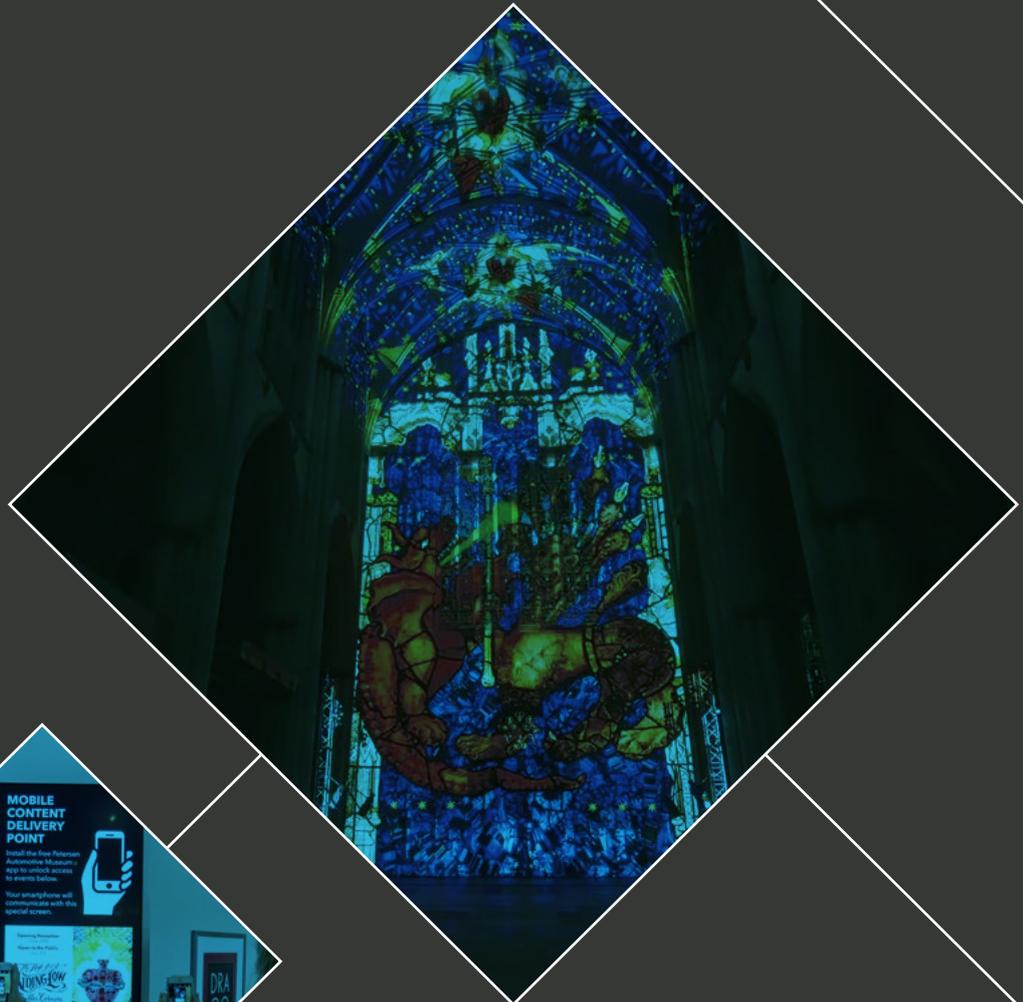


 THE FREEDOM  
TO CREATE



# PRELIMINARY BROCHURE

February 2020



**Panasonic**  
BUSINESS

PRELIMINARY  
AS OF FEBRUARY 2020

## PT-RQ35K Series

3-Chip DLP™ Projectors

AVAILABLE FROM NOVEMBER 2020

### World's Smallest and Lightest\*<sup>1</sup> 30,000 Im<sup>2</sup> 3-Chip DLP™ Laser Projectors Streamline Workflow Management

\*1 As of February 2020, based on dimensions and weight publicly available for laser projectors between 26,000–35,000 lumens.



\* Lens sold separately.



\* PT-RQ35K only  
Resolution 3840 x 2400 pixels  
(QUAD PIXEL DRIVE: ON)

\* PT-RQ35K only.

\* PT-RQ35K only.

\* PT-RZ34K only.

PT-RQ35K Series		
	PT-RQ35K	PT-RZ34K
Light Output	30,000 Im <sup>2</sup> /31,000 Im (Center) <sup>*3</sup>	
Resolution	4K (3840 x 2400 pixels*)	WUXGA (1920 x 1200 pixels)

\* With Quad Pixel Drive ON.

#### Projectors

**PT-RQ35K Series**  
3-Chip DLP™ Projectors

**PT-RZ790 Series**  
1-Chip DLP™ Projectors

**PT-FRZ60 Series**  
1-Chip DLP™ Projectors

**PT-LB426 Series**  
Portable LCD Projectors

**PT-TW381R Series**  
Short-Throw LCD Projectors

#### Flat-Panel Displays

**SQ1H Series**  
4K UHD Displays

**SQE1 Series**  
4K UHD Displays

**CQE1 Series**  
4K UHD Displays

#### Wireless Presentation System

**Wireless Presentation System**

#### • Revolutionizing Event Operation with Simplified Workflow

Bringing massive brightness to tight installation spaces, the PT-RQ35K Series outputs 30,000 Im<sup>2</sup> from a body 60 % the size of our 26,000 Im<sup>2</sup> PT-RQ32K. Streamlining features include Smart Projector Control with NFC<sup>\*4</sup> for mobile access to network configuration such as IP address setup.

#### • Spellbinding Pictures at up to 4K with Expanded Color Gamut

Red and blue lasers emitting at optimal wavelengths expand color-space by 114 %<sup>\*5</sup> over the PT-RQ32K. Vivid reds and truer blues heighten realism for ultra-detailed 4K or WUXGA image reproduction. High brightness, vibrant color, and immersive contrast carry content to a new level.

#### • Stable Operation with Newly Refined Cooling System

New filterless cooling system combines a finless radiator and hermetically sealed DMDs to reinforce reliability. Separate cooling for the sensitive red laser is managed by Dynamic Digital Control to assure stability as temperature fluctuates. Failover Circuitry and Backup Input<sup>\*6</sup> add insurance to a 20,000-hour<sup>\*7</sup> maintenance-free design.

\*2 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. \*3 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. \*4 NFC (Near Field Communication) function availability may vary by country or region. \*5 Panasonic research. \*6 Combination of primary/backup input terminals is fixed. Backup Input Function enabled when input signal to primary/backup terminals is the same. \*7 Around this time, light output will have decreased by approximately 50 % (IEC62387: 2008 Broadcast Contents, NORMAL Mode, Dynamic Contrast [ON], temperature 35 °C (95 °F), elevation 700 m (2,297 ft) with 0.15 mg/m<sup>3</sup> of airborne particulate matter. Estimated time until brightness decreases to 50 % will vary depending on environment and usage conditions. Parts other than the light source may require replacement before 20,000 hours, and checkup is recommended around this time.

Specifications (Tentative)

Model	PT-RQ35K	PT-RZ34K	
Projector type	3-Chip DLP™ projector		
DLP™ chip	Panel size	24.4 mm (0.96 in) diagonal (16:10 aspect ratio)	
	Display method	DLP™ chip x 3, DLP™ projection system	
	Number of pixels	2,304,000 (1920 x 1200 pixels) x 3	
Light source	Laser diodes (Blue LD, Red LD)		
Light output	30,000 lm <sup>1</sup> /31,000 lm (Center) <sup>2</sup>		
Time until light output declines to 50 % <sup>3</sup>	20,000 hours (NORMAL)		
Resolution	4K (3840 x 2400 pixels) (Quad Pixel Drive: ON)	WUXGA (1920 x 1200 pixels)	
Contrast ratio <sup>4</sup>	20,000:1 (Full On/Full Off, Dynamic Contrast Mode: 3)		
Screen size [diagonal]	1.78–25.4 m (70–1,000 in), 1.78–15.24 m (70–600 in) with ET-D75LE8/ET-D3LET80, 3.05–15.24 m (120–600 in) with ET-D75LE95		
Center-to-corner zone ratio <sup>4</sup>	90 %		
Lens	Optional (no lens included with this model)		
Lens shift <sup>4</sup> (From the origin point of the lens mounter)	Vertical	±55 % (+78 %, +68 % with ET-D75LE95, ±48 % with ET-D3LEW200, ±44 % with ET-D75LE6/ET-D3LEW60) (powered)	
	Horizontal	±20 % (±15 % with ET-D75LE6/ET-D3LEW60/ET-D3LEW200, ±12 % with ET-D75LE95, +25 %, 0 % with ET-D3LEU100) (powered)	
Keystone correction range	Vertical: ±45 ° (±40 ° with ET-D75LE10/ET-D3LEW10/ET-D75LE20/ET-D3LES20, ±28 ° with ET-D75LE6/ET-D3LEW60, ±22 ° with ET-D75LE50/ET-D3LEW50, ±15 ° with ET-D3LEW200, ±8 ° with ET-D3LEU100, +5 ° with ET-D75LE95), Horizontal: ±40 ° (±15 ° with ET-D75LE50/ET-D3LEW50/ET-D75LE6/ET-D3LEW60, ±5 ° with ET-D3LEU100/ET-D3LEW200, 0 ° with ET-D75LE95) When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of 55 °.		
Installation	Ceiling/floor, front/rear, free 360-degree installation		
Terminals	SDI IN	—	BNC x 1: 3G/HD-SDI input
	HDMI® IN	HDMI x 1 (Deep Color, compatible with HDCP 2.2, 4K/60p signal input <sup>5</sup> )	
	DVI-D IN	—	DVI-D 24-pin x 1 (DVI 1.0 compliant, compatible with HDCP) (Single-link only)
	MULTI PROJECTOR SYNC IN	BNC x 1	—
	MULTI PROJECTOR SYNC OUT	BNC x 1	—
	MULTI PROJECTOR SYNC IN/3D SYNC IN/OUT	—	BNC x 1
	MULTI PROJECTOR SYNC OUT/3D SYNC OUT	—	BNC x 1
	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)	
	SERIAL OUT	D-sub 9-pin (male) x 1 for link control (RS-232C compliant)	
	REMOTE 1 IN	M3 stereo mini-jack x 1 for wired remote control	
	REMOTE 1 OUT	M3 stereo mini-jack x 1 for link control	
	REMOTE 2 IN	D-sub 9-pin (female) x 1 for external control (parallel)	
	DIGITAL LINK	RJ-45 x 1 for network and DIGITAL LINK connection (HDBaseT™ compliant), 100Base-TX, compatible with Art-Net, PLink™ (Class 2), Deep Color, HDCP 2.2, 4K/60p signal input <sup>6</sup>	
	LAN	RJ-45 x 1 for network connection, PLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible	
	USB	USB connector (Type A) x 1 for optional Wireless Module (AJ-WM50 Series)/USB Memory Stick	
	DC OUT	USB Type A x 2 (for power supply, DC 5 V total of 2 A)	
	Expansion slot	SLOT 1/SLOT 2 (total two terminals, vacant) for interface boards, SLOT NX compatible	SLOT (one terminal, vacant) for interface boards, SLOT NX compatible
Power supply	AC 200 V–240 V (Light output will decrease to approximately one third when using the projector with AC 100 V to AC 120 V)		
Power consumption	TBD		
Cabinet materials	Molded plastic		
Operation noise <sup>7</sup>	TBD		
Dimensions (W x H x D)	600 x 360 x 800 mm (23 5/8" x 14 3/16" x 31 1/2") or less, not including protruding parts <sup>8</sup>		
Weight <sup>7</sup>	70 kg (154 lbs) or less <sup>8</sup>		
Operating environment	Operating temperature: 0–45 °C (32–113 °F), operating humidity: TBD		
Applicable software	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Smart Projector Control for iOS/Android™		

<sup>1</sup> Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. <sup>2</sup> Average light-output value of all shipped products measured at center of screen in NORMAL Mode. <sup>3</sup> Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [ON], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Estimated time until light output declines to 50 % varies depending on environment. <sup>4</sup> Lens shift is not supported on the ET-D75LE50/ET-D3LEW50. <sup>5</sup> 4K signals are converted to WUXGA (1920 x 1200 pixels) only for the PT-RZ34K. <sup>6</sup> 600 x 360 x 800 mm (23 5/8" x 14 3/16" x 31 1/2") as of February 2020. Dimensions may be smaller at time of launch. <sup>7</sup> Average value. May differ depending on the actual unit. <sup>8</sup> 70 kg (154 lbs) as of February 2020. Weight may be less at time of launch.

Optional Accessories

- **Fisheye Lens**  
ET-D3LEF70  
Note: Equipped with Auto Lens Identification Function.
- **Fixed-Focus Lens**  
ET-D75LE95 (0.364:1) / ET-D3LEU100\* (0.370:1) / ET-D3LEW50\* (0.694:1) / ET-D75LE50 (0.694:1)  
\* Equipped with Auto Lens Identification Function.
- **Zoom Lens**  
ET-D3LEW200\* (0.645–0.850:1) / ET-D3LEW60\* (0.924–1.10:1) / ET-D75LE6 (0.924–1.10:1) / ET-D3LEW10\* (1.26–1.72:1) / ET-D75LE10 (1.30–1.67:1) / ET-D3LES20\* (1.67–2.41:1) / ET-D75LE20 (1.67–2.41:1) / ET-D3LET30\* (2.40–4.66:1) / ET-D75LE30 (2.40–4.66:1) / ET-D3LET40\* (4.61–7.41:1) / ET-D75LE40 (4.62–7.38:1) / ET-D3LET80\* (7.34–13.8:1) / ET-D75LE8 (7.34–13.8:1)  
\* Equipped with Auto Lens Identification Function and Stepping Motor.
- **Stepping Motor Kit**  
ET-D75MKS10  
Note: Calibration is required each time the lens is mounted.
- **Wireless Module**  
AJ-WM50 Series  
Note: Product availability may vary by country or region.
- **DIGITAL LINK Switcher**  
ET-YFB200G  
Note: ET-YFB200G is not compatible with 4K signals.
- **Digital Interface Box**  
ET-YFB100G  
Note: ET-YFB100G is not compatible with 4K signals.
- **Early Warning Software**  
ET-SWA100 Series  
Note: Part number suffix may differ depending on the license type.  
\* Multi Monitoring & Control Software Ver. 2.0 or later is required.  
Please download from the following website:  
[www.panasonic.net/cns/projector/download/application/](http://www.panasonic.net/cns/projector/download/application/)
- **NFC Upgrade Kit**  
ET-NUK10  
Note: Product availability may vary by country or region.
- **Interface Board**  
Interface Board for 12G-SDI Input (Input x 2, Input/Output x 2)  
ET-MDN12G10  
Interface Board for 12G-SDI Optical (Input x 1, Input/Output x 1)  
ET-MDNFB10  
Interface Board for HDMI® (HDCP 2.2) Input (Input x 2)  
ET-MDNHM10  
Interface Board for DVI Input (Input x 2)  
ET-MDNV10  
Interface Board for DisplayPort™ (Input x 2)  
ET-MDNDP10

PT-RZ790 Series

1-Chip DLP™ Projectors

AVAILABLE FROM SEPTEMBER 2020

Compact 1-Chip DLP™ Laser Projectors  
Bring High Brightness and Simple Flexibility  
to Exhibition Spaces



Black Models



White Models



PT-RZ790 Series				
	PT-RZ790	PT-RZ790L	PT-RZ690	PT-RZ690L
Light Output	7,000 lm <sup>1</sup> /7,200 lm (Center) <sup>2</sup>		6,000 lm <sup>1</sup> /6,200 lm (Center) <sup>2</sup>	
Resolution	WUXGA			
Lens	Lens supplied	Without lens	Lens supplied	Without lens

• **Bright, Color-Rich Images in Any Environment**

The PT-RZ790 Series delivers the brightness, resolution, and color that designers need to enhance exhibits with bright, bold, and vivid pictures. SOLID SHINE Laser and Quartet Color Harmonizer enhance color-depth and white-balance accuracy for arrestingly realistic pictures even in well-lit spaces.

• **Light, Quiet, Compact Projectors are Easy to Install**

Projectors support our 1-Chip DLP™ lenses and 4K signal input<sup>3</sup> via HDMI® and DIGITAL LINK, adapting to your space with 23.2 kg<sup>4</sup> body and 36 dB operation in Normal Mode. Smart Projector Control app enhances efficiency with On/Off function, lens adjustment, touchscreen OSD navigation, and projection auto-focusing using your smartphone camera<sup>5</sup>.

• **Proven SOLID SHINE Laser Reliability**

Hermetically sealed DMD block, shielded laser drive, and new filterless cooling system eliminate the hassle of maintenance for 20,000 hours<sup>6</sup> of continuous projection, while brightness ramp and color uniformity remain linear. For extra insurance, Backup Input<sup>7</sup> switches to a fallback if primary video is interrupted.

<sup>1</sup> Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. <sup>2</sup> Average light-output value of all shipped products measured at center of screen in NORMAL Mode. <sup>3</sup> 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI. <sup>4</sup> Including standard lens. <sup>5</sup> Projector auto-focus may not be supported on some mobile devices. <sup>6</sup> Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast Contents, NORMAL Mode, Dynamic Contrast [ON], temperature 35 °C (95 °F), elevation 700 m (2,297 ft) with 0.15 mg/m<sup>3</sup> of airborne particulate matter. Estimated time until brightness decreases to 50 % will vary depending on environment and usage conditions. Parts other than the light source may require replacement before 20,000 hours, and checkup is recommended around this time. <sup>7</sup> Combination of primary/backup input terminals is fixed. Backup Input function enabled when input signal to primary/backup terminals is the same.

Specifications (Tentative)

Model	With supplied lens	PT-RZ790	PT-RZ690
	Without lens	PT-RZ790L	PT-RZ690L
Projector type		1-Chip DLP™ projector	
DLP™ chip	Panel size	17.0 mm (0.67 in) diagonal (16:10 aspect ratio)	
	Display method	DLP™ chip x 1, DLP™ projection system	
	Number of pixels	2,304,000 (1920 x 1200 pixels)	
Light source		Laser diodes	
Light output		7,000 lm <sup>*1</sup> /7,200 lm (Center) <sup>*2</sup>	6,000 lm <sup>*1</sup> /6,200 lm (Center) <sup>*2</sup>
Time until light output declines to 50 % <sup>*3</sup>		20,000 hours (NORMAL)/24,000 hours (ECO)	
Resolution		1920 x 1200 pixels	
Contrast ratio <sup>*1</sup>		10,000:1 (Full On/Full Off, Dynamic Contrast Mode: ON)	
Screen size [diagonal]		1.27–15.24 m (50–600 in), 1.27–5.08 m (50–200 in) with ET-DLE055, 2.54–8.89 m (100–350 in) with ET-DLE035, 2.54–10.16 m (100–400 in) with ET-DLE020, 16:10 aspect ratio	
Center-to-corner zone ratio <sup>*1</sup>		90 %	
Lens		PT-RZ790: Powered zoom (throw ratio 1.71–2.41:1), powered focus F 1.7–1.9, f 25.6–35.7 mm PT-RZ790L: Optional powered zoom/focus lenses	PT-RZ690: Powered zoom (throw ratio 1.71–2.41:1), powered focus F 1.7–1.9, f 25.6–35.7 mm PT-RZ690L: Optional powered zoom/focus lenses
Lens shift <sup>*4</sup> (From the origin point of the lens mounter)	Vertical	+50 %, -16 % (+40 %), -16 % with ET-DLE060 (powered)	
	Horizontal	+30 %, -10 % (+10 %), -20 % with ET-DLE020, +19 %, -10 % with ET-DLE060, +28 %, -10 % with ET-DLE105/ET-DLE085 (powered)	
Keystone correction range		Vertical: ±40 ° (±5 ° with ET-DLE020, ±16 ° with ET-DLE060, ±22 ° with ET-DLE105/ET-DLE085/ET-DLE055, +5 ° with ET-DLE035), Horizontal: ±15 ° (±10 ° with ET-DLE060) (cannot be operated with ET-DLE035/ET-DLE020)	
Keystone correction range with optional ET-UK20 Upgrade Kit		Vertical: ±45 ° (±16 ° with ET-DLE060, ±40 ° with ET-DLE150/ET-DLE250/ET-DLE170, ±22 ° with ET-DLE105/ET-DLE085/ET-DLE055), Horizontal: ±40 ° (±10 ° with ET-DLE060, ±15 ° with ET-DLE105/ET-DLE085/ET-DLE055) When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of 55 °.	
Installation		Ceiling/floor, front/rear, free 360-degree installation	
Terminals	SDI IN	BNC x 1; 3G/HD/SD-SDI input	
	HDMI® IN	HDMI 19-pin x 1 (Compatible with HDCP 2.2, Deep Color, 4K signal input <sup>*5</sup> )	
	DVI-D IN	DVI-D 24-pin x 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only)	
	RGB 1 IN	RGB x 1 (BNC x 5); RGB/Y/PaPr/Y/CaCr/YC/VIDEO	
	RGB 2 IN	D-sub HD 15-pin (female) x 1; RGB/Y/PaPr/Y/CaCr	
	SERIAL/MULTI PROJECTOR SYNC IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)	
	SERIAL/MULTI PROJECTOR SYNC OUT	D-sub 9-pin (male) x 1 for link control	
	REMOTE 1 IN	M3 x 1 for wired remote control	
	REMOTE 1 OUT	M3 x 1 for link control (for wired remote control)	
	REMOTE 2 IN	D-sub 9-pin (female) x 1 for external control (parallel)	
	DIGITAL LINK	RJ-45 x 1 for network and DIGITAL LINK connections (HDBaseT™ compliant), PjLink™ (Class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.2 compatible, Deep Color compatible, 4K signal input <sup>*5</sup>	
	LAN	RJ-45 x 1 for network connection, PjLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible	
Power supply		AC 100–240 V, 50/60 Hz	
Power consumption		TBD	
Cabinet materials		Molded plastic	
Operation noise <sup>*1</sup>		36 dB	
Dimensions (W x H x D)		PT-RZ790: 498 x 200 <sup>*6</sup> x 581 mm (19 19/32" x 7 7/8" x 22 7/8") (with supplied lens)	PT-RZ690: 498 x 200 <sup>*6</sup> x 581 mm (19 19/32" x 7 7/8" x 22 7/8") (with supplied lens)
		PT-RZ790L: 498 x 200 <sup>*6</sup> x 538 mm (19 19/32" x 7 7/8" x 21 3/16") (without lens)	PT-RZ690L: 498 x 200 <sup>*6</sup> x 538 mm (19 19/32" x 7 7/8" x 21 3/16") (without lens)
Weight <sup>*7</sup>		PT-RZ790: Approx. 23.2 kg (51.1 lbs) (with supplied lens)	PT-RZ690: Approx. 23.2 kg (51.1 lbs) (with supplied lens)
		PT-RZ790L: Approx. 22.4 kg (49.4 lbs) (without lens)	PT-RZ690L: Approx. 22.4 kg (49.4 lbs) (without lens)
Operating environment		TBD	
Applicable software		Logo Transfer Software, Multi Monitoring & Control Software, Geometry Manager Pro (ET-UK20 Upgrade Kit, ET-CUK10 Auto Screen Adjustment Kit), Smart Projector Control for iOS/Android™	

<sup>\*1</sup> Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. <sup>\*2</sup> Average light-output value of all shipped products measured at center of screen in NORMAL Mode. <sup>\*3</sup> Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [ON], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Estimated time until light output declines to 50 % varies depending on environment. <sup>\*4</sup> Lens shift is not supported on the ET-DLE055, and the optical axis is fixed with the ET-DLE035. <sup>\*5</sup> 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI®. <sup>\*6</sup> Excluding legs. <sup>\*7</sup> Average value. May differ depending on the actual unit.

Optional Accessories

- **Fixed-Focus Lens**  
ET-DLE030 (0.380:1) / ET-DLE035 (0.380:1) / ET-DLE055 (0.785:1)

- **Zoom Lens**  
ET-DLE020 (0.280–0.299:1) / ET-DLE060 (0.600–0.801:1) / ET-DLE085 (0.782–0.977:1) / ET-DLE105 (0.978–1.32:1) / ET-DLE150 (1.30–1.89:1) / ET-DLE170\* (1.71–2.41:1) / ET-DLE250 (2.27–3.62:1) / ET-DLE350 (3.58–5.45:1) / ET-DLE450 (5.36–8.58:1)

\* The ET-DLE170 is equivalent of supplied lens. The availability of the ET-DLE170 varies depending on the country.

- **Ceiling Mount Bracket**

ET-PKD130H (6-axis, for high ceiling)  
ET-PKD120H (for high ceiling)  
ET-PKD120S (for low ceiling)  
Note: Use ET-PKD120H, ET-PKD120S, and ET-PKD130H in combination with ET-PKD130B. ET-PKD130H is recommended when used with ET-DLE030/ET-DLE035.

- **Projector Mount Bracket**

ET-PKD130B

- **DIGITAL LINK Switcher**

ET-YFB200G  
Note: ET-YFB200G is not compatible with 4K signals.

- **Digital Interface Box**

ET-YFB100G  
Note: ET-YFB100G is not compatible with 4K signals.

- **Geometry Manager Pro Software Upgrade Kit**

ET-UK20

- **Auto Screen Adjustment Upgrade Kit**

ET-CUK10/ET-CUK10P

- **Early Warning Software**

ET-SWA100 Series  
Note: Part number suffix may differ depending on the license type.  
\* Multi Monitoring & Control Software Ver. 2.0 or later is required. Please download from the following website: [www.panasonic.net/cns/projector/download/application/](http://www.panasonic.net/cns/projector/download/application/)

# Panasonic

## BUSINESS

# PT-FRZ60 Series

1-Chip DLP™ Projectors

AVAILABLE FROM SEPTEMBER 2020

## Easy-to-Manage 1-Chip DLP™ Laser Projectors Offer Clear Pictures in Bright Rooms with Flexible Integration in the Classroom or Office



PT-FRZ60 Series			
	PT-FRZ60	PT-FRZ50	PT-FRZ55
Light Output	6,000 lm <sup>*1</sup> /6,200 lm (Center) <sup>*2</sup>	5,200 lm <sup>*1</sup> /5,400 lm (Center) <sup>*2</sup>	5,000 lm <sup>*1</sup> /5,200 lm (Center) <sup>*2</sup>
Resolution	WUXGA		

### • Dynamic Images in Bright Rooms with Silent Operation

No more dark rooms and distracting projector noise. PT-FRZ60 Series creates dynamic images that resist washout under lights while operating noise is reduced to an inaudible 27 dB<sup>3</sup> in Quiet Mode. Quartet Color Harmonizer optimizes wheel and filter to boost color vibrancy.

### • Compact, Lightweight Projectors are Easy to Install

Projectors feature a 2.0x optical zoom<sup>\*4</sup> to increase throw-distance range for flexible installation, while 4K signal input<sup>\*5</sup> via CEC-compatible HDMI® and DIGITAL LINK smooths integration with the latest infrastructure. Separate LAN and 5 V/2 A USB outlet support wireless projection.

### • Proven SOLID SHINE Laser Reliability

The PT-FRZ60 Series features a high-efficiency filterless cooling system, hermetically sealed DMD block, and dust-resistant shielded laser drive to assure 20,000 hours<sup>\*6</sup> of stable maintenance-free projection. A linear brightness ramp and strong color retention preserve image quality for longer.

<sup>\*1</sup> Measurement, measuring conditions (TBD), and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. <sup>\*2</sup> Average light-output value of all shipped products measured at center of screen in NORMAL Mode. <sup>\*3</sup> FRZ50/FRZ55 only (TBD). FRZ60 operates at 30 dB in Quiet Mode (TBD). <sup>\*4</sup> Excluding the PT-FRZ55. <sup>\*5</sup> 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI®. <sup>\*6</sup> Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast Contents, NORMAL Mode, Dynamic Contrast [ON], temperature 35 °C (95 °F), elevation 700 m (2,297 ft) with 0.15 mg/m<sup>3</sup> of airborne particulate matter. Estimated time until brightness decreases to 50 % will vary depending on environment and usage conditions. Parts other than the light source may require replacement before 20,000 hours, and checkup is recommended around this time.

Specifications (Tentative)

Model	PT-FRZ60	PT-FRZ50	PT-FRZ55
Projector type	1-Chip DLP™ projector		
DLP™ chip	Panel size	17.0 mm (0.67 in) diagonal (16:10 aspect ratio)	
	Display method	DLP™ chip x 1, DLP™ projection system	
	Number of pixels	2,304,000 (1920 x 1200 pixels)	
Light source	Laser diodes		
Light output	6,000 lm <sup>*1</sup> /6,200 lm (Center) <sup>*2</sup>	5,200 lm <sup>*1</sup> /5,400 lm (Center) <sup>*2</sup>	5,000 lm <sup>*1</sup> /5,200 lm (Center) <sup>*2</sup>
Time until light output declines to 50 % <sup>*3</sup>	20,000 hours (NORMAL)		
Resolution	1920 x 1200 pixels		
Contrast ratio <sup>*4</sup>	20,000:1 (Full On/Full Off, Dynamic Contrast Mode: ON)		
Screen size [diagonal]	1.02–7.62 m (40–300 in), 16:10 aspect ratio		
Center-to-corner zone ratio <sup>*1</sup>	90 %		
Lens	2.0x manual zoom (throw ratio: 1.46–2.94:1), manual focus, F 2.0–3.4, f 21.5–43.0 mm		Fixed (throw ratio: 0.8:1), powered focus, F 1.75, f 11.9 mm
	Lens shift (From the origin point of the lens mounter)	Vertical: +64 %, -44 % (manual) Horizontal: +34 %, -27 % (manual)	±4.4 % (powered) ±2.1 % (powered)
Keystone correction range	Vertical: ±40 °, Horizontal: ±20 °. When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of ±60 °.		Vertical: ±25 °, Horizontal: ±20 °. When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of ±45 °.
Installation	Ceiling/floor, front/rear, free 360-degree installation		
Terminals	HDMI® IN	HDMI 19-pin x 2 (Compatible with HDCP 2.2, Deep Color, 4K/60p signal input <sup>*4</sup> ), CEC supported	
	COMPUTER 1 IN	D-sub HD 15-pin (female) x 1 (RGB/Y/PbPr/YCaCr/YC)	
	COMPUTER 2 IN/1 OUT	D-sub HD 15-pin (female) x 1 (RGB/Y/PbPr/YCaCr/YC)	
	VIDEO IN	Pin jack x 1 (composite video)	
	AUDIO IN 1	Pin jack x 2 (L, R)	
	AUDIO IN 2/3	M3 x 1/M3 x 1	
	AUDIO OUT	M3 x 1 (Variable)	
	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)	
	DIGITAL LINK	RJ-45 x 1 for network and DIGITAL LINK connections (HDBaseT™ compliant), PLink™ (Class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.2 compatible, Deep Color compatible, 4K/60p signal input <sup>*4</sup>	
	LAN	RJ-45 x 1 for network connection, PLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible	
USB	USB connector (Type A) x 1 (Output 5 V/2 A)		
Power supply	AC 100–240 V, 50/60 Hz		
Power consumption	TBD		
Cabinet materials	Molded plastic		
Operation noise <sup>*1</sup>	30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD)	27 dB (Quiet Mode) (TBD), 32 dB (Normal Mode) (TBD)	
Dimensions (W x H x D)	498 x 168 <sup>*5</sup> x 492 mm (19 5/8 <sup>*5</sup> x 6 5/8 <sup>*5</sup> x 19 3/8 <sup>*5</sup> )		498 x 168 <sup>*5</sup> x 481 mm (19 5/8 <sup>*5</sup> x 6 5/8 <sup>*5</sup> x 18 15/16 <sup>*5</sup> )
Weight <sup>*6</sup>	Approx. 16.6 kg (36.6 lbs) (TBD)	Approx. 16.3 kg (35.9 lbs) (TBD)	Approx. 16.6 kg (36.6 lbs) (TBD)
Operating environment	Operating temperature: 0–40 °C (32–104 °F), operating humidity: 10–80 % (no condensation) (TBD)		Operating temperature: 0–45 °C (32–113 °F), operating humidity: 10–80 % (no condensation) (TBD)
Applicable software	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software		

<sup>\*1</sup> Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. <sup>\*2</sup> Average light-output value of all shipped products measured at center of screen in NORMAL Mode. <sup>\*3</sup> Around this time, light output will have decreased by approximately 50 %. IEC62067: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [ON], under conditions with 35 °C (95 °F), 700 m (2,297 ft) above sea level, and 0.15 mg/m<sup>3</sup> of particulate matter. Estimated time until light output declines to 50 % varies depending on environment. <sup>\*4</sup> 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI<sup>®</sup>. <sup>\*5</sup> With legs at shortest position. <sup>\*6</sup> Average value. May differ depending on the actual unit.

Optional Accessories

- **Ceiling Mount Bracket**  
ET-PKD120H\* (for high ceiling)  
ET-PKD120S\* (for low ceiling)  
\* The ET-PKD120H/PKD120S are used in combination with the ET-PKD130B (sold separately).
- **Projector Mount Bracket**  
ET-PKD130B
- **DIGITAL LINK Switcher**  
ET-YFB200G  
Note: ET-YFB200G is not compatible with 4K signals.
- **Digital Interface Box**  
ET-YFB100G  
Note: ET-YFB100G is not compatible with 4K signals.
- **Early Warning Software**  
ET-SWA100/105  
Note: Part number suffix may differ depending on the license type.  
\*Multi Monitoring & Control Software Ver. 2.0 or later is required.  
Please download from the following website:  
[www.panasonic.net/cns/projector/download/application/](http://www.panasonic.net/cns/projector/download/application/)
- **D-sub/S-VIDEO Conversion Cable**  
ET-ADSV

PT-LB426 Series  
Portable LCD Projectors

AVAILABLE FROM APRIL 2020

# Affordable LCD Portables Propose an Efficient Long-Life Solution for High-Contrast Projection in Offices and Classrooms



PT-LB426 Series						
	PT-LW376	PT-LW336	PT-LB426	PT-LB386	PT-LB356	PT-LB306
Light Output	3,600 lm <sup>*1</sup>	3,100 lm <sup>*1</sup>	4,100 lm <sup>*1</sup>	3,800 lm <sup>*1</sup>	3,300 lm <sup>*1</sup>	3,100 lm <sup>*1</sup>
Resolution	WXGA			XGA		

## • High-Visibility Images in Artificial Light

With 20,000:1 contrast—25 % higher<sup>\*2</sup> than previous series—and up to 4,100 lm<sup>\*3</sup> brightness, the PT-LB426 Series provides brilliant images from a compact 2.9 kg<sup>\*4</sup> body. Daylight View Lite senses ambient brightness and optimizes for clearest image reproduction. Pictures are bright and easy to see in well-lit rooms.

## • Low Maintenance and Long Life

Low-degradation lamp lasts 20,000 hours<sup>\*5</sup> in Eco Mode while easy-access filter can be swapped at 10,000 hours<sup>\*6</sup>, reducing parts inventory and cost of maintenance. Multi Monitoring & Control Software with Early Warning<sup>\*7</sup> functions detects potential problems before they can interrupt a presentation, boosting reliability.

## • Flexible Installation, Easy Operation

With 1.2x zoom and V/H Keystone Correction<sup>\*8</sup> (H: ±35 °, V: ±35 °), the projectors can be placed almost anywhere. Network models add dual HDMI<sup>®</sup><sup>\*9</sup> for media players, PCs, or a streaming device powered by a 5 V/2 A USB outlet<sup>\*10</sup>. This terminal also supports the optional ET-WML100/AJ-WM50 Series<sup>\*11</sup> wireless module for screen mirroring.

<sup>\*1</sup> Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. <sup>\*2</sup> In comparison to the Panasonic PT-LB425 Series. <sup>\*3</sup> For the LB426 only. Refer to footnote (1) for measurement conditions. <sup>\*4</sup> LB306 weighs 2.8 kg. <sup>\*5</sup> Lamp life is approximately 20,000 hours in Eco Mode and approximately 10,000 hours in Normal/Quiet Mode. Lamp replacement timing varies depending on operating environment and usage conditions. <sup>\*6</sup> In Quiet Mode only. Replacement timing varies depending on operating environment and usage conditions. <sup>\*7</sup> Multi Monitoring & Control Software supported on network models only. Early Warning Functions (ET-SWA100) are included free with Multi Monitoring & Control Software Ver. 2.0 and later (free download), but require a paid license key and activation at the PASS website to use after a 90-day trial period has expired. Visit [panasonic.net/cns/projector/products/mnms/](http://panasonic.net/cns/projector/products/mnms/) for more information. <sup>\*8</sup> Excluding the LB306, which has vertical keystone correction of ±30 °. <sup>\*9</sup> For all projectors excluding the LB306, which has 1 x HDMI input. <sup>\*10</sup> Excluding the LB306, which has a USB terminal for service only. <sup>\*11</sup> Subject to regional availability.

Specifications (Tentative)

Model	PT-LW376	PT-LW336	PT-LB426	PT-LB386	PT-LB356	PT-LB306	
Projector type	LCD projector						
LCD panel	Panel size	15.0 mm (0.59 in) diagonal (16:10 aspect ratio)		16.0 mm (0.63 in) diagonal (4:3 aspect ratio)			
	Display method	Transparent LCD panel (x 3, R/G/B)					
	Drive method	Active matrix method					
	Number of pixels	1,024,000 (1280 x 800 pixels) x 3		786,432 (1024 x 768 pixels) x 3			
Light source	230 W x 1 lamp						
Light output*1	3,600 lm	3,100 lm	4,100 lm	3,800 lm	3,300 lm	3,100 lm	
Lamp replacement cycle*2	Normal: 10,000 h/Eco: 20,000 h/Quiet: 10,000 h						
Filter replacement cycle	Normal: 5,000 h/Eco: 6,000 h/Quiet: 10,000 h						
Resolution	1280 x 800 pixels		1024 x 768 pixels				
Contrast ratio*1	20,000:1 (All white/all black, Iris: On, Image mode: Dynamic, Lamp control: Normal)						
Screen size [diagonal]	0.76–7.62 m (30–300 in), 16:10 aspect ratio		0.76–7.62 m (30–300 in), 4:3 aspect ratio				
Center-to-corner zone ratio*1	85 %						
Lens	Manual zoom (1.2x), manual focus lens, F = 1.6–1.76, f = 19.16–23.02 mm, throw ratio: 1.48–1.78:1	Manual zoom (1.2x), manual focus lens, F = 2.1–2.25, f = 19.11–22.94 mm, throw ratio: 1.47–1.77:1	Manual zoom (1.2x), manual focus lens, F = 1.6–1.76, f = 19.16–23.02 mm, throw ratio: 1.48–1.78:1	Manual zoom (1.2x), manual focus lens, F = 2.1–2.25, f = 19.11–22.94 mm, throw ratio: 1.47–1.77:1		Manual zoom (1.2x), manual focus lens, F = 2.1–2.25, f = 19.11–22.94 mm, throw ratio: 1.47–1.77:1	
Keystone correction range	Vertical: ±35 ° (Auto, Manual), Horizontal: ±35 ° (Manual) (TBD)					Vertical: ±30 ° (Manual) (TBD)	
Installation	Ceiling/floor, front/rear						
Terminals	HDMI® IN	HDMI 19-pin x 2 (Compatible with HDCP 1.4, Deep Color), Audio signal: Linear PCM (Sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)				HDMI 19-pin x 1 (Compatible with HDCP 1.4, Deep Color), Audio signal: Linear PCM (Sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)	
	COMPUTER 1 IN	D-sub HD 15-pin (female) x 1 [RGB/S-Video/YPe(Cb)Pr(Cr)]					
	COMPUTER 2 IN/1 OUT	D-sub HD 15-pin (female) x 1 [RGB]					D-sub HD 15-pin (female) x 1 [RGB] (RGB OUT only)
	VIDEO IN	Pin jack x 1					
	AUDIO IN 1	M3 (L,R) x 1					
	AUDIO IN 2	Pin jack x 2 (L,R)					
	AUDIO OUT	M3 (L,R) x 1 (Variable)					
	LAN	RJ-45 x 1 for network connection, 10Base-T/100Base-TX, PLink™ (Class 1) compatible					—
	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compatible)					
	USB A	USB Type-A (for Memory Viewer Light/Wireless Module [Output 5 V/2 A])					—
	USB B	—					For service only
	Power supply	AC 100–240 V, 50/60 Hz					
Power consumption	300 W						
Built-in speaker	10 W monaural					2 W monaural	
Cabinet materials	Molded plastic						
Operation noise*1	Normal: 38 dB, Eco: 35 dB, Quiet: 30 dB						
Dimensions (W x H x D)	335 x 96*3 x 252 mm (13 3/16" x 3 25/32" x 9 29/32")						
Weight*4	Approx. 2.9 kg (6.4 lbs)					Approx. 2.8 kg (6.2 lbs)	
Operating environment	Operating temperature: 5–40 °C (41–104 °F), operating humidity: 20–80 % (no condensation)						
Applicable software	Multi Monitoring & Control Software, Presenter Light Software (for Windows®), Wireless Projector						

\*1 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. \*2 Lamp replacement cycle stated is maximum value, at which time brightness will have decreased to 50 %. Usage environment affects lamp replacement cycle. \*3 With legs at shortest position. \*4 Average value. May differ depending on the actual unit.

Optional Accessories

- **Ceiling Mount Bracket**  
ET-PKL100H\* (for high ceiling)  
ET-PKL100S\* (for low ceiling)  
\* The ET-PKL100H/ET-PKL100S are used in combination with the ET-PKL420B (sold separately).
- **Projector Mount Bracket**  
ET-PKL420B
- **Replacement Filter Unit**  
ET-RFL300  
Note: Filter cover not included.
- **Replacement Lamp Unit**  
ET-LAL510
- **Wireless Module**  
ET-WML100/AJ-WM50 Series\*  
\* Product availability may vary by country or region.
- **D-sub/S-VIDEO Conversion Cable**  
ET-ADSV

PT-TW381R Series  
Short-Throw LCD Projectors

AVAILABLE FROM APRIL 2020

Short-Throw Projectors Promote Effective Communication Without Screen Shadowing



\* Requires optional ET-WML100/AJ-WM50 Series wireless module



\* PT-TW381R only

	PT-TW381R Series			
	PT-TW381R	PT-TW380	PT-TX440	PT-TX350
Light Output	3,300 lm*1		3,800 lm*1	3,200 lm*1
Resolution	WXGA		XGA	

• **Beautiful Interactive Images, No Presenter Shadowing**

With high-contrast brilliance enhanced by Daylight View Lite, the PT-TW381R Series punches through ambient light to deliver colorful pictures. The PT-TW381R's interactive function expands with Whiteboard Software while the projectors avoid shadowing with throw-distances as short as 79 cm\*2 or less.

• **Low-Maintenance Endurance Reduces TCO**

Central to projector design is a low-degradation lamp engineered for 20,000 hours\*3 of operation. Filter needs no maintenance until 10,000 hours\*4 and takes just moments to replace. Save time and money with dependable set-and-forget projection you can count on.

• **Simple Setup with Extensive Connections**

V/H keystone corrects the picture once the projector is set. Dual HDMI® inputs, two D-sub inputs\*5, and 5V/2A USB outlet for streaming devices are equipped, while the optional ET-WML100/AJ-WM50 Series\*6 module enables screen mirroring from PC or mobile. Plug-and-play connections join RS-232C and LAN for control and automation systems.

\*1 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2012 international standards. Value is average of all products when shipped. \*2 79 cm for the TW381R and TW380, 75 cm for the TX440 and TX350 when projecting an 80-inch image. \*3 Lamp life is approximately 20,000 hours in Eco Mode and approximately 10,000 hours in Normal/Quiet Mode. Lamp replacement timing varies depending on operating environment and usage conditions. \*4 In Quiet Mode. Replacement timing varies depending on operating environment and usage conditions. \*5 One input is shared with the D-sub output. \*6 Subject to regional availability.

Specifications (Tentative)

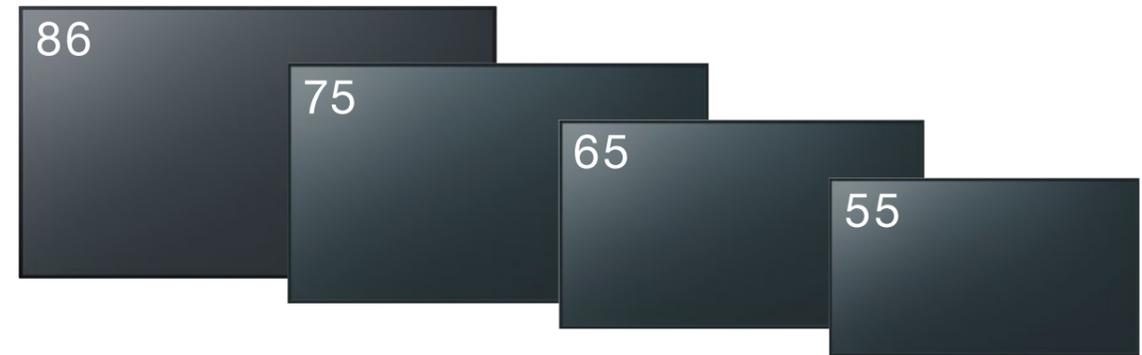
Model	PT-TW381R	PT-TW380	PT-TX440	PT-TX350
Projector type	LCD projector			
LCD panel	Panel size	15.0 mm (0.59 in) diagonal (16:10 aspect ratio)		16.0 mm (0.63 in) diagonal (4:3 aspect ratio)
	Display method	Transparent LCD panel (x 3, R/G/B)		
	Drive method	Active matrix method		
	Number of pixels	1,024,000 (1280 x 800 pixels) x 3		786,432 (1024 x 768 pixels) x 3
Light source	230 W x 1 lamp			
Light output*1	3,300 lm		3,800 lm	3,200 lm
Lamp replacement cycle*2	Normal: 10,000 h/Eco: 20,000 h/Quiet: 10,000 h			
Filter replacement cycle	Normal: 5,000 h/Eco: 6,000 h/Quiet: 10,000 h			
Resolution	1280 x 800 pixels		1024 x 768 pixels	
Contrast ratio*1	20,000:1 (All white/all black, Iris: On, Image mode: Dynamic, Lamp control: Normal)			
Screen size [diagonal]	1.27–2.54 m (50–100 in), 16:10 aspect ratio		1.27–2.54 m (50–100 in), 4:3 aspect ratio	
Center-to-corner zone ratio*1	85 %			
Lens	Fixed zoom, manual focus lens, F = 1.8, f = 6.08 mm, throw ratio: 0.46:1 (Projection distance: 0.79 m [2.59 ft] for 80-inch image)		Fixed zoom, manual focus lens, F = 1.8, f = 6.08 mm, throw ratio: 0.46:1 (Projection distance: 0.75 m [2.46 ft] for 80-inch image)	
Keystone correction range	Vertical: ±15 ° (Auto, Manual), Horizontal: ±15 ° (Manual)			
Installation	Ceiling/floor, front/rear			
Terminals	HDMI® IN	HDMI 19-pin x 2 (Compatible with HDCP 1.4, Deep Color), Audio signal: Linear PCM (Sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)		
	COMPUTER 1 IN	D-sub HD 15-pin (female) x 1 [RGB/S-Video/YPe(Cb)Pr(Cr)]		
	COMPUTER 2 IN/1 OUT	D-sub HD 15-pin (female) x 1 [RGB]		
	VIDEO IN	Pin jack x 1		
	AUDIO IN 1	M3 (L,R) x 1		
	AUDIO IN 2	Pin jack x 2 (L,R)		
	AUDIO OUT	M3 (L,R) x 1 (Variable)		
	LAN	RJ-45 x 1 for network connection, 10Base-T/100Base-TX, PjLink™ (Class 1) compatible		
	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compatible)		
	USB	USB Type-A (for Memory Viewer Light/Wireless Module [Output 5 V/2 A])		
Mini USB	x 1 (for interactive function)			
Power supply	AC 100–240 V, 50/60 Hz			
Power consumption	300 W			
Built-in speaker	10 W monaural			
Cabinet materials	Molded plastic			
Operation noise*1	Normal: 38 dB, Eco: 35 dB, Quiet: 30 dB			
Dimensions (W x H x D)	335 x 134.1*3 x 329 mm (13 9/16" x 5 9/32" x 12 15/16")			
Weight*4	Approx. 3.9 kg (8.6 lbs)			
Operating environment	Operating temperature: 5–40 °C (41–104 °F), operating humidity: 20–80 % (no condensation)			
Applicable software	Multi Monitoring & Control Software, Presenter Light Software (for Windows®), Wireless Projector			

\*1 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. \*2 Lamp replacement cycle stated is maximum value, at which time brightness will have decreased to 50 %. Usage environment affects lamp replacement cycle. \*3 With legs at shortest position. \*4 Average value. May differ depending on the actual unit.

Optional Accessories

- **Ceiling Mount Bracket**  
ET-PKL100H\* (for high ceiling)  
ET-PKL100S\* (for low ceiling)  
\* The ET-PKL100H/ET-PKL100S are used in combination with the ET-PKL430B (sold separately).
- **Projector Mount Bracket**  
ET-PKL430B
- **Replacement Filter Unit**  
ET-RFL300  
Note: Filter cover not included.
- **Replacement Lamp Unit**  
ET-LAL510
- **Interactive Light Pen**  
ET-PEN100  
Note: Exclusively for PT-TW381R. Same as supplied Interactive Light Pen.
- **Interactive Pointer**  
ET-PNT100  
Note: Exclusively for PT-TW381R.
- **Wireless Module**  
ET-WML100/AJ-WM50 Series\*  
\* Product availability may vary by country or region.
- **D-sub/S-VIDEO Conversion Cable**  
ET-ADSV

## Ultra-bright Professional Displays Provide Clear Images Under High Ambient Lighting Conditions



SQ1H Series				
	TH-86SQ1H	TH-75SQ1H	TH-65SQ1H	TH-55SQ1H
Screen Size	86-inch class	75-inch class	65-inch class	55-inch class
Brightness	1000cd/m <sup>2</sup> or more (TBD)		2000cd/m <sup>2</sup> or more (TBD)	
Contrast	TBD			
Resolution	4K (3840 x 2160) (TBD)			

### • Ultra-bright Picture Quality

Compatible with installation in atriums exposed to glare and outdoor display windows, and equipped with high-brightness panels. Compatible with the “12-axis Color Management Function” and “HDR”. Thoroughly displays the rich colors of 4K images.

### • Easy Installation

Various types of installation have become possible while taking into consideration the space and legibility.

### • Superb Reliability

Efficiency and high reliability for the environment. This model is capable of constant, 24/7 operation.

### • Easy Signage System Configuration

Supports Intel® Smart Display Module (Intel® SDM) specification and USB media player.

## Versatile Lineup of 4K High-resolution Displays Support 24-hour Operation



### Specifications (Tentative) \*Design and specification subject to change without notice.

Model	TH-86SQ1H	TH-75SQ1H	TH-65SQ1H	TH-55SQ1H	
Display Panel	Panel size	86-inch class	75-inch class	65-inch class	
	Panel type / Backlight	TBD			
	Aspect ratio	16:9			
	Effective display area (W x H)	TBD	TBD	TBD	TBD
	Resolution	3840 x 2160 (TBD)			
	Brightness (typ.)	1000 cd/m <sup>2</sup> or more (TBD)			2000 cd/m <sup>2</sup> or more (TBD)
	Contrast ratio (typ.)	TBD			
	Response time (typ.)	TBD			
	Viewing angle [(T/B)/(L/R)]	TBD			
	Panel Surface Treatment	TBD			
Terminals	HDMI In	HDMI TYPE-A Connector x 2 (Compatible with HDCP 2.2)			
	DisplayPort In	DisplayPort x 1 (HDCP2.2) (TBD)			
	DisplayPort Out	DisplayPort x 1 (HDCP2.2) (TBD)			
	DVI-D	DVI-D 24-pin x 1 (HDCP 1.1) (TBD)			
	PC In	Mini D-sub 15-pin x 1 (TBD)			
	Serial in	D-sub 9-pin x 1, RS232C Compatible			
	IR In/Out	Stereo Mini Jack (M3) x 1 / x 1			
	Audio In	Stereo Mini Jack (M3) x 2 0.5V [rms]			
	Audio Out	Stereo Mini Jack (M3) x 1 0.5 V [rms], Variable (-∞ - 0 dB) (1 kHz 0 dB Input, 10 kΩ Load)			
	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™ (TBD)			
	Slot	Intel® SDM specification			
	USB	USB Connector (TYPE-A) x 2, DC 5 V/2 A, DC 5V/1A (USB 3.0 Supported)			
	Built-in speaker	20 W [10 W + 10 W]			
External speaker out	30 W [15 W + 15 W] 10% THD				
Power requirements	110-127 V AC, 50/60 Hz, 220-240 V AC, 50/60 Hz				
Power consumption	TBD	TBD	TBD	TBD	
Power off condition	TBD	TBD	TBD	TBD	
Standby condition	TBD	TBD	TBD	TBD	
Dimensions (W × H × D)	TBD	TBD	TBD	TBD	
Weight	TBD	TBD	TBD	TBD	
Bezel width	TBD	TBD	TBD	TBD	
Wall-hanging pitch	VESA Compliant				
Orientation	Landscape/Portrait				
Tilting angle	Landscape setting: 0 - 20 degrees forward/backward (TBD) Portrait setting: 0 - 20 degrees forward/backward (TBD)		Landscape setting: 0 - 45 degrees forward/backward (TBD) Portrait setting: 0 - 45 degrees forward/backward (TBD)		
Operating time	24 h/day				
Operating environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F)/Humidity: 20-80 % (Non condensation)/for up to 0-1400 m (4593 ft) altitude. Temperature: 0 °C to 35 °C (32 °F to 95 °F)/Altitude 1400 -2800 m (4593 ft to 7874 ft)				

### Optional Accessories

- **Early Warning Software<sup>1</sup>**  
ET-SWA100/105 Series<sup>2</sup>
- **Auto Display Adjustment Upgrade Kit**  
TY-VUK10

<sup>1</sup>: Multi Monitoring & Control Software ver.2.1 or later required.  
<sup>2</sup>: Part number suffix may differ depending on the license type.

### Software (free)

- **Content Management Software (Ver.3.0 or later)**  
\* Windows® only.
- **Multi Monitoring & Control Software (Ver.2.1)**  
\* Windows® only.
- **Video Wall Manager**



Actual resolution: 3840 x 2160p

SQE1 Series							
	TH-98SQE1	TH-86SQE1	TH-75SQE1	TH-65SQE1	TH-55SQE1	TH-49SQE1	TH-43SQE1
Screen Size	98-inch class	86-inch class	75-inch class	65-inch class	55-inch class	49-inch class	43-inch class
Brightness	500 cd/m <sup>2</sup>						
Contrast	TBD						
Resolution	4K (3840 x 2160)						

### • High Picture Quality

Four times higher resolution quality than Full HD has been achieved to display 4K video that expresses images in detail.

### • Easy Installation

Compatible with a wide range of applications, for a design that blends into spaces. Supports 24/7 continuous operation. Ideal for installation in public spaces.

### • Wide Expandability

Intel® SDM (Smart Display Module) specifications have been adopted. The range of use can be expanded by combining it with various function boards.

## 4K Entry Displays with High Picture Quality Enhance Presentation Effect.



Specifications (Tentative) \*Design and specification subject to change without notice.

Model	TH-98SQE1	TH-86SQE1	TH-75SQE1	TH-65SQE1	TH-55SQE1	TH-49SQE1	TH-43SQE1
Display Panel	98-inch class	86-inch class	75-inch class	65-inch class	55-inch class	49-inch class	43-inch class
Panel size	TBD						
Panel type / Backlight	TBD						
Aspect ratio	16:9						
Effective display area (W x H)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Resolution	3840 x 2160						
Brightness (typ.)	500 cd/m <sup>2</sup>						
Contrast ratio (typ.)	TBD						
Response time (typ.)	TBD						
Viewing angle [(T/B)/(L/R)]	TBD						
Panel Surface Treatment	TBD						
Terminals	HDMI TYPE-A Connector x 4						
HDMI In	DisplayPort x 1 (HDCP2.2)						
DisplayPort In	DisplayPort x 1 (HDCP2.2)						
DisplayPort Out	-						
DVI-D In	Mini D-sub 15-pin x 1						
PC In	D-sub 9-pin x 1, RS232C Compatible						
Serial	Stereo Mini Jack (M3) x 1						
IR In	Pin Jack (L/R) x 1 (TBD)						
Audio In	Stereo Mini Jack(M3) x1 SPDIFx1						
Audio Out	RJ45 x 1						
LAN	Intel® SDM specification						
Slot	USB Connector (TYPE A) x 1, (TYPE C) x 1(TBD)						
USB	x 1						
WiFi	24 W [12 W + 12 W]						
Built-in speaker	110~127 V AC, 50/60 Hz, 220~240 V AC, 50/60 Hz			16 W [8 W + 8 W]			
Power requirements	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Power consumption	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Power off condition	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Standby condition	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Dimensions (W x H x D) (TBD)	2236 x 1292 x 98 mm	1928 x 1099 x 80 mm	1684 x 967mm x100 mm	1459 x 853 x 96 mm	1238 x 712 x 104 mm	1102 x 635 x 104 mm	966 x 557 x 106 mm
Weight (TBD)	102.3 kg	65.8 kg	37.2 kg	24.5 kg	17.1 kg	13.7 kg	10.3 kg
Bezel width	39 mm (T/B/L/R)	15 mm (T/B/L/R)	16 mm (T/R/L), 21 mm (B)	15 mm (T/R/L), 21 mm (B)	11 mm (T/R/L), 14 mm (B)	11 mm (T/R/L), 15 mm (B)	9 mm (T), 10 mm (R/L), 13 mm (B)
Wall-hanging pitch	900 x 600 mm, M8	600 x 400 mm, M8	400 x 400 mm, M6	400 x 200 mm, M6	400 x 200 mm, M6	200 x 200 mm, M6	
Orientation	Landscape/Portrait						
Tilting angle	Landscape setting: 0 - 20 degrees forward/backward, Portrait setting: 0 - 20 degrees forward/backward (TBD)						
Operating time	24 h/day						
Operating environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F)/Humidity: 20-80 % (Non condensation)/for up to 0-1400 m (4593 ft) altitude. Temperature: 0 °C to 35 °C (32 °F to 95 °F)/Altitude 1400 -2800 m (4593 ft to 7874 ft)						

Optional Accessories

(TBD)

Software

(TBD)



Actual resolution: 3840 x 2160p

CQE1 Series							
	TH-98CQE1W	TH-86CQE1W	TH-75CQE1W	TH-65CQE1W	TH-55CQE1W	TH-49CQE1W	TH-43CQE1W
Screen Size	98-inch class	86-inch class	75-inch class	65-inch class	55-inch class	49-inch class	43-inch class
Brightness	400 cd/m <sup>2</sup>						
Contrast	TBD						
Resolution	4K (3840 x 2160)						

- **High Picture Quality**

Highly detailed images in 4K resolution (3840x2160) supporting 4K/60p signals for faithful expression of high-quality content.

- **Excellent Reliability**

Enables continuous operation 16 hours a day, without any concern. Ideal everyday use for offices, schools, and other applications.

- **Various Types of Operation**

Supports 4 HDMI input terminals for high-frequency use, and other basic terminals are also provided as standard equipment.

Specifications (Tentative) \*Design and specification subject to change without notice.

Model	TH-98CQE1W	TH-86CQE1W	TH-75CQE1W	TH-65CQE1W	TH-55CQE1W	TH-49CQE1W	TH-43CQE1W	
Display Panel	Panel size	98-inch class	86-inch class	75-inch class	65-inch class	55-inch class	49-inch class	
	Panel type / Backlight	TBD						
	Aspect ratio	16:9						
	Effective display area (W x H)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Resolution	3840 x 2160						
	Brightness (typ.)	400 cd/m <sup>2</sup>						
	Contrast ratio (typ.)	TBD						
	Response time (typ.)	TBD						
	Viewing angle [(T/B)/(L/R)]	TBD						
	Panel Surface Treatment	TBD						
Terminals	HDMI In	HDMI TYPE-A Connector x 4						
	PC In	Mini D-sub 15-pin x 1 (Female)						
	Serial	D-sub 9-pin x 1, RS232C Compatible						
	IR In	Stereo Mini Jack (M3) x 1						
	Audio in	Pin Jack (L/R) x 1 (TBD)						
	Audio out	Stereo Mini Jack (M3) x 1, SPDIF x 1						
	LAN	RJ 45 x 1						
	USB	USB Connector TYPE-A x 1, Type-C x 1						
Wifi	x 1							
Built-in speaker	24 W [12 W + 12 W]				16 W [8 W + 8 W]			
Power requirements	220-240 V AC, 50/60 Hz							
Power consumption	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Power off condition	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Standby condition	TBD	TBD	TBD	TBD	TBD	TBD	TBD	
Dimensions (W x H x D)	2236 x 1292 x 98 mm (TBD)	1928 x 1099 x 80 mm (TBD)	1684 x 967 x 100 mm (TBD)	1459 x 853 x 75 mm (TBD)	1238 x 712 x 87 mm (TBD)	1102 x 635 x 85 mm (TBD)	966 x 557 x 86 mm (TBD)	
Weight	102.3 kg (TBD)	65.8 kg (TBD)	37.2kg (TBD)	24.5 kg (TBD)	17.1 kg (TBD)	13.7 kg (TBD)	10.3 kg (TBD)	
Bezel width	39 mm (T/B/L/R)	15 mm (T/B/L/R)	16 mm (T/R/L), 21 mm (B)	15 mm (T/R/L), 21 mm (B)	11 mm (T/R/L), 14 mm (B)	11 mm (T/R/L), 15 mm (B)	9 mm (T), 10 mm (R/L), 13 mm (B)	
Wall-hanging pitch	900 x 600 mm, M8	600 x 400 mm, M8		400 x 400 mm, M6	400 x 200 mm, M6	200 x 200 mm, M6		
Orientation	Landscape							
Tilting Angle	0-20 degree forward (TBD)							
Operating time	16 h/day							
Operating environment	Temperature: 0 °C to 40 °C (32 °F to 104 °F)/Humidity: 20-80 % (Non condensation)/for up to 0-1400 m (4593 ft) altitude. Temperature: 0 °C to 35 °C (32 °F to 95 °F)/Altitude 1400 -2800 m (4593 ft to 7874 ft)							

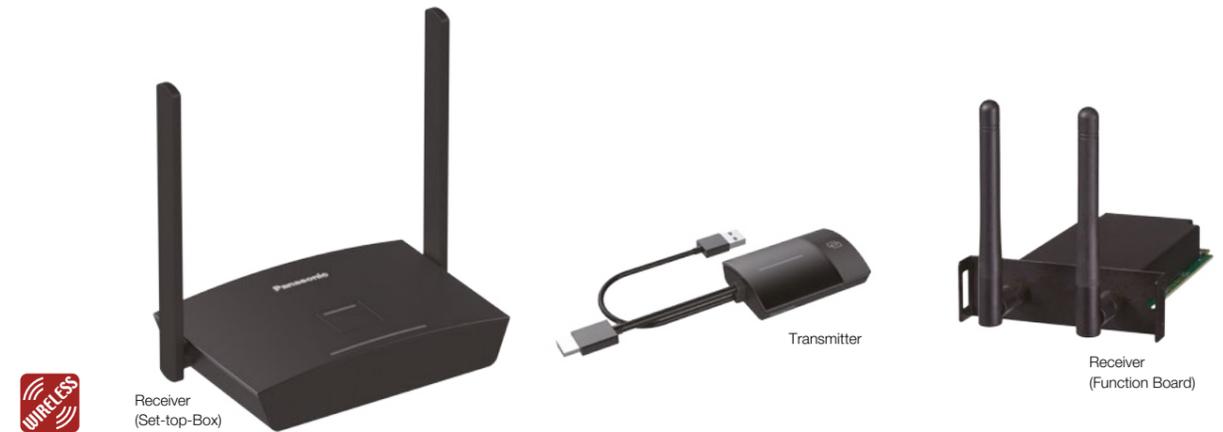
# Wireless Presentation System

AVAILABLE FROM MID FY2020

Availability varies depending on model

## Panasonic Launches a Wireless Presentation System Compatible

Achieving Efficient Presentations with Simple Operation



### • Smart Installation

Images can be displayed from a wireless PC, with two types of receivers available to suit the environment of the user. The STB receiver type can be used with Panasonic pro displays and projectors. Simply connect an HDMI cable. The Intel® SDM standard type receiver attaches to expansion slots on the rear of the display, requiring no installation space.

### • Simple Operation

There is no special software installation necessary for the PC. The presenter's PC can also be switched by simply pressing a button, with no need to reconnect the cable. The user simply presses a button on the transmitter to display the PC screen.

### • High Image Quality

Hardware processing enables image compression and decompression for Full-HD resolution. Wireless transmission is IEEE802.11ac compliant. Presentations containing video content are also supported.

Model Name	Wireless Presentation System		
	Receiver (Set top box)	Receiver (Functional Board)	Transmitter
Resolution (Max)	Full HD		
Wi-Fi	IEEE802.11ac		
Receiver type	Set Top Box	Intel® SDM S-type	-
Registered no. of Transmitters	32 units		
Number of Simultaneous Screen Connections	Max. 4 screens		
Audio Transmission	Yes		
Dimensions (W x H x D)	TBD	TBD	TBD
Weight	TBD	TBD	TBD
Compatible Displays	Panasonic pro displays, projectors	SQ1 Series* (As of Feb.)	-

\* 4K output not possible

# Panasonic

## BUSINESS



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