kg (268.9 lbs.)	Approx. 54 kg (121.2 lbs.) TBD		Approx. 44.0 kg (97.0 lbs.)	Approx. 29.5kg (65.0lbs)	Approx. 23 kg (50.7 lbs.)
	Pitch for Wall-Hanging	VESA compliant 600x400mm	VESA compliant 400x400mm		VESA Compliant 400 x 400 mm	VESA Compliant 200 x 200 mm	
	Protective Glass Thickness		6 mm (0.24")	4 mm (0.16")		4 mm (0.16")	
OPTIONS	Pedestal	TY-ST55PE9, TY-ST65PE8	TY-ST75PE9		TY-ST55PE9	TY-ST55PE9	TY-ST43PE8
	Early Warning Software	ET-SWA100 Series			ET-SWA100 Series		

Other features: please refer to pages 20-23 for comprehensive product specifications

*1 Brightness without protection glass.

*2: When using the Panasonic Whiteboard Software for Windows®. Up to 4-point using the Whiteboard Software for Mac.

Engaging Interactive Multi-Touch Displays for high efficient Team work and Digital signage

Slim and stylish design with high precision intuitive touch for collaboration & teamworks

- Wide range of sizes, from 43" to 86,"to meet any space requirements.
- Multi-touch screen integrated HID infrared touch frame with 20 simultaneous touchpoints increases usability and participant involvement.
- Flexible installation (landscape, portrait or back-tilt 20°)
- 4k ultra HD resolution delivering the highest detail and image quality.



Built for practicality

- Created with safety and ease of use in mind, the touch screens are perfect for use in schools and other education spaces.
- The screens are built with protection tempered anti-glare glass with only 4mm thickness for small size displays and 6mm for larger sizes [75" and 86].
- The larger size (75" and 86") come with a handy carrying handle to ensure efficient and safe mobility.



Cost-effective collaboration

- As with all the Panasonic interactive range, the SQ1/EQ1/EF1/LFE8-IR displays can be used with the Panasonic Whiteboard Software for Windows or Mac, including a whiteboard mode, PowerPointR presentation mode – as well as Video and Screen Capture functions.
- These multi-touch displays includes a wide range of flexible functions and extended connectivity from the main SQ1/EQ1/EF1/LFE8 series.



SQ1-IR Series

4K Multi-Touch premium displays for collaborative suites and engaging retail stores

Ideal for:

- Retail environments
- Transport hubs (Train stations, Bus stations, Airports...)
- Museums
- Exhibitions
- Higher Education
- Control rooms
- Broadcast studios

Key Features:

- Slim and stylish design large multi-touch screens 86" and 98" 500 cd/m², 24/7 operation
- Narrow bezel with high precision simultaneous 20 touch-point technology for novelty design and out-standing performance
- 4K resolution, fast response and precise touch for the highest detail and quality of images, drawings or data. Non-4K sources are also beautifully compensated
- Bright and efficient high-visibility 4K IPS panel with anti-glare surface (Haze level 28%)
- Built-in USB Media Player playing 4K content eliminates the need for external devices and allows updates to USB memory devices via LAN
- System expandability supporting new slot for ultra-slim Intel® SDM (Intel® Smart Display Module) specification featuring high-speed PCIe connection simplifying interface integration, signage system installation, and platform management
- Flexible and light installation either in Portrait, landscape and tilt (landscape forward 20 degree) orientation

Basic Specifications



EQ1-IR Series

4K entry professional multi-touch display with Infrared touch technology for high user engagement

Ideal for:

- Classrooms and seminar rooms,
- Huddle rooms,
- Offices,
- Lecture theatres,
- Presentation rooms,
- Control rooms,
- Public digital signage.

Key Features:

- Slim and stylish design with wide range of sizes, from 43" to 86,"to meet any space
- Narrow bezel with high precision 20 simultaneous touch point multi-touch screen integrated Infra-Red touch frame ensures ease of use and quicker operation with Infrared technology to engage team members
- 4K resolution for the highest detail and quality of images, drawings and data. Non-4K sources are also beautifully compensated
- Built-in USB Media Player playing 4K content eliminates the need for external devices and allows updates to USB memory devices via LAN
- Flexible installation (landscape, portrait or back-tilt 20°)
- Extensive connectivity

Basic Specifications



EF1-IR/LFE8-IR

Cost-effective collaboration

Ideal for:

- Classrooms and seminar rooms
- Huddle rooms
- Lecture theatres
- Presentation rooms
- Flexible installation (landscape or portrait)

Key Features:

- Wide range of sizes, from 43" to 75,"to meet any space
- Narrow bezel with high precision 20 simultaneous touch point multi-touch screen integrated Infra-Red touch frame ensures ease of use and quicker operation with Infrared technology to engage team members
- Flexible installation also in portrait (except 75")

Basic Specifications



AF1-SST Series



Model no.		TH-55AF1-SST	TH-49AF1-SST	TH-42AF1-SST
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	IPS Panel/E-LED	IPS Panel/E-LED	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 (Typ)	500 cd/m ²	500 cd/m ²	500 cd/m ²
	Contrast Ratio	1300:1	1300:1	1300:1
	Dynamic Contrast Ratio	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]
	Panel Surface Treatment	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 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	Display	VIDEO In	BNC x 1 [Shared with Component In]	BNC x 1 [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]
	OpenPort PLATFORM	Audio In (L/R)	Stereo Mini Jack [M3] x 1 [Shared with DVI-D In]	Stereo Mini Jack [M3] x 1 [Shared with DVI-D In]
		Audio Out (L/R)	Stereo Mini Jack [M3] x 1	Stereo Mini Jack [M3] x 1
		Serial In/Out	D-sub 9-pin x 1/x 1, RS-232C Compatible	D-sub 9-pin x 1/x 1, RS-232C Compatible
		USB	USB connector [TYPE A] x 1, DC 5 V/1 A [USB3.0 is not supported]	USB connector [TYPE A] x 1, DC 5 V/1 A [USB3.0 is not supported]
		IR In/Out	Stereo Mini Jack [M3] x 1 / x 1	Stereo Mini Jack [M3] x 1 / x 1
		LAN	RJ45 x 1 for Network Connection, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PjLink™	RJ45 x 1 for Network Connection, 10BASE-T/100BASE-TX/1000BASE-T, Compatible with PjLink™
GENERAL	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
		196 W	181 W	160 W
		Approx. 0.3 W	Approx. 0.3 W	Approx. 0.3 W
	Stand-by Condition	Approx. 0.5 W [When [OpenPort PLATFORM standby] is set to [Off]]	Approx. 0.5 W [When [OpenPort PLATFORM standby] is set to [Off]]	Approx. 0.5 W [When [OpenPort PLATFORM standby] is set to [Off]]
		Approx. 20 W [When [OpenPort PLATFORM standby] is set to [On]]	Approx. 20 W [When [OpenPort PLATFORM standby] is set to [On]]	Approx. 20 W [When [OpenPort PLATFORM standby] is set to [On]]
	Dimensions (W x H x D)	1309 x 784 x 76mm [51.5" x 30.9" x 3.0"]	1171 x 701 x 76mm [46.1" x 27.6" x 3.0"]	947 x 541 x 76mm [37.3" x 21.3" x 3.0"]
	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	48mm [1.89"]	48mm [1.89"]	48mm [1.89"]
	Weight	49kg [108 lbs.]	39.8kg [87.7 lbs.]	33.5kg [73.85 lbs.]
	Gross Weight	57kg [125.6 lbs.]	46.5kg [102.5 lbs.]	38.5kg [84.9 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]	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.]	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]	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]
TOUCH OPTIONS	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*4	24 h/day	24 h/day	24 h/day
	Pedestal	TY-ST55PE9	TY-ST55PE9	TY-ST55PE9
	Early Warning Software*5	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100 Series
	Auto Display Adjustment Upgrade Kit*6	TY-VUK10	TY-VUK10	TY-VUK10
	Multi Window Processor	ET-MWP100G	ET-MWP100G	ET-MWP100G
	Detection Method	ShadowSense™ Touch		ShadowSense™ Touch
	Touch Operation	Multi-touch up to 10 points		Multi-touch up to 10 points
	Protective Glass Thickness	4mm hardened safety glass		4mm hardened safety glass

Multi-Touch Screen

Featuring ShadowSense™ touch technology



ShadowSense™ touch is based upon the precise and accurate detection of an object's shadow as it enters, hovers within, or transitions out of a sensor's field of view.

- High durability and touch accuracy
- Works even in very bright environments
- Works with any input device (fingers, gloves, pens)
- Avoids accidental touches by recognizing pens, fingers, sleeves or objects used as an eraser
- High touch accuracy and fast response
- Very robust due to high tolerance towards dirt and objects blocking sensors
- Protection glass: 4mm hardened safety glass, smooth anti-glare surface for easy drawing and writing.

*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. *6: Download the latest Video Wall Manager from PASS in advance.
[https://panasonic.net/cns/prodisplas/pass/]

LF80-SST Series



Multi-Touch Screen

Model no.	TH-55LF80-SST	TH-49LF80-SST	TH-42LF80-SST
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	IPS Panel/E-LED	IPS Panel/E-LED	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 (Typ)	500 cd/m ²	500 cd/m ²	500 cd/m ²
Contrast Ratio	1300:1	1300:1	1300:1
Dynamic Contrast Ratio	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)
Panel Surface Treatment	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)	Anti-Glare (Haze 10 %)
TOUCH			
Detection Method	ShadowSense™ Touch		ShadowSense™ Touch
Touch Operation	Multi-touch up to 10 points		Multi-touch up to 10 points
Protective Glass Thickness	4mm hardened safety glass		4mm hardened safety glass
TERMINAL			
VIDEO In	BNC x 1 (Shared with Component /RGB Y/G)		BNC x 1 (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/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 x 1 (Female)		Mini D-Sub 15-pin x 1 (Female)
Audio In (L/R)	Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)		Stereo Mini Jack (M3) x 1 (Shared with DVI-D In)
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	RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with LAN)		RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with LAN)
LAN	RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)		RJ45 x 1 100BASE-TX, Compatible with PLink™ (Shared with DIGITAL LINK)
IR In/Out	Stereo Mini Jack (M3) x 1 / x 1		Stereo Mini Jack (M3) x 1 / x 1
USB	USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)		USB Type A Connector x 1, DC 5V/1A (USB 3.0 is not supported.)
Function Slot	—		—
GENERAL			
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	196 W	181 W	160 W
Power Off Condition	Approx. 0.3 W	Approx. 0.3 W	Approx. 0.3 W
Stand-by Condition	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])	Approx. 0.5 W (When [OpenPort PLATFORM standby] is set to [Off])
	Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On])	Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On])	Approx. 20 W (When [OpenPort PLATFORM standby] is set to [On])
Dimensions (W x H x D)	1309 x 784 x 76mm (51.5" x 30.9" x 3.0")	1171 x 701 x 76mm (46.1" x 27.6" x 3.0")	947 x 541 x 76mm (37.3" x 21.3" x 3.0")
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	48mm (1.89")	48mm (1.89")	48mm (1.89")
Weight	49kg (108 lbs.)	39.8kg (87.7 lbs.)	33.5kg (73.85 lbs.)
Gross Weight	57kg (125.6 lbs.)	46.5kg (102.5 lbs.)	38.5kg (84.9 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-ST55PE9	TY-ST55PE9	TY-ST55PE9
Wall-hanging Bracket	—	—	—
Digital Interface Box	ET-YFB100G	ET-YFB100G	ET-YFB100G
DIGITAL LINK Switcher	ET-YFB200G	ET-YFB200G	ET-YFB200G
Early Warning Software	ET-SWA100 Series	ET-SWA100 Series	ET-SWA100
Auto Display Adjustment Upgrade Kit	TY-VUK10	TY-VUK10	TY-VUK10
Multi Window Processor	ET-MWP100G	ET-MWP100G	ET-MWP100G

Featuring ShadowSense™ touch technology



ShadowSense™ touch is based upon the precise and accurate detection of an object's shadow as it enters, hovers within, or transitions out of a sensor's field of view.

- High durability and touch accuracy
- Works even in very bright environments
- Works with any input device (fingers, gloves, pens)
- Avoids accidental touches by recognizing pens, fingers, sleeves or objects used as an eraser
- High touch accuracy and fast response
- Very robust due to high tolerance towards dirt and objects blocking sensors
- Protection glass: 4mm hardened safety glass, smooth anti-glare surface for easy drawing and writing.

*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.

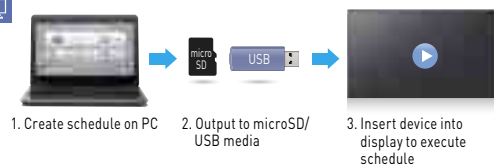
Panasonic Software Line-up

In order to maximize the use of professional displays, Panasonic offers a variety of software and applications (some free of charge, and others for a fee).

Content Management Software



Content Management Software makes it possible to create scheduling data and media playlist on a PC and save it to one or more SD Cards. Insert the card into Space Players to execute the schedule. The software reduces complexity for temporary installations or where the device is frequently moved from place to place.



Compatible Display: AF1 Series (Ver.1.1 only), SQ1 Series, SF2 Series, SF2H Series, and EQ1 Series
<https://panasonic.net/cns/prodisplays/download/software/>

Whiteboard Software



This simple software is easy to operate. Requiring no PC installation, it can be started and used from external memory. Switching to a convenient, simple menu when using the Remote Pointer is also supported.



Compatible Displays: BF1 Series, BQE1 Series, BFE1 Series
<https://panasonic.net/cns/prodisplays/download/software/#whiteboard>

Wireless Manager



This application supports wired or wireless connection of screen display images from a PC to the display. Be sure to uninstall the old version of the software before upgrading to the new version.



Compatible Displays: BF1 Series
<https://panasonic.net/cns/prodisplays/download/software/#wireless>

Auto Display Adjustment Upgrade Kit (TY-VUK10)

Panasonic's free Video Wall Manager software can be used with LCD Video Wall Series displays. With this software, you can calibrate display color using a color sensor, adjust display settings, and control and manage data via PC. If software is upgraded with an optional TY-VUK10 Auto Display Adjustment Upgrade Kit, brightness and color among multiple displays can be automatically calibrated using a compatible camera (Nikon D5200/D5300/D5500/D5600)*.



* 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, AF-S DX NIKKOR 18-55 mm f/3.5-5.6G VR II

For more information, please visit the PASS: <https://https://panasonic.net/cns/prodisplays/pass/>

Mobile App (iOS/Android)

Wireless Projector

This is an application that lets you send displayed screenshot, document files (PDF, PowerPoint, Excel, Word), and JPEG/PNG images saved to Android devices (tablets and smartphones) to a Panasonic wireless display over a wireless LAN (Wi-Fi), and display them. The application also lets you rotate the screen, enlarge or reduce the screen with a pinch operation, and flip through pages with a flick operation.



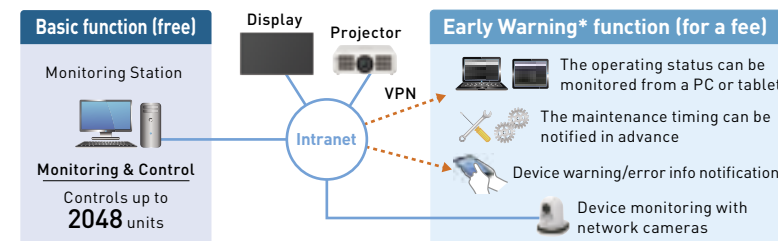
- Dedicated wireless apps for iOS and Android™
- Fewer steps to connect
- Wide media compatibility and functionality

For more information, please visit the Website:
<https://panasonic.net/cns/prodisplays/download/software/#wireless>

Multi Monitoring & Control Software



This free Panasonic software offers monitoring and control of up to 2,048 projectors and professional displays over a LAN network from a single PC to simplify management and maintenance while supporting stable operation. If you also purchase Early Warning Software (ET-SWA100), it will monitor the status of projectors and displays on the intranet and inform you of errors when it detects signs of trouble. This contributes to a lighter maintenance load and reduces costs.



* Software function support varies by model.
 * Multi Monitoring & Control Software Ver. 2.0 or higher is required to use the Early Warning function.

Features

- Map Display
Image files, such as floor plans, can be loaded, and the icon for each device can be positioned by 'Drag & Drop'.
- Auto Search of the Devices to Be Registered
You can select the devices to be registered from devices automatically searched on the network.^{*1}
- Other Features
 - Monitoring of the status of each device^{*2}
 - Execution of control commands
 - Scheduling function
 - Delivery of the contents list^{*3}



Early Warning Function (ET-SWA100)

If you install 'Multi Monitoring & Control Software', a free 90-day trial is automatically available.

Maintenance Scheduling Suggestion^{*3}
 It is easier to plan for maintenance by predicting the approximate time for maintenance and service based on the usage monitoring.

Video Stop Detection Using a Network Camera
 Images of registered projectors or displays can be monitored regularly by a supported network camera^{*4}. You can also receive a notification when an abnormality such as a blackout or an image freeze happens.



Captured image when an abnormality happens is stored

*1: Some devices can't be registered using the auto search function depending on the device status and network environment.
 *2: Software functionality varies depending on the model. *3: Function for supported projectors and professional displays only.
 *4: Panasonic Network camera (BB-S/DG-S/WW-S series), Panasonic PTZ camera (AW-UE70/HE40/HE130 series).

For more information about compatible displays, please visit the Website:
https://panasonic.net/cns/prodisplays/download/software/multi/dl_files/DeviceList-Multi_EN.pdf

Early Warning function License * If you install "Multi Monitoring Control Software", a free 90 day trial.
 For more information, please visit the PASS: <https://panasonic.net/cns/prodisplays/pass>

Optional Accessories

Optional Accessories			Advanced Professional								Standard								Entry												Video Wall						
			TH-55SF1H	TH-49SF1H	TH-42SF1H	TH-80SF2H	TH-70SF2H	TH-55LF80	TH-49LF80	TH-42LF80	TH-98SQ1	TH-86SQ1	TH-55AF1	TH-49AF1	TH-42AF1		TH-65SF2	TH-55SF2	TH-49SF2	TH-43SF2	TH-86EQ1	TH-75EQ1	TH-65EQ1	TH-55EQ1	TH-50EQ1	TH-43EQ1	TH-75EF1	TH-65EF1	TH-32EF1	TH-55LF8	TH-48LF8	TH-43LF8	TH-55VF1H	TH-55LFV70	TH-55LFV8	TH-49LFV8	
Screen Size (inch)			55	49	42	80	70	55	49	42	98	86	55	49	42		65	55	49	43	86	75	65	55	50	43	75	65	32	55	48	43	55	55	55	49	
MOUNTING OPTIONS	Pedestal	TY-ST75PE9	-	-	-	Yes	Yes	-	-	-	-	-	-	-	-		-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		TY-ST55PE9	-	-	-	-	-	-	-	-	-	-	-	-	-	-		Yes	Yes	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-		
		TY-ST43PE9	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		TY-ST43PE8	Yes	Yes	Yes	-	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes		-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	-	-	-	-	
		TY-ST32PE1	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	-		
	Installation Mount (Landscape setting only)	TY-VK55LV2	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	Yes	Yes	Yes	-
		TY-VK49LV2	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes		
	Cover Frame Kit for 55"	TY-CF55VW1	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-
		TY-CF55VW50	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	-	
	Pitch for Wall Hanging (VESA compliant models)	800 x 500 (M8)	-	-	-	-	-	-	-	-	-	Yes	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		600 x 500 (M8)	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
600 x 400 (M8)		-	-	-	-	-	-	-	-	-	-	Yes	-	-		-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
600 x 400 (M6)		-	-	-	Yes	-	-	-	-	-	-	-	-	-		-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-			
400 x 400 (M8)		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
400 x 400 (M6)		Yes	Yes	-	-	Yes	Yes	Yes	-	-	-	Yes	Yes	-		Yes	Yes	Yes	Yes	-	-	Yes	-	Yes	-	Yes	-	Yes	-	Yes	-	Yes	Yes	Yes	Yes		
400 x 200 (M6)		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-			
200 x 200 (M6)		-	-	Yes	-	-	-	-	Yes	-	-	-	-	-	Yes		-	-	-	-	-	-	-	-	Yes	-	-	-	-	-	Yes	Yes	-	-	-		
100 x 100 (M4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	Yes	-	Yes	-	-	-	-	-	-	-			
OTHERS	DIGITAL LINK Switcher	ET-YFB200G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-		Yes	Yes*1	Yes*1	Yes	-	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	-	-	
	Digital Interface Box	ET-YFB100G	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-		Yes	Yes*1	Yes*1	Yes*1	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-		
	Multi Window Processor	ET-MWP100	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	Yes	Yes	

The specifications can change without notice.

*1: SF2W model only.

Optional Accessories

Optional Accessories		Multi-Touch Screen																							
		TH-80BF1	TH-65BF1	TH-75BQE1	TH-65BFE1	TH-98SQ1-IR	TH-86SQ1-IR	TH-86EQ1-IR	TH-75EQ1-IR	TH-65EQ1-IR	TH-55EQ1-IR	TH-50EQ1-IR	TH-43EQ1-IR	TH-75EF1-IR		TH-65EF1-IR	TH-55LFE8-IR	TH-48LFE8-IR	TH-43LFE8-IR	TH-55LF80-SST	TH-49LF80-SST	TH-42LF80-SST	TH-55AF1-SST	TH-49AF1-SST	TH-42AF1-SST
Screen Size (inch)		80	65	75	65	98	86	86	75	65	55	50	43	75		65	55	48	43	55	55	49	55	49	42
MOUNTING OPTIONS	Pedestal	TY-ST75PE9	-	-	Yes	Yes	-	-	-	Yes	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		TY-ST65P20	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		TY-ST55PE9	-	-	-	-	-	-	-	-	Yes	-	-	-	-		-	-	-	-	-	-	-	-	-
		TY-ST43PE9	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		TY-ST43PE8	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	-		-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		TY-ST32PE1	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Installation Mount (Landscape setting only)	TY-VK55LV2	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		TY-VK49LV2	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Cover Frame Kit for 55"	TY-CF55VW1	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		TY-CF55VW50	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
	Pitch for Wall Hanging (VESA compliant models)	800 x 500 [M8]	-	-	-	-	Yes	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		600 x 500 [M8]	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		600 x 400 [M8]	-	-	-	-	-	Yes	Yes	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		600 x 400 [M6]	-	-	-	-	-	-	Yes	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
		400 x 400 [M8]	Yes	-	-	-	-	-	-	-	-	-	-	-	Yes		-	-	-	-	-	-	-	-	-
		400 x 400 [M6]	-	-	Yes	Yes	-	-	-	-	Yes	-	Yes	-	-		Yes	Yes	-	-	Yes	Yes	-	Yes	Yes
		400 x 200 [M6]	-	-	-	-	-	-	-	-	-	Yes	-	-	-		-	-	-	-	-	-	-	-	-
		200 x 200 [M6]	-	-	-	-	-	-	-	-	-	-	-	Yes	-		-	-	Yes	Yes	-	Yes	-	-	Yes
		100 x 100 [M4]	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	Yes	Yes	-	-	-	-	Yes
OTHERS	DIGITAL LINK Switcher	ET-YFB200G	Yes	Yes	-	-	Yes	Yes	-	-	-	-	-	-		-	-	-	-	Yes	Yes	Yes	-	-	
	Digital Interface Box	ET-YFB100G	Yes	Yes	-	-	Yes	Yes	-	-	-	-	-	-		-	-	-	-	Yes	Yes	Yes	-	-	
	Multi Window Processor	ET-MWP100	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

The specifications can change without notice.

Features

Features		Advanced Professional								Standard									
		TH-55SF1H	TH-49SF1H	TH-42SF1H	TH-80SF2H	TH-70SF2H	TH-55LF80	TH-49LF80		TH-42LF80	TH-98S01	TH-86S01	TH-55AF1	TH-49AF1	TH-42AF1	TH-65SF2	TH-55SF2	TH-49SF2	TH-43SF2
Size (inch)		55	49	42	80	70	55	49		42	98	86	55	49	42	65	55	49	43
INSTALLATION SPECIFICATIONS	LinkRay Compatible	Yes	Yes	Yes	Yes	Yes	-	-		-	-	-	-	-	-	-	-	-	-
	Touch Operation	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
	IP Rating	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
	Operating Time	24	24	24	24	24	24	24		24	24	24	24	24	24	24	24	24	24
	DIGITAL LINK	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1	Yes*1		Yes*1	Yes*1	Yes*1	-	-	-	Yes*1	Yes*1	Yes*1	Yes*1
	Wireless Function	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
	Protective Glass	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
	Function Slot	-	-	-	-	-	-	-		-	Intel® SDM	-	-	-	-	-	-	-	-
FUNCTIONS	Portrait	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Multi Screen (Multi Display Setting)*2	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	Yes	Yes
	Pre Calibration	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
	Fan-less Design	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Built-in Whiteboard	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
	USB Media Player	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Memory Viewer	-	-	-	Yes	Yes	-	-		-	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes
SOFTWARE	Data Cloning	USB			USB/LAN		USB			USB	USB/LAN		USB		USB/LAN		USB/LAN		
	HDMI CEC	-	-	-	Yes	Yes	-	-		-	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes
	Custmized Image Setting	-	-	-	Yes	Yes	-	-		-	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes
	USB Memory Network Setting	-	-	-	Yes	Yes	-	-		-	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes
	Multi Input Display*3	-	-	-	-	-	-	-		-	Yes	Yes	-	-	-	-	-	-	-
	Input Search (No Signal Auto Switch Setting/Input Signal Search)	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Failover/Failback	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	1:1Pixel Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Color Management	6-axis			6-axis		6-axis			6-axis	12-axis		6-axis		6-axis		6-axis		
	Color Enhancement	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*1: Long Reach Mode compatible. TH-65SF2E (for Europe/CIS) and TH-65/55/49/43SF2W (for Asia, Middle East, Africa) only.

*2: The number of units that can be set as a group varies depending on the model. For details, see the Operation Manual of each model.

*3: There are restrictions on the input signal and 4-Input Multi Display function. For details, see the Operation Manual of each model.

*4: The part number suffix may differ depending on the license type.

Features

Features								Entry							Video Wall									
		TH-86E01	TH-75E01	TH-65E01	TH-55E01	TH-50E01	TH-43E01								TH-75EF1	TH-65EF1	TH-32EF1	TH-55LFE8	TH-48LFE8	TH-43LFE8	TH-55VF1H	TH-55LFV70	TH-55LFV8	TH-49LFV8
Size (inch)		86	75	65	55	50	43							75	65	32	55	48	43	55	55	55	49	
INSTALLATION SPECIFICATIONS	LinkRay Compatible	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	Touch Operation	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	IP Rating	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	Operating Time	24	24	18	18	18	18							16	16	16	16	16	16	24	24	24	24	24
	DIGITAL LINK	-	-	-	-	-	-							-	-	-	-	-	-	Yes	Yes	-	-	-
	Wireless Function	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	Protective Glass	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	Function Slot	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
INSTALLATION	Portrait	Yes	Yes	Yes	Yes	Yes	Yes							-*1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Multi Screen (Multi Display Setting)*2	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Daisy Chain Connection	Yes (IR only)												Yes (IR only)			Yes (IR only)			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	-	-	-	-
FUNCTIONS	Built-in Whiteboard	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	USB Media Player	Yes	Yes	Yes	Yes	Yes	Yes							Yes*3	Yes*3	Yes*3	Yes*3	Yes*3	Yes*3	Yes	Yes	-	-	-
	Memory Viewer	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	-	-	-	-	-
	Data Cloning	USB/LAN												USB			USB			USB/LAN		-	-	-
	HDMI CEC	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	-	-	-	-	-
	Custmized Image Setting	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	-	-	-	-	Yes	-	-	-	-
	USB Memory Network Setting	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	Yes	-	-	-	-
	Multi Input Display	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	Input Search (No Signal Auto Switch Setting/Input Signal Search)	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
	Failover/Failback	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	Yes	Yes	Yes*4	Yes*4	Yes*4
	1:1Pixel Mode	-	-	-	-	-	-							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-
	Color Management	6-axis												-	-	-	-	-	-	-	-	-	-	-
	Color Enhancement	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Adaptive Contrast Correction	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Refine Enhancer	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	Yes	-	-	-	-
	Gradation Smoother	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	Yes	-	-	-	-
	Frame Creation	Yes	Yes	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-
	Dynamic Backlight	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	-	Yes*5	-	-	-
	Set up Timer	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
	Off Timer Setting	Yes	Yes	Yes	Yes	Yes	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
	Auto Setup	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
	No Activity Power Off	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-
	PJ Link Protocol	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	LAN Control (Network Control)	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
	Web Browser Control	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
	Remote ID Control (Function)	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
	Serial ID Control (Function)	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-
Local Dimming	Yes	Yes	-	-	-	-							Yes	-	-	-	-	-	-	Yes	Yes	Yes	Yes	
ECO Mode/Power Management Mode	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Audio Input Select (Switching)	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	-	Yes	-	-	-	
SOFTWARE	Multi Monitoring & Control Software Compatible	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Early Warning Software Compatible*6	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	Video Wall Manager	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	
	Auto Display Adjustment Upgrade Kit (TY-VUK10)	-	-	-	-	-	-							-	-	-	-	-	-	Yes	Yes	Yes	Yes	
	Content Management Software	Yes	Yes	Yes	Yes	Yes	Yes							-	-	-	-	-	-	-	-	-	-	
	Super High Quality Up-Scaling	-	-	-	-	-	-							-	-	-	-	-	-	-	-	-	-	-

*1: Long Reach Mode compatible. TH-65SF2E (for Europe/CIS) and TH-65/55/49/43SF2W (for Asia, Middle East, Africa) only.

*2: The number of units that can be set as a group varies depending on the model. For details, see the Operation Manual of each model.

*3: There are restrictions on the input signal and 4-Input Multi Display function. For details, see the Operation Manual of each model.

*4: The part number suffix may differ depending on the license type.

*5: The availability varies depending on the country. Please contact your sales representative for more information.

Note: The specifications may vary depending on the model, even for the same function. For details, see the Operation Manual of each model.

Features

Features		Multi-Touch Screen																							
		TH-80BF1	TH-65BF1	TH-75BQE1	TH-65BFE1	TH-98SQ1-IR	TH-86SQ1-IR	TH-86EQ1-IR		TH-75EQ1-IR	TH-65EQ1-IR	TH-55EQ1-IR	TH-50EQ1-IR	TH-43EQ1-IR	TH-75EF1-IR	TH-65EF1-IR	TH-55LFE8-IR	TH-48LFE8-IR	TH-43LFE8-IR	TH-55AF1-SST	TH-49AF1-SST	TH-42AF1-SST	TH-55LF80-SST	TH-49LF80-SST	TH-42LF80-SST
Size (inch)		80	65	75	65	98	86	86		75	65	55	50	43	75	65	55	58	43	55	49	42	55	49	42
INSTALLATION SPECIFICATIONS	LinkRay Compatible	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Touch Operation	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	IP Rating	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Operating Time	18	18	16	16	24	24	24		24	18	18	18	18	16	16	16	16	16	24	24	24	24	24	24
	DIGITAL LINK	Yes	Yes	-	-	Yes*1	Yes*1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	Yes*1	Yes*1	Yes*1
	Wireless Function	Yes	Yes	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Protective Glass	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Function Slot	SLOT 2.0	-	-	-	-	Intel SDM	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
INSTALLATION	Portrait	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Multi Screen (Multi Display Setting)*2	-	-	-	-	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 (IR only)		Yes (IR only)					Yes (IR only)			Yes (IR only)			Yes	Yes	Yes	Yes	Yes
	Pre Calibration	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Fan-less Design	-	-	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FUNCTIONS	Built-in Whiteboard	Yes	Yes	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	USB Media Player	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes *3	Yes *3	Yes *3	Yes *3	Yes *3	Yes	Yes	Yes	Yes	Yes	Yes
	Memory Viewer	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-
	Data Cloning	-	-	-	-	USB/LAN		USB/LAN		USB/LAN					USB			USB			USB			USB	
	HDMI CEC	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-
	Customized Image Setting	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-
	USB Memory Network Setting	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	-	-	-	-
	Multi Input Display	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Input Search (No Signal Auto Switch Setting/Input Signal Search)	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Failover/Failback	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
	1:1Pixel Mode	Yes	Yes	-	-	-	-	-		-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Color Management	-	-	-	-	12-axis		6-axis		6-axis					-	-	-	-	-	6-axis			6-axis		
	Color Enhancement	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Adaptive Contrast Correction	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Refine Enhancer	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
	Gradation Smoother	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
	Frame Creation	Yes	Yes	-	-	Yes	Yes	Yes		Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dynamic Backlight	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
	Set up Timer	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Off 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
	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
	Auto Setup	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	No Activity Power Off	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	PJ Link Protocol	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	LAN Control (Network Control)	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Web Browser Control	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Remote ID Control (Function)	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Serial ID Control (Function)	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Local Dimming	-	-	-	-	Yes	Yes	Yes		Yes	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-
	ECO Mode/Power Management Mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Audio Input Select (Switching)	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes
SOFTWARE	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
	Early Warning Software Compatible*6	Yes	Yes	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	Video Wall Manager	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	
	Auto Display Adjustment Upgrade Kit (TY-VUK10)	-	-	-	-	Yes	Yes	-		-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	
	Content Management Software	-	-	-	-	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	Yes (Ver1.1)			-	-	-
	Super High Quality Up-Scaling	-	-	-	-	Yes	Yes	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*1: Long Reach Mode compatible. TH-65SF2E (for Europe/CIS) and TH-65/55/49/43SF2W (for Asia, Middle East, Africa) only.
 *2: The number of units that can be set as a group varies depending on the model. For details, see the Operation Manual of each model.
 *3: There are restrictions on the input signal and 4-Input Multi Display function. For details, see the Operation Manual of each model.
 *4: The part number suffix may differ depending on the license type.

Note: The specifications may vary depending on the model, even for the same function. For details, see the Operation Manual of each model.

Panasonic®

Weights and dimensions shown are approximate. 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. 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, 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 PLink 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. "LinkRay", "LinkRay" icon and OpenPort PLATFORM are trademarks of Panasonic Corporation. All other trademarks are the property of their respective trademark owners. Images on screen are simulated.

© 2018 Panasonic Corporation. All rights reserved.



For all the latest information on Panasonic projectors and professional displays download our app to your iOS/Android device.



For the latest information about Panasonic Professional Displays, please visit:

Professional Display European Website - business.panasonic.co.uk/visual-system/products-and-accessories/professional-displays
 YouTube - www.youtube.com/user/PanasonicBusiness
 Facebook - www.facebook.com/PanasonicVisualSolutionsEU/

All information included here is valid as of February 2019