Panasonic

98-inch 4K UHD LCD Display

TH-98LQ70LW

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

■ DISPLAY PANEL

Screen Size (Diagonal)	98-inch (2476.9 mm)
Panel Type	IPS / Direct-LED
Aspect Ratio	16:9
Effective Display Area (W x H)	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 2 (Up to 4K@50/60 Hz)*[1]
	HDMI TYPE A Connector x 2 (Up to 2K@50/60 Hz)*[1]
DisplayPort IN	DisplayPort x 1 (DP1.2a) *1
DVI-D IN	DVI-D 24 Pin x 1
AUDIO IN (L/R)	Stereo mini jack (M3) x 1 set (shared with PC IN)
PC IN	Mini D-sub 15Pin x 1 (Female) *[2]
AUDIO IN (L/R)	Stereo mini jack (M3) x 1 set (shared with DVI-D IN)
Function Slot	SLOT NX x 2*[3] (Vacant)

*1 : HDCP supported, Embedded auido supported
*2 : RGB / YPbPr switchable
*3 : 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 (shard with LAN)

*1 : RS-232C compatible
*2 : PJLink 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	220 - 240 V AC, 50 / 60 Hz
Power Consumption	620 W (653 VA)
	2115.5 BTU
On Mode Average Power Consumption*	480 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

Dimemsions (W x H x D)	2233 x 1288 x 113 mm
Carton Dimensions (W x H x D)	2406 x 1520 x 460 mm
Weight	approx. 105 kg
Gross Weight	approx. 130 kg
Cabinet Material / Color	Metal / Black
Protection Glass	No
Mount Screw Holes	Diameter: M16, Valid screw depth: 26 mm
Eyebolt Screw Holes	Diameter: M12, Valid screw depth: 25 mm

■ INSTALLATION

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	: 0℃ to 40℃ *[1]
		: 0℃ to 35℃ *[2]
	Humidity	: 20% to 80% (No condensation)
	Altitude	: 0 to 2400 m*[3]
Storage Enviroment	Temperature	: -20℃ to 60℃
	Humidity	: 20% to 80% (No 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 1400 m and higher and below 2400 m above sea level, make sure [High altitude mode] is set to [ON].

⬤ 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*	24 h/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
Celling-hanging Bracket	TY-CE103PS10*[2]
Digital Interface Box	ET-YFB100G

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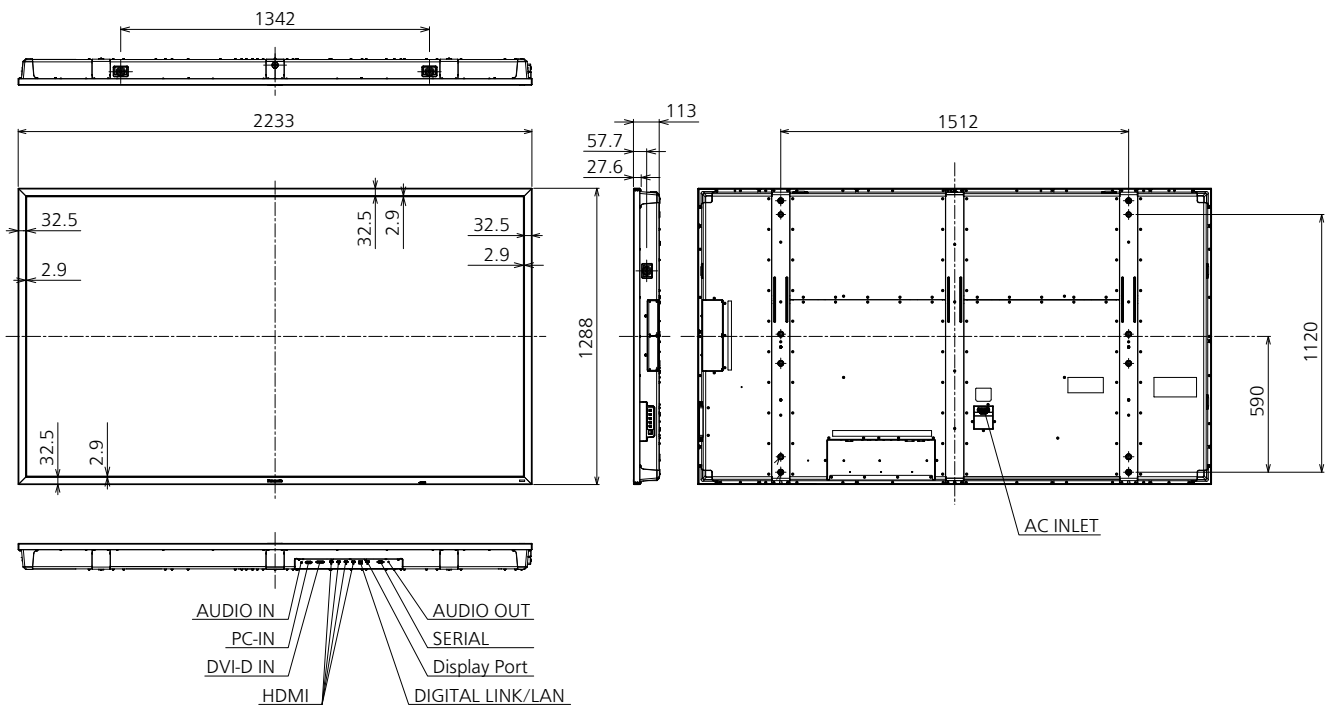
⬤ STANDARD (CERTIFICATIONS)

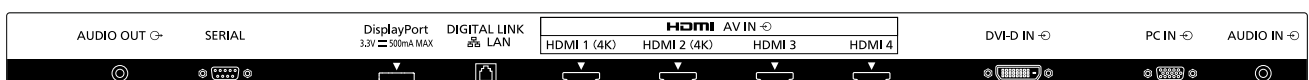|	
Safety Regulations	Europe : EN60065, IEC60065, EAC Asia : AS / NZS60065, SASO, IEC60065 /SS, IEC60065 / PAI
Radiation Regulations	Europe : EN55022 Class-B, EN55024, EN61000-3-2, EN61000-3-3 Asia : CISPR22 Class-B

⬤ INCLUDED ACCESSORIES

AC power cord (Approx. 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 :mm

AUDIO IN
PC-IN
DVI-D IN
HDMI
AUDIO OUT
SERIAL
Display Port
DIGITAL LINK/LAN

AC INLET

⬤ CONNECTION TERMINAL

AUDIO OUT ⊕	SERIAL	DisplayPort 3.3V ⎓ 500mA MAX	DIGITAL LINK ⬚ LAN	HDMI AV IN ⊕				DVI-D IN ⊕	PC IN ⊕	AUDIO IN ⊕
				HDMI 1 (4K)	HDMI 2 (4K)	HDMI 3	HDMI 4			

* Specifications and appearance are subject to change without notice.

List of correspondence 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 ferquency (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 × 480	31.47	59.94	25.18	✔	✔	✔	✔	✔
800 × 600	37.88	60.32	40.00	✔	✔	✔	✔	✔
1024 × 768	48.36	60.00	65.00	✔	✔	✔	✔	✔
1280 × 768	47.70	60.00	80.14	✔	✔ *6	✔	✔	✔
1366 × 768	48.39	60.04	86.71	✔	✔ *6	✔	✔	✔
1280 × 1024	63.98	60.02	108.0	✔	✔	✔	✔	✔
1600 × 900	60.00	60.00	108.0	✔	✔	✔	✔	✔
1920 × 1080	67.50	60.00	148.5	✔	✔	✔	✔	✔
1920 × 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.

*4: Supported in YCBCR 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.