# Panasonic **BUSINESS**

PT-MZ16K Series

**CD** Projectors

PT-MZ16KL PT-MZ13KL PT-MZ10KL

NOVEMBER / 2019



SOLID SHINE LCD Boosts Brightness While Reducing Your Workload for an Effortless Learning Experience

## Main Features

# [] Clear, Long-Lasting Viewing for Efficiency and Comfort

Harnessing a Multi-Laser Drive Engine, 1-inch LCDs, and Pure White Generator, viewers can enjoy vivid images at up to  $16,000 \text{ lm}^{*1}$ .

# **[]**2 | High Reliability for **Fewer Callouts**

Our first LCD projectors featuring liquid-cooled lasers, discrete sealed phosphor-wheel cooling, and backup-input switching maintain reliable projection in tough conditions.

# **[]** 3 Simplified Installation Streamlines Your Workflow

LCD projectors are first with updated Smart Projector Control Ver. 2.0\*2 app and Geo Pro software. 4K/60p signal input\*3 and new lenses seamlessly integrate projectors into any space and A/V infrastructure.



DIGITAL

Geo. Pro

**LINK** 

# PT-MZ16K Series

|              | PT-MZ16KL | PT-MZ13KL | PT-MZ10KL |  |
|--------------|-----------|-----------|-----------|--|
| Light Output | 16,000 lm | 13,000 lm | 10,000 lm |  |
| Resolution   | WUXGA     |           |           |  |

Black Models

\*1 Brightness is for PT-MZ16KL. 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 For information on Smart Projector Control app for iOS and Android<sup>®</sup>, please see ou website at www.panasonic.net/cns/projector/products/smartpicontrol \*3 4K signals are converted to the projector's resolution (1920 x 1200 pixels) upon projection. Supported terminals comprise DIGITAL LINK/HDMI®.

| SOLID<br>SHING |  |
|----------------|--|
| LASCR          |  |





## Pure White Generator for High Brightness and Color

Pure White Generator arrests brightness loss with a patented multi-reflection engine that more efficiently gathers blue laser light. This helps to enhance color accuracy for natural, true-to-life color expression.

### Liquid-Cooled Multi-Laser Drive Engine with Failover

Multi-Laser Drive Engine is backed by new liquid-cooling and laser failover circuitry. If a laser diode fails, only the affected series is bypassed and not the entire module. Projection continues with imperceptible brightness loss. Enjoy superior reliability and peace of mind.

## **Reliable Phosphor-Wheel Design**

The PT-MZ16K Series has dedicated Panasonicoriginal sealed cooling for the heat-resistant phosphor wheel. The assembly is extensively shielded to protect against dust intrusion for long-life brightness.

# Supports Geo Pro Software

Introducing the first LCD projectors to support Geometry Manager Pro. The software expands on the projector's built-in adjustments with Free Grid geometry functions. Optional upgrade kits add creative masking (ET-UK20) and Auto Screen Adjustment for multiple curved or planar screens via a compatible camera (ET-CUK10).

#### Other Features -

- Smart Projector Control Ver. 2.0 features NFC function\* and projector auto-focus via smartphone camera
- Information Monitor screen
- displays operational data
- Flexible backup input-switching
- function for any two inputsOptional lenses eliminate
- throw-ratio gaps
- Lenses feature sensor-based AF0 smart auto-focus
- Separate DIGITAL LINK and LAN terminals
- 3,000,000:1 Dynamic Contrast
- Daylight View 3 and Detail Clarity Processor 4

\* In some countries, projector activation is required to enable NFC function. Visit www.panasonic.net/cns/projector/products/smartpjcontrol/regional.html for a list of countries where an optional ET-NUK10 Upgrade Kit can be obtained to enable NFC function. If NFC function is disabled, the app's NFC screen is displayed, but reading/writing data is not possible. Requires iPhone 7 or later and IOS 11 or later. Writing capability is not supported on iOS devices.

#### Specifications

| Model           |                                     | PT-MZ16KL  | PT-MZ13KL                      | PT-MZ10KL                      |  |  |  |
|-----------------|-------------------------------------|--|--------------------------------|--------------------------------|--|--|--|
| Projector type  |                                     | LCD projectors   |                                |                                |  |  |  |
| LCD panel       | Panel size                          | 25.4 mm (1.0 in) diagonal (16:10 aspect ratio)   |                                |                                |  |  |  |
|                 | Pixels                              | 2,304,000 (1920 x 1200) pixels x 3   |                                |                                |  |  |  |
| Light source    |                                     | Laser diodes   |                                |                                |  |  |  |
| Light output*1  |                                     | 16,000 lm  | 13,000 lm                      | 10,000 lm                      |  |  |  |
| Time until ligh | t output declines to 50 %*2         | 20,000 hours (NORMAL)  |                                |                                |  |  |  |
| Resolution      |                                     | 1920 x 1200 pixels   |                                |                                |  |  |  |
| Contrast ratio  | *1                                  | 3,000,000:1 (Full On/Full Off) * With [Dynamic Contrast] set to [3]  |                                |                                |  |  |  |
| Screen size [d  | liagonal]                           | 2.03-12.7 m (80-500 in), 16:10 aspect ratio  |                                |                                |  |  |  |
| Center-to-cor   | ner zone ratio*1                    | 85 %   |                                |                                |  |  |  |
| Lens            |                                     | Optional powered zoom lenses   |                                |                                |  |  |  |
| Lens shift      | Vertical (from center of screen)    | ±60 % (±40 % with ET-EMW200, ±50 % with ET-EMW300) (powered)   |                                |                                |  |  |  |
|                 | Horizontal (from center of screen)  |  |                                |                                |  |  |  |
| Keystone corr   |                                     | Vertical: ±40° (±14° with ET-EMW200/ET-EMW300, ±22° with ET-EMW400/ET-EMW500), Horizontal: ±15° (±8° with ET-EMW200/ET-EMW300)   |                                |                                |  |  |  |
| Keystone corr   | ection range<br>ET-UK20 Upgrade Kit | Vertical: ±40° (±14° with ET-EMW200/ET-EMW300, ±22° with ET-EMW400/ET-EMW500), Horizontal: ±40° (±8° with ET-EMW200/ET-EMW300, ±15° with ET-EMW400/ET-EMW500)<br>When [VERTICAL KEYSTONE] and [HORIZONTAL KEYSTONE] are used simultaneously, correction cannot be made exceeding a total of 55°.   |                                |                                |  |  |  |
| Terminals       | SDI IN                              | The first of the second s |                                |                                |  |  |  |
|                 | HDMLIN                              | HDMI 19-pin x 1 (Compatible with HDCP 2.2, Deep Color, 4K/60p signal input*)   |                                |                                |  |  |  |
|                 | DVI-D IN                            | DVI-D 24-pin x1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only)  |                                |                                |  |  |  |
|                 | RGB IN                              | S-sub-HD 15-pin (female) x 1 (RGP/VPBP/YCBCR)  |                                |                                |  |  |  |
|                 | SERIAL/MULTI PROJECTOR SYNC IN      | D-sub-p-in (female) x1 for external control (RS-232C compliant)  |                                |                                |  |  |  |
|                 | SERIAL/MULTI PROJECTOR SYNC OUT     | D-sub 9-pin (male) x 1 for link control (RS-232C compliant)  |                                |                                |  |  |  |
|                 | REMOTE 1 IN                         | D-sub 9-pin (female) × 1 for external control (parallel)   |                                |                                |  |  |  |
|                 | REMOTE 2 IN                         | M3 x 1 for wired remote control  |                                |                                |  |  |  |
|                 | REMOTE 2 OUT                        | M3 x 1 for link control (for wired remote control)   |                                |                                |  |  |  |
|                 | DIGITAL LINK                        | RJ-45 x 1 for network and DIGITAL LINK connection (video/network/serial control) (HDBaseT™ compliant), 100Base-TX (Compatible with PJLinK™ [Class 2], Art-Net,<br>HDCP 2.2, Deep Color, 4K/60p signal input*)  |                                |                                |  |  |  |
|                 | LAN                                 | RJ-45 x 1 for network connection, 10Base-T, 100Base-TX (Compatible with PJLink <sup>™</sup> [Class 2], Art-Net)  |                                |                                |  |  |  |
|                 | DC OUT                              | USB Connector (Type A) x 1 (Output 5 V/2 A)  |                                |                                |  |  |  |
| Power supply    |                                     | AC 100–240 V, 50/60 Hz   |                                |                                |  |  |  |
| Power consur    | nption                              | 1,050 W  | 800 W                          | 640 W                          |  |  |  |
| Filter          |                                     | Included (Estimated maintenance time: approx. 20,000 hours)  |                                |                                |  |  |  |
| Operation noi:  | se*1                                | 38 dB (NORMAL) / 32 dB (Quiet)   | 35 dB (NORMAL) / 30 dB (Quiet) | 35 dB (NORMAL) / 30 dB (Quiet) |  |  |  |
| Dimensions (\   | W x H x D)                          | 650 x 211*4 x 440 mm (25 <sup>19</sup> /32" x 8 <sup>5</sup> /16 <sup>**4</sup> x 17 <sup>21</sup> /64") (Without lens)  |                                |                                |  |  |  |
| Weight*5        |                                     | Approx. 22.3 kg (49.2 lbs)   |                                |                                |  |  |  |
| Operating env   | ironment                            | Operating temperature: 0-45 °C (32-113 °F)*6; Operating humidity: 10-80 % (no condensation)  |                                |                                |  |  |  |
| Applicable so   | ftware                              | Logo Transfer Software, Multi Monitoring & Control Software, Early Warning Software, Geometry Manager Pro (ET-UK20 Upgrade Kit, ET-CUK10 Auto Screen Adjustment Kit),<br>Smart Projector Control for iOS/Android <sup>™</sup>  |                                |                                |  |  |  |

<sup>11</sup> Measurement, measuring conditions, and method of notation all comply with ISO/EC 21118: 2012 international standards. Value is average of all products when shipped. <sup>12</sup> Around this time, light output will have decreased by approximately 50 %. IEC62087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast (2), under conditions with 35 °°C (95 °F). 700 m (2,297 ft) above sea level, and 0.15 m grin\* of particulate matter. Estimated time until light output declines to 50 % varies depending on environment. <sup>\*3</sup> 4K signals are converted to the projector's resolution (1920 x 1200 pinels) upon projection. Supported terminals: ICIATL LUNK/MDML \*\* With legs at shortest position. <sup>\*5</sup> Average value. May differ depending on the actual unit. <sup>\*6</sup> 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.

#### **Optional Accessories**

#### • Zoom Lens

ET-EMW200 (0.480–0.550:1) (Available from April 2020) / ET-EMW300 (0.550–0.690:1) (Available from January 2020) / ET-EMW400 (0.690–0.950:1) / ET-EMW500 (0.950–1.36:1) (Available from January 2020) / ET-EMS600 (1.35–2.10:1) / ET-EMT700 (2.10–4.14:1) (Available from December 2019) / ET-EMT800 (4.14–7.40:1) (Available from January 2020)

#### Ceiling Mount Bracket

- ET-PKD120H (for high ceilings) / ET-PKD120S (for low ceilings) /
- ET-PKD130H (with 6-axis adjustment mechanism)
- Attachment for Ceiling Mount Bracket
- ET-PKE301B



- Replacement Filter
- ET-RFM100
- 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 FT-UK20
  - ET-UK2U

 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: https://panasonic.net/cns/projector/download/application/

- ograde Kit NFC Upgrade Kit ET-NUK10
  - Note: Product availability may vary by country or region