## Panasonic CONNECT



6,000 lm PT-FRQ60 1-Chip DLP™ 4K Projector Delivers Smooth, Detailed Images for an Insightful Visual Experience

## PT-FRQ60

Compact 1-Chip DLP™ Projectors Deliver Smooth, Detailed Images for an Insightful Visual Experience

## **Key Features**

1-Chip DLP™ laser projector, 6,000lm brightness

4K (3840 x 2160) output resolution, ideal for museum exhibitions, education, and corporate offices

2.0x zoom lens and wide V/H Lens Shift (V: +71 %, -48 %, H: +34 %, -27 %)

Preactivated upgrade kit for Geometry Manager Pro

Supports 240Hz/1080p high frame rate with minimal input-to-output latency



























## PT-FRQ60

https://ap.connect.panasonic.com/p h/en/products/projectors/pt-frq60

Projector type	1-Chip DLP <sup>TM</sup> projector
Display method	DLP <sup>TM</sup> chip x 1, DLP <sup>TM</sup> projection system
Display Device -> Panel size	16.5 mm (0.65 in) diagonal (16:9 aspect ratio)
Display Device -> Number of pixels *1	1920 x 1080 pixels(If a signal other than 120 Hz/240 Hz is input, it cannot be displayed at
	this resolution.)
Light source	Laser diodes
Light output *2 *3	6,000 lm
Light output (ANSI) *4	6,000 lm
Light output (Center) *5	6,200 lm (Center)
Time until light output declines to 50 %	620,000 hours [NORMAL]
-> NORMAL *6	
Time until light output declines to 50 %	<b>6</b> 24,000 hours [ECO]
-> ECO *6	
Time until light output declines to 50 % -> QUIET *6	620,000 hours [QUIET]
Resolution	4K (3840 x 2160 pixels) (With Quad Pixel Drive)
Contrast Ratio (typ.) *3	20,000:1 (Full On/Full Off)(When [PICTURE MODE] is set to [DYNAMIC] and [DYNAMIC
	CONTRAST] is set to [1]. HDMI signal input)
Screen size (diagonal)	1.02–7.62 m (40–300 in), 16:9 aspect ratio
Center-to-corner zone ratio *3	90%
Lens	2.0x manual zoom (throw ratio: 1.46–2.93:1), manual focus, F 2.0–3.4, f 21.5–43.0 mm
Lens shift -> Vertical(from center of	
screen)	
Lens shift -> Horizontal(from center	±24.0% 27.0% (manual)
of screen)	· 24 70, 27 70 (manda)
Keystone correction range	Vertical: ±40 °, Horizontal: ±20 °
Installation	Ceiling/floor, front/rear, free 360-degree installation
Terminals -> HDMI <sup>™</sup> IN	HDMI <sup>TM</sup> 19-pin x 2 (Compatible with HDCP 2.3, Deep Color, 4K/60p signal input*6), CEC
Terminals -> HDMT IN	
	supported
Terminals -> COMPUTER IN (D-SUB 15pin)	D-sub HD 15-pin (female) x 1 (RGB/YP <sub>B</sub> P <sub>R</sub> /YC <sub>B</sub> C <sub>R</sub> )
Terminals -> COMPUTER OUT (D-SUB 15pin)	D-sub HD 15-pin (female) x 1(RGB/YP <sub>B</sub> P <sub>R</sub> /YC <sub>B</sub> C <sub>R</sub> )
Terminals -> AUDIO IN(M3 Stereo Mini Jack)	M3 stereo mini-jack x 2
Terminals -> AUDIO OUT(M3 Stereo Mini Jack)	M3 stereo mini-jack x 2
Terminals -> SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)
Terminals -> DIGITAL LINK IN / LAN	RJ-45 x 1 for network and DIGITAL LINK connection (video/network/serial control)
	(HDBaseT <sup>TM</sup> compliant), 100Base-TX (Compatible with PJLink <sup>TM</sup> [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®)
Terminals -> LAN	RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink <sup>TM</sup> [Class
	2], Art-Net)
Terminals -> USB TYPE A	USB connector (Type A) x 1 for optional AJ-WM50 Series Wireless Module, for USB
	memory,and for power supply (DC 5 V, maximum 2 A)
Terminals -> SLOT	IPv4, IPv6*8
Protocol versions	1.0
Power supply	IPv4, IPv6 <sup>*9</sup>
	AC 100–240 V, 50/60 Hz,
	• •
Maximum power consumption	AC 100–240 V, 50/60 Hz,
	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan)
Maximum power consumption	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA)
Maximum power consumption On-mode power consumption(Operating mode) ->	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA)
Maximum power consumption On-mode power consumption(Operating mode) -> Normal	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA) [NORMAL] 445 W
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA) [NORMAL] 445 W
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA) [NORMAL] 445 W
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA) [NORMAL] 445 W
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) ->	AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5–2.4 A) (525 VA) [NORMAL] 445 W
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal Standby power consumption -> ECO	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W  15 W (Standby Mode) [NORMAL]
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W  15 W (Standby Mode) [NORMAL]  0.5 W (Standby Mode) [ECO] Molded plastic
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials Filter	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W  15 W (Standby Mode) [NORMAL]  0.5 W (Standby Mode) [ECO] Molded plastic No
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials Filter Operation noise -> Normal *3	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W  15 W (Standby Mode) [NORMAL]  0.5 W (Standby Mode) [ECO]  Molded plastic No 36 dB [NORMAL]
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials Filter Operation noise -> Normal *3 Operation noise -> Eco *3	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W  15 W (Standby Mode) [NORMAL]  0.5 W (Standby Mode) [ECO]  Molded plastic  No 36 dB [NORMAL] 36 dB [ECO]
Maximum power consumption On-mode power consumption(Operating mode) -> Normal On-mode power consumption(Operating mode) -> Eco On-mode power consumption(Operating mode) -> Quiet Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials Filter Operation noise -> Normal *3	AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 505 W (5.5-2.4 A) (525 VA) [NORMAL] 445 W  [ECO] 355 W  [QUIET] 355 W  15 W (Standby Mode) [NORMAL]  0.5 W (Standby Mode) [ECO]  Molded plastic No 36 dB [NORMAL]

Dimensions (W x H x D) -> Width (not including protruding parts)	498 mm (19 5/8")
Dimensions -> Height (including protruding parts)	168 mm (6 5/8")
Dimensions -> Depth (not including protruding parts)	492 mm (19 3/8")
Weight <sup>*11</sup>	Approx. 16.4 kg (36.2 lbs)
Operating environment -> Operating temperature *12	0–45 °C (32–113 °F)
Operating Environment -> Operating humidity (No condensation)	10–80 % (no condensation)
Applicable software	Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Projector Network Setup Software
Control function via LAN	Crestron Connected <sup>TM</sup> V2, Crestron XiO Cloud <sup>TM</sup> *12, Art-Net DMX, AMX® DD, and PJLink <sup>TM</sup> (Class 2)
Footnote Description	<ol> <li>If a signal other than 120 Hz/240 Hz is input, it cannot be displayed at this resolution.</li> <li>When [PICTURE MODE] is set to [DYNAMIC], [DAYLIGHT VIEW] is set to [OFF],</li> </ol>
	IDYNAMIC CONTRASTI is set to IOFFI LIGHT OUTPUTL is set to I100%1 and

- [DYNAMIC CONTRAST] is set to [OFF], [LIGHT OUTPUT] is set to [100%], and [AUTO POWER SAVE] is set to [OFF].
- 3. Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 international standards. Value is the average of all products when shipped.
- 4. Measurement, measuring conditions, and method of notation all comply with American National Standards Institute standards. Value is the average of all products when shipped.
- 5. Average light-output value of all shipped products measured at the center of the screen.
- 6. Around this time, light output will have decreased to approximately 50 % of its original level ([PICTURE MODE]: [DYNAMIC], [DYNAMIC CONTRAST] set to [2], temperature 30 °C [86 °F], elevation 700 m [2,297 ft] with 0.15 mg/m3 of particulate matter). Estimated time until light output declines to 50 % varies depending on environment.
- 7.4 K/60 p signals are converted to the projector's resolution upon projection.
- 8. 4K/60p signals are converted to projector's resolution. Supports YPBPR 4:2:0
- 9. Main firmware version must be 3.00 or higher. Optional AJ-WM50 Series Wireless Module is not compatible with IPv6.
- 10. With legs fully retracted.
- 11. Average value. May differ depending on the actual unit.
- 12. When using the projector at an altitude lower than 2,700 m (8,858 ft) above sea level, and the operating environment temperature becomes 35 °C (95 °F) or higher, the light output may be reduced to protect the projector. When optional AJ-WM50 Series Wireless Module is attached, operating temperature range becomes 0-40 °C (32-104 °F).
- 13. Main firmware version must be 3.00 or higher.