



**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

### 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 2.2-compliant HDMI® inputs or DIGITAL LINK terminal





## PT-FRZ60

<https://eu.connect.panasonic.com/hu/en/projectors/pt-frz60-series/pt-frz60>

<b>Projector type</b>	1-Chip DLP™ projector
<b>Display method</b>	DLP™ chip x 1, DLP™ projection system
<b>Display Device -&gt; Panel size</b>	17.0 mm (0.67 in) diagonal (16:10 aspect ratio)
<b>Display Device -&gt; Number of pixels</b>	2,304,000 (1920 x 1200 pixels)
<b>Light source</b>	Laser diodes
<b>Light output *1</b>	6,000 lm
<b>Light output (ANSI)</b>	6,000 lm
<b>Light output (Center) *1 *2</b>	6,200 lm (Center)
<b>Time until light output declines to 50 %</b>	20,000 hours [NORMAL]
<b>-&gt; NORMAL *4</b>	
<b>Resolution</b>	1920 x 1200 pixels
<b>Contrast Ratio (typ.) *2</b>	20,000:1 (Full On/Full Off, Picture Mode: Dynamic, Dynamic Contrast 1, Operating Mode: Normal)
<b>Screen size (diagonal)</b>	1.02–7.62 m (40–300 in), 16:10 aspect ratio
<b>Center-to-corner zone ratio</b>	90%
<b>Lens</b>	2.0x manual zoom (throw ratio: 1.46–2.94:1), manual focus, F 2.0–3.4, f 21.5–43.0 mm
<b>Lens shift -&gt; Vertical(from center of screen)</b>	+64 %, -44 % (manual)
<b>Lens shift -&gt; Horizontal(from center of screen)</b>	+34 %, -27 % (manual)
<b>Keystone correction range</b>	Vertical: ±40 °, Horizontal: ±20 °
<b>Installation</b>	Ceiling/floor, front/rear, free 360-degree installation
<b>Terminals -&gt; HDMI™ IN</b>	HDMI™ 19-pin x 2 (Compatible with HDCP 2.3, Deep Color, 4K/60p signal input*4), CEC supported
<b>Terminals -&gt; COMPUTER IN ( D-SUB 15pin )</b>	D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR)
<b>Terminals -&gt; COMPUTER OUT ( D-SUB 15pin )</b>	D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR)
<b>Terminals -&gt; VIDEO IN</b>	Pin jack x 1 (composite video)
<b>Terminals -&gt; AUDIO IN(M3 Stereo Mini Jack)</b>	Pin jack x 1 (L, R)
<b>Terminals -&gt; AUDIO IN(Pin Jack L/R)</b>	M3 x 1/M3 x 1
<b>Terminals -&gt; AUDIO OUT(M3 Stereo Mini Jack)</b>	M3 x 1 (Variable)
<b>Terminals -&gt; SERIAL IN</b>	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)
<b>Terminals -&gt; DIGITAL LINK IN / LAN</b>	RJ-45 x 1 for network and DIGITAL LINK connections (HDBaseT™ compliant), PJLink™ (Class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.3 compatible, Deep Color compatible, 4K/60p signal input*4
<b>Terminals -&gt; LAN</b>	RJ-45 x 1 for network connection, PJLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible
<b>Terminals -&gt; USB TYPE A</b>	USB connector (Type A) x 1 (Output 5 V/2 A)
<b>Power supply</b>	AC 100–240 V, 50/60 Hz
<b>Maximum power consumption *11</b>	540 W (5.8–2.3 A)
<b>On-mode power consumption(Operating mode) -&gt; Normal *11</b>	[NORMAL] 490 W
<b>On-mode power consumption(Operating mode) -&gt; Eco *11</b>	[ECO] 385 W
<b>On-mode power consumption(Operating mode) -&gt; Quiet *11</b>	[QUIET] 385 W
<b>Standby power consumption -&gt; Normal</b>	10 W ( Standby Mode ) [ NORMAL ]
<b>Standby power consumption -&gt; ECO</b>	0.5 W ( Standby Mode ) [ ECO ]
<b>Cabinet materials</b>	Molded plastic
<b>Filter</b>	No
<b>Operation noise -&gt; Normal *2</b>	35 dB [NORMAL]
<b>Operation noise -&gt; Quiet *2</b>	30 dB [QUIET]
<b>Dimensions (W x H x D)</b>	498 x 168*5 x 492 mm (19 5/8" x 6 5/8"*5 x 19 3/8" )
<b>Dimensions -&gt; Width (including protruding parts)</b>	498 mm (19 5/8")
<b>Dimensions -&gt; Height (including protruding parts)</b>	168 mm (6 5/8")
<b>Dimensions -&gt; Depth (including lens)</b>	492 mm (19 3/8")
<b>Weight *13</b>	Approx. 16.1 kg (35.5 lbs)
<b>Operating environment -&gt; Operating temperature</b>	0–45 °C (32–113 °F)

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**Operating Environment -> Operating humidity (No condensation)** 10–80 % (no condensation)

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**Applicable software** Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software

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**Footnote Description**

1. 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].
2. 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.
3. Measurement, measuring conditions, and method of notation all comply with American National Standards Institute standards. Value is the average of all products when shipped.
4. Average light-output value of all shipped products measured at the center of the screen.
5. Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast Contents, Normal Mode, Dynamic Contrast 2, temperature 30 °C (86 °F), elevation 700 m (2,297 ft) with 0.15 mg/m<sup>3</sup> of airborne particulate matter. Estimated time until light output declines to 50 % varies depending on environment.
6. 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI®.
7. With legs at shortest position.
8. Average value. May differ depending on the actual unit.