# **Panasonic**

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### 4K UHD LCD Display 98-inch TH-98LQ70 / 84-inch TH-84LQ70

# Durable and Professional 4K UHD LCD Displays

LQ70 Series





# Overwhelmingly Dynamic Images from Ultralarge (98"/84") Screens and 4K Resolution

Panasonic's LQ70 Series of 4K UHD LCD displays employ 4K picture quality to render intricately detailed, large-screen images. They literally fill the screen with dynamic, large-scale pictures. And unique video technologies accumulated from Panasonic's development of projectors and broadcast monitors deliver images with high precision and faithful color reproduction.

Durable and Professional 4K UHD LCD Displays

# High Durability & Reliability

Rugged and dependable for public display use.

## Designed with Rugged Durability for Professional Use

The LQ70 Series has protective glass with 3.5J\* impact resistance on the front of the display. With its strong resistance to external impacts, this rugged design allows safe installation in places where many people walk by, such as train stations, airports, and shopping malls. \* This value is from a Panasonic test. It does not imply a guaranteed value.

Protective glass resists impacts



 The LQ70 Series can be installed in public spaces without being placed in a protective case. When the unit gets dirty, it can be cleaned by simply wiping with a soft cloth.
LQ70L Series models without protective glass are also available. For details, please contact your nearest dealer. TH-98LQ70L/TH-84LQ70L

#### Special latticed frame resists twisting

The special aluminum frame construction also resists twisting to boost reliability during installation. Ideal for rental applications, where the panel is frequently transported and installed.



\* The image is simulated to show the frame structure. The appearance varies from that of an actual model.

## Portrait Installation Capability

When the LQ70 Series is installed vertically, it can display a person in almost life-size dimensions. It is ideal for digital signage use because it faithfully reproduces the textures and colors of a model's clothing and accessories. It helps to maintain a high-quality brand image. Vertical installation also has no effect on the lifetime of the panel.

## Enables Continuous 24/7 Operation

In addition to being impact resistant, the LQ70 Series is capable of constant, 24/7 operation. It offers reliable use in public spaces where many people gather, such as train stations, airports, and shopping malls, as well as installation in control rooms. It is also equipped with a variety of input/output terminals for versatile applications.

\* 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.





When the display is installed in a high location, it can be set to tilt forward. This makes signage easier to see in shops with high ceilings.

\*10 degrees with landscape setting and 5 degrees with portrait setting.

A 4K display panel can be set up in a room with limited space since the optimum viewing distance for 4K images is shorter than that for HD.

## Excellent 4K Image Quality

## Ideal for applications that require faithful color reproduction.

## Panasonic 4K Quality Right Down to the Details

With approximately 8,290,000 pixels, or 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.



## Non-4K Sources Are Also Beautifully Compensated

Panasonic's new-generation image processing technology (Detail Clarity Processor3\*) also reproduces non-4K image content, such as Full-HD images and PC signals, with high picture quality. In addition, it compensates motion images for smooth, non-blurry display, which was difficult with conventional models.

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

Full-HD



Some large displays are blurry around the edges.



New generation image processing technology



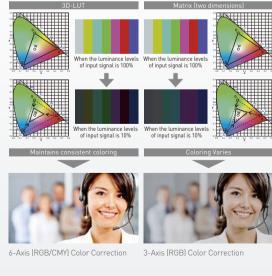
A sharp, clear image with crisp edges.

#### \* The image is simulated.

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

The color space on LCD displays tends to narrow when the luminance level drops, and it's often accompanied by color phase shifts. 3D-LUT (Look Up Table) Color Correction on the LQ70 Series has a look up table for each luminance level. Six Axis Coordinate Correction applies image processing to balance the six axes of the three primary colors (RGB) and their complementary colors (CMY). This keeps the intermediate shades of extremely fine colors vibrant and lifelike.

#### Accurate color at low luminance level



\* Images on screen are simulated.

For both first-time purchases and replacements. Ideal for Wide Expandability.

## Designed for easy transportation and installation

By mounting eyebolts to the installation holes of the LQ70 Series and attaching hooks to the eyebolts, the unit can be easily moved and installed using a hoisting device such as a crane. The tough frame resists twisting and distortion, thus reducing the burden on the installation staff.

\* The unit must be installed or uninstalled only by a specially trained installer.

## Existing plasma display mounting fixtures can be used

The size and positions of mounting holes on the LQ70 Series are the same as those on a large Panasonic plasma display

(103-inch/85-inch model). This enables the use of existing peripheral accessories. When replacing a Panasonic plasma display with the LQ70 Series, the existing mounting fixtures can be used, thus reducing the labor and cost of replacement.

## Capable of 4-Input Multi Display with no processor required

The LQ70 Series features a 4-Input Multi Display function. The image can be switched from a full-screen display to a 4-Input Multi Display with a single press of a remote control button. Ideal for checking details in various applications, such as videoconferences, digital signage, and surveillance monitoring.

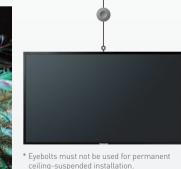
 Some restrictions exist for input signals and display splitting.
3G-SDI input and 4K image are not supported by the 4-Input Multi Display function.







The image can be switched from a full-screen display to a 4-Input Multi Display by simply pressing the MULTI DISPLAY button on the remote control.







(98") **Pedestal** TY-ST103PF9



TY-WK103PV9





Mobile Stand TY-ST85PB1

# System Expandability

## System Expandability Ideal for use in a wide range of systems.

SLOT NX Versatile 4K Input The new SLOT NX makes it possible to change the interface to match the application. If the optional 3G-SDI Terminal Board is mounted, the LQ70 Series can be connected with SGI. This feature is convenient for use in broadcasting stations, for rental use and for long-distance connection. The LQ70 Series is expandable and will accommodate 4K input in the future.





\* All images shown are simulated. \* SLOT NX is not compatible with SLOT 2.0. \* Require 2 boards for 4K/60p

Various Interfaces for 4K 60p Video Input The LQ70 Series comes standard equipped with HDMI and DisplayPort terminals that support 4K60p signals. SDI connection of 4K60p signals is also possible with an optional 3G-SDI terminal board. And DIGITAL LINK compatibility also enables video, audio, and control signals to be sent via a LAN cable. These 4K60p compatible terminals prepare the LQ70 Series for the 4K environment of the future.

#### **Connection Terminal**

ſ	AUDIO OUT 🕞	SERIAL	DisplayPort 3.3V == 500mA MAX	DIGITAL LINK 몲 LAN	HƏMI AVIN ⊕				DVI-D IN -⊙	PC IN -O	AUDIO IN -O	
					HDMI 1 (4K)	HDMI 2 (4K)	HDMI 3	HDMI 4	DVIDIN®	PCIN-O	AUDIO IN 6	DICITAL
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		*			<u> </u>	<u> </u>	<u> </u>	$\sim$	••	* (110) *		

### OTHER FEATURES

## Built-in Speaker

The 20 W (10 W + 10 W) speakers are built into the rear of the display. There is no need for external speakers when using content that has a soundtrack.

\* For higher volume sound, use an external audio output and more powerful speakers.

## Local dimming function

This function controls the LED backlight intensity of particular parts of the displayed image. This significantly increases the contrast ratio of a certain area of the screen image.

## Frame Creation

A new frame is created and inserted between the frames that make up the image, to achieve greater smoothness. This gives you more beautiful moving images.

## Brightness Sensor for ECO

The backlight brightness is automatically adjusted according to the viewing environment. Can reduce power consumption.

\* [Sensor] of [Power Save] mode is ON.

### Input search

When a signal is not detected, another input with a signal is automatically selected,

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

Optional ET-SWA100 Early Warning Software lets you check the status of system equipment with a tablet or PC located at a distance from the monitoring server. This helps to quickly solve any problems that might occur.

# A wide range of professional applications

## **Public information**



The high-resolution screen is ideal for fine text in airport flight displays and train schedules. The rugged design also provides excellent durability.

## Store signage



Product details and textures are very true-to-life. The outstanding expression of the large 4K display effectively captures attention.

**Broadcast studios** 

# Control rooms



The high resolution and large screen size make previously difficult-to-see images sharp and clear. It's ideal for monitoring, because even slight movements can be easily detected. It's also fully capable of 24/7 operation.



The beautiful 4K large screen provides sharp, real-life images. Color temperature can be set from 3000K to 11500K. And an optional terminal board enables SDI connection, ideal for broadcast station or studio use.

# Rental & staging



Superb durability and easy installation allow for safe and secure use in events. High-quality images and the large-screen presence raise the level of excitement. Real-time presentation is also achieved by suppressing the delay time from input to display.

## Meeting rooms



The large-screen display provides clear visibility even for meetings with a lot of people attending, and high-definition images are ideal for design and simulation use.

## SPECIFICATIONS

Model no.	TH-98LQ70	TH-84LQ70						
DISPLAY PANEL								
Screen Size ( Diagonal )	98-inch	84-inch						
Panel Type	IPS / Direct-LED	IPS / Edge-LED						
Aspect Ratio	16:9							
Effective Display Area ( W×H )	2159×1214 mm (85.0"×47.8")	1860×1047 mm (73.2" × 41.2")						
Number of Pixels ( H × V )	3840×2160 pixels							
Brightness (Typ)	500 cd/m <sup>2</sup>							
Dynamic Contrast Ratio	500000:1							
Contrast Ratio	1300 : 1	1400 : 1						
Response Time	8 ms (G to G)	12 ms (G to G)						
Viewing Angle (Horizontal/Vertical)	178°/ 178°							
CONNECTION TERMINAL								
HDMI In	HDMI TYPE A Connector ×2 (Up to 4K@50/60Hz)*	1 HDMI TYPE A Connector×2 (Up to 2K@50/60Hz)*1						
DisplayPort In	DisplayPor	t ×1 (DP1.2a)*1						
DVI-D In/Audio In (L/R)		ick (M3) ×1 (Shared with PC In )						
PC In / Audio In (L/R)	Mini D-sub 15-pin×1( Female )*2/Stereo Mini Jack (M3) ×1 ( Shared with DVI-D In )							
Slot	SLOT NX ×2 (Vacant)							
CONTROL								
Serial In	D-sub 9-pin×1, RS-232C Compatible							
LAN	RJ45×1 100BASE-TX, Compatible with PJLink™ (Shared with DIGITAL LINK)							
DIGITAL LINK	RJ45×1 ( Shared with LAN )							
AUDIO								
Audio Out	Stereo Mini Jack (M3)×1							
Built in Speaker	20 W [10 W + 1	0 W] (10% THD)						
ELECTRICAL								
Power Requirements	110-127 V ( U model ) / 220-240 V ( W model ) AC, 50 / 60 Hz							
Power Consumption	650 W (U model), 620 W (W model)	560 W (U model), 540 W (W model)						
MECHANICAL								
Dimensions (W×H×D)	2233×1288×122 mm (87.9"×50.7"×4.8")	1949×1141×99 mm (76.7"×44.9"×3.9")						
Weight	Approx. 136.0 kg (299.9 lbs.)	Approx. 108.0 kg (238.1 lbs.)						
Protective Glass	YES							
Installation Requirement								
Orientation	Landscape/Portrait							
Tilting Angle	10 degrees with landscape setting and 5 degrees with portrait setting							
ENVIRONMENTAL								
Operating Environment	Temperature:0°C to 40°C (32°F to 104°F )/Humidity:20%	to 80% (Non condensation) / Altitude 0~2400 m (7874 ft)*						
DIMENSIONS								
	2233 Screen size W2159 × H1214 Unit : mm	1949 Screen size W1860 × H1047						

\*1:HDCP supported, Embedded auido supported \*2:RGB/YPbPr switchable \*3:\*Environmental temperature to use this unit at high altitudes (1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to 95°F) When using the unit where it is 1400 m (4593ft) and higher and below 2400 m (7874ft) above sea level): 0°C to 35°C (32°F to \*Please contact your sales representative with regard to the tilt angle before installation.



TH-841 Q70

84'

#### OPTIONAL ACCESSORIES

Terminal Board 3G-SDI Terminal Board TY-TBN03G \*Require 2 boards for 4K/60p

#### Pedestal TY-ST103PF9 (for 98-inch model) TY-ST85P12 (for 84-inch model)

#### Wall-hanging Bracket

TY-WK103PV9 (for 98-inch model) TY-WK85PV12 (for 84-inch model)

#### **Ceiling-hanging Bracket**

TY-CE103PS10 (for 98-inch model) TY-CE85PS12 (for 84-inch model) \*Tilt angle limited to 10 degree maximum.

#### Mobile Stand

TY-ST85PB1 (for 84-inch model)

**DIGITAL LINK Switcher** ET-YFB200G

**Digital Interface Box** FT-YFB100G





LQ70L Series models without protective glass are also available. For details, please contact your nearest dealer. TH-98LQ70L/TH-84LQ70L



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For more information about Panasonic Professional Displays, please visit:

Professional Display Global Website - panasonic.net/prodisplays YouTube - www.youtube.com/PanasonicProDisplay

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