

# Panasonic



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





## PT-FRZ60

<https://ap.pnd.panasonic.com/tw/en/pt-frz60>

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| <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 *2 *3</b>                                     | 6,000 lm   |
| <b>Light output (ANSI) *4</b>                                    | 6,000 lm   |
| <b>Light output (Center) *5</b>                                  | 6,200 lm (Center)  |
| <b>Time until light output declines to 50 %</b>                  | 20,000 hours [NORMAL]  |
| <b>-&gt; NORMAL *6</b>   |  |
| <b>Resolution</b>  | 1920 x 1200 pixels   |
| <b>Contrast Ratio (typ.) *3</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 *3</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 *7</b>                              | 540 W (5.8–2.3 A)  |
| <b>On-mode power consumption(Operating mode) -&gt; Normal *8</b> | [NORMAL] 490 W   |
| <b>On-mode power consumption(Operating mode) -&gt; Eco *8</b>    | [ECO] 385 W  |
| <b>On-mode power consumption(Operating mode) -&gt; Quiet *8</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 *3</b>                           | 35 dB [NORMAL]   |
| <b>Operation noise -&gt; Quiet *3</b>                            | 30 dB [QUIET]  |
| <b>Body Colour</b>   | PT-FRZ50B-BlackPT-FRZ50BE-BlackPT-FRZ50BD8-BlackPT-FRZ50W-WhitePT-FRZ50WE-White  |
| <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</b>  | Approx. 16.1 kg (35.5 lbs)   |

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|---|---|
| <b>Operating environment -&gt; Operating temperature *11</b>            | 0-45 °C (32-113 °F)   |
| <b>Operating Environment -&gt; Operating humidity (No condensation)</b> | 10-80 % (no condensation)   |
| <b>Applicable software</b>  | Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software   |
| <b>NFC</b>  | No  |
| <b>Terminals -&gt; SDI IN</b>   | —   |
| <b>Terminals -&gt; DVI-D IN</b>   | —   |
| <b>Terminals -&gt; DisplayPort™ IN</b>                                  | —   |
| <b>Operation noise -&gt; Eco *3</b>                                     | —   |
| <b>Gross Dimensions (W x H x D in mm)</b>                               | FRZ50W/FRZ50B/FRZ50BD8: Approx. 684 x 291 x 596 mm<br>FRZ50WEJ/FRZ50BEJ: Approx. 694 x 310 x 606 mm   |
| <b>Gross Weight (Kg)</b>  | FRZ50W/FRZ50B: 20.7 kg (45.7 lbs)<br>FRZ50WEJ/FRZ50BEJ: 22.2 kg (49.0 lbs)<br>FRZ50BD8: 20.4 kg (45.0 lbs)  |
| <b>Active 3D</b>  | No  |
| <b>SDM</b>  | No  |
| <b>EAN</b>  | PT-FRZ50W: 5025232941407<br>PT-FRZ50WEJ: 5025232941414<br>PT-FRZ50B: 5025232941421<br>PT-FRZ50BEJ: 5025232941438<br>PT-FRZ50BD8: 8887549898648  |
| <b>Footnote Description</b>   | <ol style="list-style-type: none"> <li>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].</li> <li>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.</li> <li>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.</li> <li>4. Average light-output value of all shipped products measured at the center of the screen.</li> <li>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/m3 of airborne particulate matter. Estimated time until light output declines to 50 % varies depending on environment.</li> <li>6. 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI®.</li> <li>7. With legs at shortest position.</li> <li>8. Average value. May differ depending on the actual unit.</li> </ol> |