# Panasonic
## BUSINESS

## PT-**RZ990** Series
### 1-Chip DLP™ Projectors

**AVAILABLE FROM AUGUST 2020**

*PT-RZ790/RZ790L/RZ690/RZ690L: Available from August 2020*
*PT-RZ990/RZ990L/RZ890/RZ890L: Available from September 2020*

# Compact 1-Chip DLP™ Laser Projectors Bring High Brightness and Simple Flexibility to Exhibition Spaces

Black Models

White Models

| PT-RZ990 Series | | | | |
|---|---|---|---|---|
| With supplied lens | PT-RZ990 | PT-RZ890 | PT-RZ790 | PT-RZ690 |
| Without lens | PT-RZ990L | PT-RZ890L | PT-RZ790L | PT-RZ690L |
| Light Output | 9,400 lm*1/10,000 lm (Center)*2 | 8,500 lm*1/8,800 lm (Center)*2 | 7,000 lm*1/7,200 lm (Center)*2 | 6,000 lm*1/6,200 lm (Center)*2 |
| Resolution | WUXGA | | | |

## • *Bright, Color-Rich Images in Any Environment*

The PT-RZ990 Series delivers the brightness, resolution, and color that designers need to enhance exhibits with bright, bold, and vivid pictures. SOLID SHINE Laser and Quartet Color Harmonizer enhance color-depth and white-balance accuracy for arrestingly realistic pictures even in well-lit spaces.

## • *Light, Quiet, Compact Projectors are Easy to Install*

Projectors support our 1-Chip DLP™ lenses and 4K signal input*3 via HDMI® and DIGITAL LINK, adapting to your space with 22.9 kg*4 body and 35 dB*5 operation in Normal Mode. Smart Projector Control app enhances efficiency with On/Off function, lens adjustment, touchscreen OSD navigation, and projection auto-focusing using your smartphone camera*6.

## • *Proven SOLID SHINE Laser Reliability*

Hermetically sealed DMD block, shielded laser drive, and new filterless cooling system eliminate the hassle of maintenance for 20,000 hours*7 of continuous projection, while brightness ramp and color uniformity remain linear. For extra insurance, Backup Input*8 switches to a failback if primary video is interrupted.

*1 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 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 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI®. *4 RZ790/690 only including standard lens. RZ990/890 weighs 23.1 kg including standard lens. *5 RZ690 only. RZ790 operates at 36 dB in Normal Mode, while RZ890 and RZ990 operate at 41 dB in Normal Mode, 37 dB in Quiet1 Mode, and 35 dB in Quiet2 Mode. *6 Projector auto-focus may not be supported on some mobile devices. *7 Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast Contents, NORMAL Mode, Dynamic Contrast [3], temperature 30 °C (86 °F), elevation 700 m (2,297 ft) with 0.15 mg/m³ of airborne particulate matter. Estimated time until brightness decreases to 50 % will vary depending on environment and usage conditions. Parts other than the light source may require replacement before 20,000 hours, and checkup is recommended around this time. *8 Combination of primary/backup input terminals is fixed. Backup Input function enabled when input signal to primary/backup terminals is the same.

## Specifications (Tentative)

| Model | With supplied lens | PT-RZ990 | PT-RZ890 | PT-RZ790 | PT-RZ690 |
|---|---|---|---|---|---|
| | Without lens | PT-RZ990L | PT-RZ890L | PT-RZ790L | PT-RZ690L |
| Projector type | | 1-Chip DLP™ projector | | | |
| DLP™ chip | Panel size | 17.0 mm (0.67 in) diagonal (16:10 aspect ratio) | | | |
| | Display method | DLP™ chip x 1, DLP™ projection system | | | |
| | Number of pixels | 2,304,000 (1920 x 1200 pixels) | | | |
| Light source | | Laser diodes | | | |
| Light output | | 9,400 lm*¹/10,000 lm (Center)*² | 8,500 lm*¹/8,800 lm (Center)*² | 7,000 lm*¹/7,200 lm (Center)*² | 6,000 lm*¹/6,200 lm (Center)*² |
| Time until light output declines to 50 %*³ | | 20,000 hours (NORMAL)/24,000 hours (ECO) | | | |
| Resolution | | 1920 x 1200 pixels | | | |
| Contrast ratio*¹ | | 10,000:1 (Full On/Full Off, Dynamic Contrast Mode: 3) | | | |
| Screen size (diagonal) | | 1.27–15.24 m (50–600 in), 1.27–5.08 m (50–200 in) with ET-DLE055, 2.54–8.89 m (100–350 in) with ET-DLE035/ET-DLE030, 2.54–10.16 m (100–400 in) with ET-DLE020, 16:10 aspect ratio | | | |
| Center-to-corner zone ratio*¹ | | 90 % | | | |
| Lens | | With supplied lens: Powered zoom (throw ratio 1.71–2.41:1), powered focus F 1.7–1.9, f 25.6–35.7 mm<br>Without lens: Optional powered zoom/focus lenses | | | |
| Lens shift*⁴ (From the origin point of the lens mounter) | Vertical | +50 %, -16 % (+40 %, -16 % with ET-DLE060) (powered) | | | |
| | Horizontal | +30 %, -10 % (+10 %, -20 % with ET-DLE020, +19 %, -10 % with ET-DLE060, +28 %, -10 % with ET-DLE105/ET-DLE085) (powered) | | | |
| Keystone correction range | | Vertical: ±40 ° (±5 ° with ET-DLE020, ±16 ° with ET-DLE060, ±22 ° with ET-DLE105/ET-DLE085/ET-DLE055, +5 ° with ET-DLE035/ET-DLE030),<br>Horizontal: ±15 ° (±10 ° with ET-DLE060) (cannot be operated with ET-DLE035/ET-DLE030/ET-DLE020) | | | |
| Keystone correction range with optional ET-UK20 Upgrade Kit | | Vertical: ±45 ° (±16 ° with ET-DLE060, ±40 ° with ET-DLE150/ET-DLE250/ET-DLE170, ±22 ° with ET-DLE105/ET-DLE085/ET-DLE055),<br>Horizontal: ±40 ° (±10 ° with ET-DLE060, ±15 ° with ET-DLE105/ET-DLE085/ET-DLE055)<br>When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of 55 °. | | | |
| Installation | | Ceiling/floor, front/rear, free 360-degree installation | | | |
| Terminals | SDI IN | BNC x 1: 3G/HD/SD-SDI input | | | |
| | HDMI IN | HDMI 19-pin x 1 (Compatible with HDCP 2.2, Deep Color, 4K/60p signal input*⁵) | | | |
| | DVI-D IN | DVI-D 24-pin x 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only) | | | |
| | RGB 1 IN | RGB x 1 (BNC x 5): RGB/YPʙPʀ/YCʙCʀ/YC/VIDEO | | | |
| | RGB 2 IN | D-sub HD 15-pin (female) x 1: RGB/YPʙPʀ/YCʙCʀ | | | |
| | SERIAL/MULTI PROJECTOR SYNC IN | D-sub 9-pin (female) x 1 for external control (RS-232C compliant) | | | |
| | SERIAL/MULTI PROJECTOR SYNC OUT | D-sub 9-pin (male) x 1 for link control | | | |
| | REMOTE 1 IN | M3 x 1 for wired remote control | | | |
| | REMOTE 1 OUT | M3 x 1 for link control (for wired remote control) | | | |
| | REMOTE 2 IN | D-sub 9-pin (female) x 1 for external control (parallel) | | | |
| | 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*⁵ | | | |
| | LAN | RJ-45 x 1 for network connection, PJLink™ (Class 2) compatible, 10Base-T/100Base-TX, Art-Net compatible | | | |
| Power supply | | AC 100–240 V, 50/60 Hz | | | |
| Power consumption | | 920 W (TBD) | 900 W (TBD) | 720 W (TBD) | 700 W (TBD) |
| Cabinet materials | | Molded plastic | | | |
| Operation noise*¹ | | 41 dB (Normal) / 37 dB (Quiet1) / 35 dB (Quiet2) | | 36 dB (Normal) | 35 dB (Normal) |
| Dimensions (W x H x D) | | With supplied lens: 498 x 200*⁶ x 581 mm (19 ¹⁹/₃₂″ x 7 ⁷/₈″*⁶ x 22 ⁷/₈″)<br>Without lens: 498 x 200*⁶ x 538 mm (19 ¹⁹/₃₂″ x 7 ⁷/₈″*⁶ x 21 ³/₁₆″) | | | |
| Weight*⁷ | | With supplied lens: Approx. 23.1 kg (50.9 lbs)<br>Without lens: Approx. 22.3 kg (49.2 lbs) | | With supplied lens: Approx. 22.9 kg (50.5 lbs)<br>Without lens: Approx. 22.1 kg (48.7 lbs) | |
| Operating environment | | Operating temperature: 0–45 °C (32–113 °F)*⁸, operating humidity: 10–80 % (no condensation) | | | |
| Applicable software | | Logo Transfer Software, Multi Monitoring & Control Software, Geometry Manager Pro (ET-UK20 Upgrade Kit, ET-CUK10 Auto Screen Adjustment Kit), Smart Projector Control for iOS/Android™ | | | |

*1 Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 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 Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [3], under conditions with 30 °C (86 °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 environment. *4 Lens shift is not supported on the ET-DLE055, and the optical axis is fixed with the ET-DLE035/DLE030. *5 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals: DIGITAL LINK/HDMI ®. *6 With legs at shortest position. *7 Average value. May differ depending on the actual unit. *8 The light output may be reduced to protect the projector depending on the temperature or altitude of operational environment.

## Optional Accessories

- **Fixed-Focus Lens**
  ET-DLE030 (0.380:1) / ET-DLE035 (0.380:1) / ET-DLE055 (0.785:1)
- **Zoom Lens**
  ET-DLE020 (0.280–0.299:1) / ET-DLE060 (0.600–0.801:1) /
  ET-DLE085 (0.782–0.977:1) / ET-DLE105 (0.978–1.32:1) /
  ET-DLE150 (1.30–1.89:1) / ET-DLE170* (1.71–2.41:1) /
  ET-DLE250 (2.27–3.62:1) / ET-DLE350 (3.58–5.45:1) /
  ET-DLE450 (5.36–8.58:1)
  *The ET-DLE170 is equivalent of supplied lens. The availability of the ET-DLE170 varies depending on the country.*

- **Ceiling Mount Bracket**
  ET-PKD130H (6-axis, for high ceiling)
  ET-PKD120H (for high ceiling)
  ET-PKD120S (for low ceiling)
  *Note: Use ET-PKD120H, ET-PKD120S, and ET-PKD130H in combination with ET-PKD130B. ET-PKD130H is recommended when used with ET-DLE030/ET-DLE035.*
- **Projector Mount Bracket**
  ET-PKD130B
- **DIGITAL LINK Switcher**
  ET-YFB200G
  *Note: ET-YFB200G is not compatible with 4K signals.*

- **Digital Interface Box**
  ET-YFB100G
  *Note: ET-YFB100G is not compatible with 4K signals.*
- **Geometry Manager Pro Software Upgrade Kit**
  ET-UK20
- **Auto Screen Adjustment Upgrade Kit**
  ET-CUK10/ET-CUK10P
- **Early Warning Software**
  ET-SWA100 Series
  *Note: Part number suffix may differ depending on the license type.*
  *Multi Monitoring & Control Software Ver. 2.0 or later is required. Please download from the following website: www.panasonic.net/cns/projector/download/application/*

# Panasonic®

**For more information about Panasonic projectors, please visit:**
Projector Global Website – **panasonic.net/cns/projector**
Facebook – **www.facebook.com/panasonicprojectoranddisplay**
YouTube – **www.youtube.com/user/PanasonicProjector**

**All information included here is valid as of June 2020.**