Panasonic CONNECT



Easy-to-Manage, Super Simple 1 Chip DLP[™] Laser Projector delivers Clear Pictures in Bright Rooms with Flexible Integration in the Classroom or Office

PT-FRZ60

DLP[™] imaging technology, Quartet Colour Harmonizer, Rich Colour Enhancer, and digitally modulated Dynamic Contrast 2 optimization coalesce in images of surpassing brightness, colour, and clarity regardless of ambient light levels. Flexible 2.0x zoom lens with V/H Lens-Shift joins DIGITAL LINK and CEC-ready HDMI® terminals supporting 4K/60p input signals*2. Separate LAN terminal and USB-DC outlet further streamline installation. Operation is almost inaudible at 27 dB*4.Heat-pipe cooling for the laser modules and heat-sinks for airtight DMD block support filterless design for 20,000 hours of maintenance-free projection. Multi-Laser Drive Engine has failover circuit protection while optional Early Warning software reinforces reliability.

Key Features

Laser 1-chip DLP, 6,000 lumens, WUXGA

DLP™ imaging technology, Quartet Colour Harmonizer, Rich Colour Enhancer, and digitally modulated Dynamic Contrast 2 optimization

Maintenance free up to 20,000 hours with dust-resistant optical block and long lasting laser engine

Flexible 2.0x zoom lens (1.46 – 2.94:1) with V/H Lens-Shift

Support uncompressed 4K/60p input signals via HDCP 2.2compliant HDMI® inputs or DIGITAL LINK terminal



Panasonic CONNECT







PT-FRZ60

https://eu.connect.panasonic.com/g b/en/products/projectors/pt-frz60

Projector type	1-Chip DLP™ projector
DLP™ Chip Panel Size	17.0 mm (0.67 in) diagonal (16:10 aspect ratio)
DLP™ Chip Display Method	DLP™ chip x 1, DLP™ projection system
DLP™ chip Number of Pixels	2,304,000 (1920 x 1200 pixels)
Light Source	Laser diodes
Light output	6,000 lm*1/6,200 lm (Center)*2
Time until light output declines to 50	20,000 hours (NORMAL)
%*3	
Resolution	1920 x 1200 pixels
Contrast Ratio*1	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*1	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
Lens shift Vertical(From the origin	+64 %, -44 % (manual)
point of the lens mounter)	
Lens shift Horizontal(From the orig	in+34 %, -27 % (manual)
point of the lens mounter)	
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 °.
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*4), CEC
	supported
Terminals Computer 1 In	D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR/YC)
Terminals Computer 2 In/1 Out	D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR/YC)
Terminals Video In	Pin jack x 1 (composite video)
Terminals Audio In 1	Pin jack x 2 (L, R)
Terminals Audio In 2/3	M3 x 1/M3 x 1
Terminals Audio Out	M3 x 1 (Variable)
	Devil 0 min (female) v 1 female mel control (CC 222C compliant)
Terminals Serial In	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)
Terminals Serial In Terminals DIGITAL LINK	RJ-45 x 1 for network and DIGITAL LINK connections (HDBase™ compliant), PJLink™ (Class
•	
•	RJ-45 x 1 for network and DIGITAL LINK connections (HDBaseT™ compliant), PJLink™ (Class
•	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
Terminals DIGITAL LINK	RJ-45 x 1 for network and DIGITAL LINK connections (HDBase™ compliant), PJLink™ (Class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.2 compatible, Deep Color compatible,4K/60p signal input*4
Terminals 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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-
Terminals DIGITAL LINK Terminals LAN	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible
Terminals DIGITAL LINK Terminals LAN Terminals USB	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A)
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD)
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D)	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8" x 6 5/8"*5 x 19 3/8")
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD)
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F), operating humidity: 10-80 % (no
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD)
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible West connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	RJ-45 x 1 for network and DIGITAL LINK connections (HDBase™ compliant), PJLink™ (Class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.2 compatible, Deep Color compatible, 4K/60p signal input*4 RJ-45 x 1 for network connection, PJLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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 Average light-output value of all shipped products measured at center of screen in
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	RJ-45 x 1 for network and DIGITAL LINK connections (HDBase™ compliant), PJLink™ (Class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.2 compatible, Deep Color compatible, 4K/60p signal input*4 RJ-45 x 1 for network connection, PJLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. *3 Aroundthis time, light output will have decreased by approximately 50
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. *3 Aroundthis time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [ON], under
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. *3 Aroundthis 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/m3 of
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32–104 °F),operating humidity: 10–80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. *3 Aroundthis 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/m3 of particulate matter. Estimated time until light output declines to 50 % varies depending on
Terminals DIGITAL LINK Terminals LAN Terminals USB Power Supply Power Consumption Cabinet Materials Operation noise*1 Dimensions (W x H x D) Weight*6 Operating Environment Applicable Software	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/60p signal input*4 RJ-45 x 1 for network connection, PJLink [™] (Class 2) compatible, 10Base-T/100Base-TX, Art- Net compatible USB connector (Type A) x 1 (Output 5 V/2 A) AC 100-240 V, 50/60 Hz TBD Molded plastic 30 dB (Quiet Mode) (TBD), 35 dB (Normal Mode) (TBD) 498 x 168*5 x 492 mm (19 5/8″ x 6 5/8″*5 x 19 3/8″) Approx. 16.6 kg (36.6 lbs) (TBD) Operating temperature: 0-40 °C (32-104 °F),operating humidity: 10-80 % (no condensation) (TBD) Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software *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 Average light-output value of all shipped products measured at center of screen in NORMAL Mode. *3 Aroundthis 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/m3 of

shortest position. *6 Average value. May differ depending on the actual unit.