Panasonic CONNECT



5,200 lm PT-FRQ50 1-Chip DLP™ 4K Projector Delivers Smooth, Detailed Images for an Insightful Visual Experience

PT-FRQ50

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

Key Features

1-Chip DLP™ laser projector, 5,200lm 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-FRQ50

https://latam.connect.panasonic.com/br/pt/produtos/projetores/pt-frq50

Projector type	1-Chip DLP TM projector
Display method	DLP TM chip x 1, DLP TM projection system
Display Device -> Panel size	16.5 mm (0.65 in) diagonal (16:9 aspect ratio)
Display Device -> Number of pixels	1920×1080 pixels(If a signal other than $120 \text{ Hz}/240 \text{ Hz}$ is input, it cannot be displayed at this resolution.)
Light source	Laser diodes
Light output *1 *2	5,200 lm
Light output (ANSI) *3	5,200 lm
Light output (Center) *2 *4	5,400 lm (Center)
Time until light output declines to 50 ^o -> NORMAL ^{*5}	%20,000 hours [NORMAL]
Time until light output declines to 50 ^o -> ECO ^{*5}	%24,000 hours [ECO]
Time until light output declines to 50 ^s -> QUIET ^{*5}	%20,000 hours [QUIET]
Resolution	4K (3840 x 2160 pixels) (With Quad Pixel Drive)
Contrast Ratio (typ.) ^{*2}	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 *2	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 of screen) *6	+34 %, -27 % (manual)
Keystone correction range	Vertical: ±40 °, Horizontal: ±20 °
Installation	Ceiling/floor, front/rear, free 360-degree installation
Terminals -> HDMI [™] IN	HDMI TM 19-pin x 2 (Compatible with HDCP 2.3, Deep Color, 4K/60p signal input*6), CEC supported
Terminals -> COMPUTER IN (D-SUB	D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR)
•	D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR)
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 TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3 Deep Color 4K/60p signal Input*7 Extrop XTP®)
Terminals -> DIGITAL LINK IN / LAN Terminals -> LAN	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class
Terminals -> LAN	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) USB connector (Type A) x 1 for optional AJ-WM50 Series Wireless Module, for USB memory
Terminals -> LAN Terminals -> USB TYPE A	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) 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 -> LAN Terminals -> USB TYPE A Terminals -> SLOT	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) USB connector (Type A) x 1 for optional AJ-WM50 Series Wireless Module, for USB memory
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz,
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan)
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz,
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) ->	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA)
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100–240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0–2.2 A) (500 VA) [NORMAL] 420 W
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9	(HDBaseT TM compliant), 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink TM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Consumpti	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Consumpti	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W [ECO] 330 W [QUIET] 330 W
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 Standby power consumption -> Normal Standby power consumption -> ECO	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W [ECO] 330 W 15 W (Standby Mode) [NORMAL] 0.5 W (Standby Mode) [ECO]
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W [ECO] 330 W [QUIET] 330 W
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W [ECO] 330 W 15 W (Standby Mode) [NORMAL] 0.5 W (Standby Mode) [ECO] Molded plastic
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials Filter	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W [ECO] 330 W 15 W (Standby Mode) [NORMAL] 0.5 W (Standby Mode) [ECO] Molded plastic No
Terminals -> LAN Terminals -> USB TYPE A Terminals -> SLOT Protocol versions Power supply Maximum power consumption *9 On-mode power consumption(Operating mode) -> Normal *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power consumption(Operating mode) -> Eco *9 On-mode power Standby power consumption -> Normal Standby power consumption -> ECO Cabinet materials Filter Operation noise -> Normal *2	(HDBaseTTM compliant), 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net, HDCP 2.3, Deep Color, 4K/60p signal Input*7, Extron XTP®) RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLinkTM [Class 2], Art-Net) 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) IPv4, IPv6*8 IPv4, IPv6*9 AC 100-240 V, 50/60 Hz, AC 110 V, 60 Hz (Taiwan) 480 W (5.0-2.2 A) (500 VA) [NORMAL] 420 W [ECO] 330 W [QUIET] 330 W 15 W (Standby Mode) [NORMAL] 0.5 W (Standby Mode) [ECO] Molded plastic No 35 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 * ¹⁰	Approx. 16.1 kg (35.5 lbs)
Operating environment -> Operating temperature *11	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 TM V2, Crestron XiO Cloud TM *12, Art-Net DMX, AMX® DD, and PJLink TM (Class 2)
Footnote Description	 If a signal other than 120 Hz/240 Hz is input, it cannot be displayed at this resolution. When [PICTURE MODE] is set to [DYNAMIC], [DAYLIGHT VIEW] is set to [OFF], [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. 4K/60p 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.