# Panasonic



# 84-inch Class 4K UHD LCD Display **TH-84LQ70U**

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

#### 

DISPLAY	
Screen Size (Diagonal)	84.0-inch (2134.6 mm)
Panel Type	IPS / Edge-LED
Aspect Ratio	16:9
Effective Display Area (W x H)	73.3" x 41.3" (1860 x 1047 mm)
Number of Pixels (H x V)	3840 x 2160 pixels
Brightness	500 cd/m 1400-1
Contrast Ratio	1400:1
Dynamic Contrast Ratio Response Time	500000 : 1 12 ms (G to G)
Viewing Angle (Horizontal / Vertical)	178° / 178°
Panel Life Time	approx. 50000 hours (typ)*
	he brightness under the condition of 25 degrees Celsius (+/- 2 degrees celsius).
Panel lifetime may be shortened due to	
HDMI IN	HDMI TYPE A Connector x 4
	HDMI $1^{+1}$ / HDMI $2^{+1}$ / ILD to $4K@50/60Hz$ )
	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* <sup>3</sup>
AUDIO IN (L/R)	Stereo mini jack (M3) x 1set (shared with PC IN)
PCIN	Mini D-sub 15pin x 1 (Female)*4
AUDIO IN (L/R)	Mini D-sub 15pin x 1 (Female) *4 Stereo mini jack (M3) x 1set (shared with DVI-D IN) SLOT NX x 2*5 (Vacant)
Function Slot	SLOTINA Z (Vacant)
*1: HDCP1.4 supported, Embedded aud	io supported
*2: HDCP1.3 supported. Embedded aud	lio supported
*3: Compliance with DVI Revision 1.0, H	IDCP1.1 supported
*4: RGB / YPbPr switchable	
*5: Option 3G-SDI terminal board TY-TB	N03G: (w/ active through)
CONTROL	
SERIAL IN	D-sub 9pin x 1*1
LAN	RJ45 x 1 100BASE-TX* <sup>2</sup>
DIGITAL LINK	RJ45 x 1 100BASE-TX (shared with LAN)
*1: RS-232C compatible	
*2: PJLink compatible (shared with DIGI	TAL 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, 50/60Hz
Power Consumption	560 W (574 VA)
	1911 BTU
On Mode Average Power Consumption*	420 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 measuremen	nt method
MECHANICAL	
Dimensions (W x H x D)	76.7" x 44.9" x 3.9" (1949 x 1141 x 99 mm)
Bezel Width	1.3" (32.5 mm)
Carton Dimensions (W x H x D)	84.9" x 53.6" x 15.9" (2156 x 1361 x 404 mm)
Weight	approx. 238.1 lbs (108 kg)
Gross Weight	approx. 256.1 lbs (106 kg) approx. 286.6 lbs (130 kg)
	approx. 286.6 lbs (130 kg)
Cabinet Material / Color	
Cabinet Material / Color Protective Glass	approx. 286.6 lbs (130 kg) Metal / Black
Cabinet Material / Color Protective Glass Mount Screw Holes	approx. 286.6 lbs (130 kg) Metal / Black Yes
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm)
Cabinet Material / Color Protective Glass Mount Screw Holes Syebolt Screw Holes NSTALLATION REQUIREMENT	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm)
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes <b>NSTALLATION REQUIREMENT</b> Drientation	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Drientation Filting Angle	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait 10 degrees with landscape setting / 5 degrees with portrait setting
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle * Please contact your sales representativ	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle * Please contact your sales representativ ENVIRONMENTAL	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait 10 degrees with landscape setting / 5 degrees with portrait setting re with regard to the tilt angle before installation.
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle * Please contact your sales representativ ENVIRONMENTAL	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait 10 degrees with landscape setting / 5 degrees with portrait setting re with regard to the tilt angle before installation. Temperature : 32°E to 104°E (0°C to 40°C)*1
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle * Please contact your sales representativ ENVIRONMENTAL	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait 10 degrees with landscape setting / 5 degrees with portrait setting re with regard to the tilt angle before installation. Temperature : 32°F to 104°F (0°C to 40°C)*1 : 32°F to 95°F (0°C to 35°C)*2
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle * Please contact your sales representativ ENVIRONMENTAL	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait 10 degrees with landscape setting / 5 degrees with portrait setting re with regard to the tilt angle before installation. 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)
Cabinet Material / Color Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle * Please contact your sales representativ ENVIRONMENTAL Operating Environment	approx. 286.6 lbs (130 kg)         Metal / Black         Yes         Diameter: M16, Valid screw depth: 1.1" (26 mm)         Diameter: M12, Valid screw depth: 1" (25 mm)         Landscape / Portrait         10 degrees with landscape setting / 5 degrees with portrait setting         re with regard to the tilt angle before installation.         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
Protective Glass Mount Screw Holes Eyebolt Screw Holes INSTALLATION REQUIREMENT Orientation Tilting Angle	approx. 286.6 lbs (130 kg) Metal / Black Yes Diameter: M16, Valid screw depth: 1.1" (26 mm) Diameter: M12, Valid screw depth: 1" (25 mm) Landscape / Portrait 10 degrees with landscape setting / 5 degrees with portrait setting re with regard to the tilt angle before installation. 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)

885170220119

<sup>\*2:</sup> 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].

#### **MAIN FEATURE**

Yes
Yes
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

	1
3G-SDI Terminal Board	TY-TBN03G*1
Pedestal	TY-ST85P12
Mobile Stand	TY-ST85PB1
Wall-hanging Bracket	TY-WK85PV12
Celling-hanging Bracket	TY-CE85PS12*2
Digital Interface Box	ET-YFB100G
*1:2 boards (total 3G-SDL v /) requi	red for 1K@50/60Hz

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)

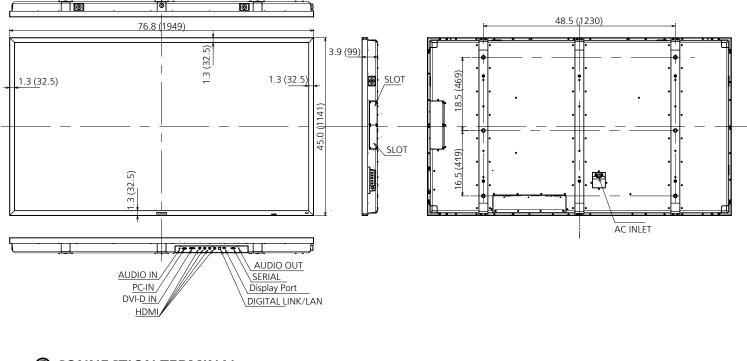
Safety Regulations	UL60065, CAN/CSA22.2 No 60065:03
Radiation Regulations	FCC Part15 Class B, ICES-003

#### 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)



#### **O** CONNECTION TERMINAL

ſ		SERIAL	DisplayPort	DIGITAL LINK 뮮 LAN	HƏMIAVIN⊙				DVI-D IN ⊕	PC IN ⊕	AUDIO IN ⊕
	AUDIO OUT G		3.3V 🚍 500mA MAX		HDMI 1 (4K)	HDMI 2 (4K)	HDMI 3	HDMI 4	DVI-D IN S	PCIN	AUDIO IN 🕤
	Ô	0 0		$\Box$	Č	<b>—</b>	<b>_</b>	<b>_</b>	¢ (#### -) ¢	0 🞆 0	Ø

\* 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

							•	eset signa
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	<b>v</b>				
625 (576) / 50i	15.63	50.00	13.5	<b>v</b>				
525 (480) / 60i* <sup>2</sup>	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	<b>v</b>	~	~	~	
625 (576) / 50p	31.25	50.00	27.0	<b>v</b>	~	~	~	
750 (720) / 60p* <sup>2</sup>	45.00	60.00	74.25	<b>v</b>	~	~	~	<b>v</b>
750 (720) / 50p	37.50	50.00	74.25	<b>v</b>	~	~	~	<b>v</b>
1125 (1080) / 60i*1*2	33.75	60.00	74.25	<b>v</b>	~	~	~	
1125 (1080) / 50i*1	28.13	50.00	74.25	<b>v</b>	~	~	~	
1125 (1080) / 24p*1*2	27.00	24.00	74.25	<b>v</b>	~	~	~	
1125 (1080) / 25p*1	28.13	25.00	74.25	<b>v</b>	~	~	~	
1125 (1080) / 30p*1*2	33.75	30.00	74.25	<b>v</b>	~	~	~	
1125 (1080) / 60p*1*2	67.50	60.00	148.5	<b>v</b>	~	~	~	<b>v</b>
1125 (1080) / 50p*1	56.25	50.00	148.5	<b>v</b>	~	~	~	<b>v</b>
640 x 480	31.47	59.94	25.18	<b>v</b>	~	~	~	<b>v</b>
800 x 600	37.88	60.32	40.00	<b>v</b>	~	~	~	<b>v</b>
1024 x 768	48.36	60.00	65.00	<b>v</b>	~	~	~	<b>v</b>
1280 x 768	47.70	60.00	80.14	<b>v</b>	✔*6	~	~	<b>v</b>
1366 x 768	48.39	60.04	86.71	<b>v</b>	✔*6	~	~	<b>v</b>
1280 x 1024	63.98	60.02	108.0	<b>v</b>	~	~	~	<b>v</b>
1600 x 900	60.00	60.00	108.0	<b>v</b>	~	~	~	<b>v</b>
1920 x 1080	67.50	60.00	148.5	<b>v</b>	~	~	~	<b>v</b>
1920 x 1200	74.04	59.95	154.0	<b>v</b>	~	~	~	<b>v</b>
4K signal	1		1					
3840 / 24p*2	54.00	24.00	297.0		~		~	<b>v</b>
3840 / 25p	56.25	25.00	297.0		~		~	<b>v</b>
3840 / 30p*2	67.50	30.00	297.0		~		~	~
4096 / 24p* <sup>2</sup>	54.00	24.00	297.0		~		<ul> <li>✓</li> </ul>	
3840 / 50p	112.5	50.00	594.0		~		✔*4	<b>√</b> * <sup>5</sup>
3840 / 60p*2	135.0	60.00	594.0		<b>v</b>		✔*4	✔*5
4096 / 50p	112.5	50.00	594.0		<b>v</b>		✔*4	
4096 / 60p*2	135.0	60.00	594.0		<b>v</b>		✔*4	
4K (Dual Link) signal								
3840 / 50p	112.5	50.00	297.0		<b>✓</b> *3			
3840 / 60p* <sup>2</sup>	135.0	60.00	297.0		<b>√</b> * <sup>3</sup>			
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.