



98-inch Class 4K UHD LCD Display

TH-98LQ70U

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

DISPLAY

Screen Size (Diagonal)	97.5-inch (2476.9 mm)
Panel Type	IPS / Direct-LED
Aspect Ratio	16:9
Effective Display Area (WxH)	85.0" x 47.8" (2159 x 1214 mm)
Number of Pixels (H x V)	3840 x 2160 pixels
Brightness	500 cd/m ²
Contrast Ratio	1300:1
Dynamic Contrast Ratio	500000 : 1
Response Time	8 ms (G to G)
Viewing Angle (Horizontal / Vertical)	178° / 178°
Panel Life Time	approx. 50000 hours (typ)*

* When the panel lifetime is at 50% of the brightness under the condition of 25 degrees Celsius (+/- 2 degrees Celsius).
Panel lifetime may be shortened due to usage environment.

CONNECTION TERMINAL

HDMI IN	HDMI TYPE A Connector x 4 HDMI 1* ¹ / HDMI 2* ¹ (Up to 4K@50/60Hz) HDMI 3* ¹ / HDMI 4* ² (Up to 2K@50/60Hz)
DisplayPort IN	DisplayPort x 1 (DP1.2a)* ²
DVI-D IN	DVI-D 24pin x 1* ³
AUDIO IN (L/R)	Stereo mini jack (M3) x 1set (shared with PC IN)
PC IN	Mini D-sub 15pin x 1 (Female)* ⁴
AUDIO IN (L/R)	Stereo mini jack (M3) x 1set (shared with DVI-D IN)
Function Slot	SLOT NX x 2* ⁵ (Vacant)

*1: HDCP1.4 supported, Embedded audio supported

*2: HDCP1.3 supported, Embedded audio supported

*3: Compliance with DVI Revision 1.0, HDCP1.1 supported

*4: RGB / YPbPr switchable

*5: Option 3G-SDI terminal board TY-TBN03G: (w/ active through)

CONTROL

SERIAL IN	D-sub 9pin x 1* ¹
LAN	RJ45 x 1 100BASE-TX* ²
DIGITAL LINK	RJ45 x 1 100BASE-TX (Shared with LAN)

*1: RS-232C compatible

*2: PLink compatible (shared with DIGITAL LINK)

AUDIO

AUDIO OUT	Stereo mini jack (M3) x 1
Built in Speaker	20 W [10 W + 10 W] (10% THD)

ELECTRICAL

Power Requirements	110-127 V AC, 50/60Hz
Power Consumption	650 W (666 VA) 2218 BTU
On Mode Average Power Consumption*	485 W
Power Off Condition	0.3 W
Stand-by Condition	0.5 W
Network Stand-by Mode	3 W

* Based on IEC 62087 Ed.2 measurement method

MECHANICAL

Dimensions (W x H x D)	87.9" x 50.7" x 4.8" (2233 x 1288 x 122 mm)
Bezel Width	1.3" (32.5 mm)
Carton Dimensions (W x H x D)	94.8" x 59.9" x 18.2" (2406 x 1520 x 460 mm)
Weight	approx. 299.9 lbs (136 kg)
Gross Weight	approx. 355 lbs (161kg)
Cabinet Material / Color	Metal / Black
Protective Glass	Yes
Mount Screw Holes	Diameter: M16, Valid screw depth: 1.1" (26 mm)
Eyebolt Screw Holes	Diameter: M12, Valid screw depth: 1" (25 mm)

INSTALLATION REQUIREMENT

Orientation	Landscape / Portrait
Tilting Angle	10 degrees with landscape setting / 5 degrees with portrait setting

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

ENVIRONMENTAL

Operating Environment	Temperature	: 32°F to 104°F (0°C to 40°C)* ¹ : 32°F to 95°F (0°C to 35°C)* ²
	Humidity	: 20% to 80% (Non condensation)
	Altitude	: 0 to 7874 feet (0 to 2400 m)* ³
Storage Environment	Temperature	: -4°F to 140°F (-20°C to 60°C)
	Humidity	: 20% to 80% (Non condensation)

*1: for up to 1400 m altitude

*2: for between 1400 m and 2400 m altitude

*3: When using the unit where it is 4593 ft (1400 m) and higher and below 7874 ft (2400 m) above sea level, make sure [High altitude mode] is set to [ON].

UPC Code	885170220119
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MAIN FEATURE

Automatic Picture Position	Yes
4 Input Multi Display (up to FHD)	Yes
Screen Saver	Yes
PC Power Management	Yes
HDMI Power Management	Yes
DVI-D Power Management	Yes
ECO Mode	Yes
Button Lock	Yes
Remote-control Lock	Yes
Power-on Screen Delay	Yes
Input Search	Yes
Local Dimming	Yes
Operating Time*	24h/day

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

OPTIONAL ACCESSORIES

3G-SDI Terminal Board	TY-TBN03G*1
Pedestal	TY-ST103PF9
Wall-hanging Bracket	TY-WK103PV9
Ceiling-hanging Bracket	TY-CE103PS10*2
Digital Interface Box	ET-YFB100G

*1: 2 boards (total 3G-SDI x 4) required for 4K@50/60Hz,
1 board (total 3G-SDI x 2) required for up to 4K@25/30Hz
*2: Tilt angle limited to 10 degree maximum

STANDARD (CERTIFICATIONS)

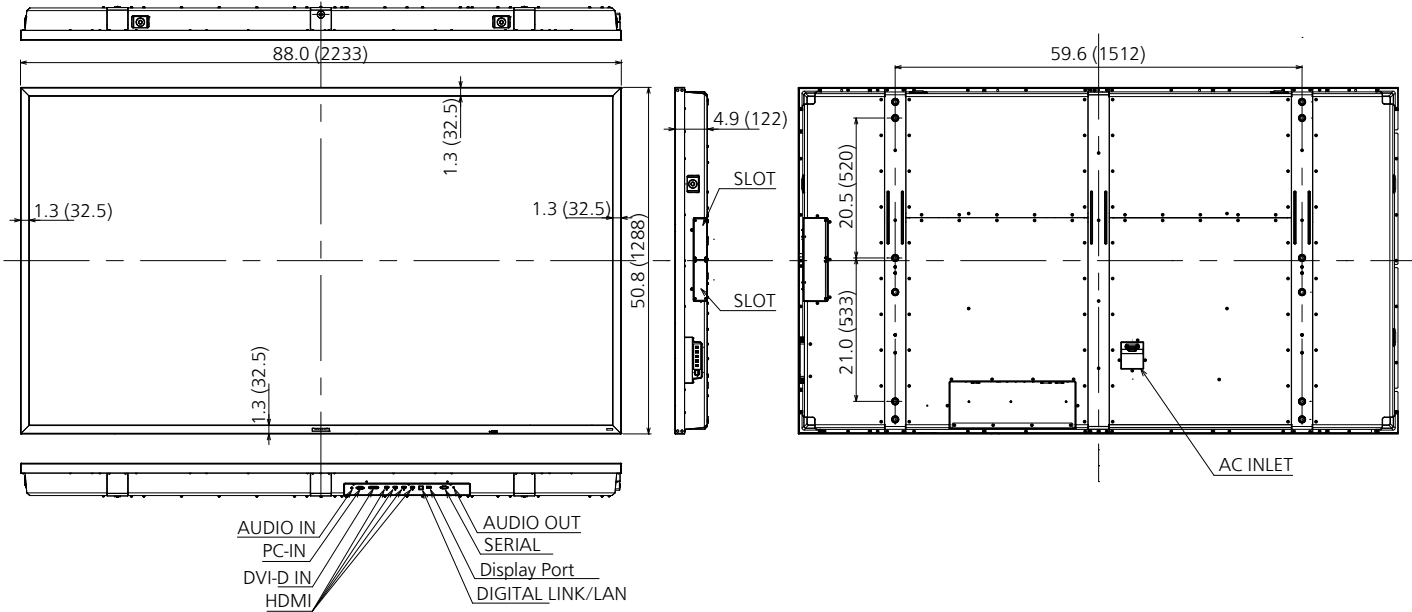
Safety Regulations	UL60065, CAN/CSA22.2 No 60065:03
Radiation Regulations	FCC Part15 Class B, ICES-003

INCLUDED ACCESSORIES

AC power cord (approx. 118" (3 m)), Operating Instructions (Book), (CD-ROM), Remote Control Transmitter, Batteries x 2, Clamper, Eyebolt cap, Eyebolt, Panasonic badge, Panasonic badge attachment plate, Allen wrench

DIMENSIONS

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



CONNECTION TERMINAL



* Specifications and appearance are subject to change without notice.

● Preset Signals

Following signal timing is preset to this unit.

These preset signals are written on EDID of the each input terminal. (Except for *6)

In many cases, it is possible to receive the signals other than below with this unit's multi scan function. (Except for 4K signal)

✓ : Preset signal

Signal name	H-Freq. (kHz)	V-Freq. (Hz)	Dot clock frequency (MHz)	PC IN	HDMI 1 HDMI 2	HDMI 3 HDMI 4 DVI-D IN	DIGITAL LINK	Display Port
525 (480) / 60i	15.73	59.94	13.5	✓				
625 (576) / 50i	15.63	50.00	13.5	✓				
525 (480) / 60i* ²	15.75	60.00	27.0		✓	✓	✓	
625 (576) / 50i	15.63	50.00	27.0		✓	✓	✓	
525 (480) / 60p* ²	31.50	60.00	27.0	✓	✓	✓	✓	
625 (576) / 50p	31.25	50.00	27.0	✓	✓	✓	✓	
750 (720) / 60p* ²	45.00	60.00	74.25	✓	✓	✓	✓	✓
750 (720) / 50p	37.50	50.00	74.25	✓	✓	✓	✓	✓
1125 (1080) / 60i* ^{1*2}	33.75	60.00	74.25	✓	✓	✓	✓	
1125 (1080) / 50i* ¹	28.13	50.00	74.25	✓	✓	✓	✓	
1125 (1080) / 24p* ^{1*2}	27.00	24.00	74.25	✓	✓	✓	✓	
1125 (1080) / 25p* ¹	28.13	25.00	74.25	✓	✓	✓	✓	
1125 (1080) / 30p* ^{1*2}	33.75	30.00	74.25	✓	✓	✓	✓	
1125 (1080) / 60p* ^{1*2}	67.50	60.00	148.5	✓	✓	✓	✓	✓
1125 (1080) / 50p* ¹	56.25	50.00	148.5	✓	✓	✓	✓	✓
640 x 480	31.47	59.94	25.18	✓	✓	✓	✓	✓
800 x 600	37.88	60.32	40.00	✓	✓	✓	✓	✓
1024 x 768	48.36	60.00	65.00	✓	✓	✓	✓	✓
1280 x 768	47.70	60.00	80.14	✓	✓* ⁶	✓	✓	✓
1366 x 768	48.39	60.04	86.71	✓	✓* ⁶	✓	✓	✓
1280 x 1024	63.98	60.02	108.0	✓	✓	✓	✓	✓
1600 x 900	60.00	60.00	108.0	✓	✓	✓	✓	✓
1920 x 1080	67.50	60.00	148.5	✓	✓	✓	✓	✓
1920 x 1200	74.04	59.95	154.0	✓	✓	✓	✓	✓
4K signal								
3840 / 24p* ²	54.00	24.00	297.0		✓		✓	✓
3840 / 25p	56.25	25.00	297.0		✓		✓	✓
3840 / 30p* ²	67.50	30.00	297.0		✓		✓	✓
4096 / 24p* ²	54.00	24.00	297.0		✓		✓	
3840 / 50p	112.5	50.00	594.0		✓		✓* ⁴	✓* ⁵
3840 / 60p* ²	135.0	60.00	594.0		✓		✓* ⁴	✓* ⁵
4096 / 50p	112.5	50.00	594.0		✓		✓* ⁴	
4096 / 60p* ²	135.0	60.00	594.0		✓		✓* ⁴	
4K (Dual Link) signal								
3840 / 50p	112.5	50.00	297.0		✓* ³			
3840 / 60p* ²	135.0	60.00	297.0		✓* ³			
4096 / 50p	112.5	50.00	297.0		✓* ^{3*6}			
4096 / 60p* ²	135.0	60.00	297.0		✓* ^{3*6}			

*1: Based on SMPTE 274M standard.

*2: Compatible with frame frequency 1/1.001

*3: The format supports Dual Link. (see page 17)

*4: Supported in YC_BC_R 4:2:0 format

*5: Supported with MST (Multi Stream Transport) only

*6: Not written on EDID

In some cases, these signals may not be displayed when setting Resolution on your PC.

Note

- Signals without above specification may not be displayed properly.
- For the signals when 3G-SDI Terminal Board with Audio is installed, refer to the manual included with it.