A Bright 10,600 lm* in a Compact Body

* The PT-DW90EX has 9,600 lm of brightness.
Higher Brightness, Picture Quality and Reliability—
All in a Compact Body

The Panasonic PT-DZ110X Series of 3-chip DLP™ projectors combine high levels of picture quality, reliability, function and system expandability into a compact body. Packed with original, advanced Panasonic technology, these projectors produce a full 10,600 lumens of brightness, and their dual lamp system and Auto Cleaning Filter (ACF) greatly boost reliability. A unique multi-unit brightness control function also gives these projectors the flexibility to meet a wide range of applications.

<table>
<thead>
<tr>
<th>Model</th>
<th>Brightness</th>
<th>Resolution</th>
<th>Input</th>
<th>Geometric Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-DZ110XE</td>
<td>10,600 lm</td>
<td>WUXGA (1920 × 1200)</td>
<td>HD/SD-SDI input</td>
<td>Geometric adjustment</td>
</tr>
<tr>
<td>PT-DS100XE</td>
<td>10,600 lm</td>
<td>SXGA+ (1400 × 1050)</td>
<td>HD/SD-SDI input</td>
<td>Geometric adjustment</td>
</tr>
<tr>
<td>PT-DW90XE</td>
<td>9,600 lm</td>
<td>WXGA (1366 × 768)</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
**Brightness & Picture Quality**

**Compact Yet Bright**
Panasonic’s original dual-lamp system, with its 355-W lamp, has helped to make the body approximately 49% smaller than Panasonic’s original PT-D10000 Series, while providing a full 10,800 lm\(^1\) of brightness.

**Dynamic Iris for a High 10,000:1*2 Contrast Ratio**
Panasonic’s Dynamic Iris uses a scene-linking aperture mechanism to achieve a remarkable 10,000:1*2 contrast without lowering its high brightness. This helps to reproduce deeper, richer blacks, and provides images with more detailed textures.

**Detail Clarity Processor 3 Brings Depth and Clarity to Details**
The frequency of the video signal is analysed for each scene, and distribution data is extracted for the ultrahigh, high, medium and low range frequencies. This unique Panasonic image correction circuit optimally enhances each area of the screen. High-precision detection is applied from 2-dimensional horizontal/vertical data to produce more natural, lifelike images with high definition.

**DICOM Simulation Mode**\(^3\)
This imaging mode is similar to DICOM part 14, which is a medical imaging standard. It reproduces X-ray images with remarkable clarity. It also allows information to be shared by many viewers on a large screen, such as during conferences or training courses.

**Full-HD Ready WUXGA Resolution** (PT-DZ110XE)
In response to the increasing popularity of wide-screen image viewing, including Blu-ray content, the PT-DZ110XE features native WUXGA resolution for full-HD viewing. This brings you lifelike projection of intricate, highly detailed images.

**Advanced Technologies for Excellent Image Quality**
- 3D colour management system
- Full 10-bit image processing
- Progressive cinema scan (3:2 pulldown)
- Dynamic sharpness control
- Digital noise reduction
- IP conversion
- AI scene control
- 2:2 pulldown mode
- 3D V/C separation
- sRGB compatibility

**Reliability & Stability**

**Panasonic’s Original Dual Lamp System**
This system eliminates the interruption if a lamp should fail (in dual-lamp operation mode). The Lamp Relay mode also operates the lamps alternately to enable 24/7 projection.

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Brightness (lumens)</th>
<th>Lamp replacement cycle (hours)*4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two lamps (high)</td>
<td>10,600</td>
<td>3,000</td>
</tr>
<tr>
<td>Two lamps (low)</td>
<td>8,480</td>
<td>4,000</td>
</tr>
<tr>
<td>One lamp (high)</td>
<td>5,300</td>
<td>6,000</td>
</tr>
<tr>
<td>One lamp (low)</td>
<td>4,240</td>
<td>8,000</td>
</tr>
</tbody>
</table>

**Auto Cleaning Filter Reduces Maintenance Hassles**
Panasonic’s proprietary Auto Cleaning Filter (ACF) automatically exposes a clean filter surface when it senses that the filter is clogged. The ACF also brushes away dust that adheres to the filter, which helps prevent clogging that can impair operation or cause malfunction. This helps maintain the superior dust-collecting performance of the Micro Cut Filter, which is a highly efficient electrostatic filter. As a result, the filter does not need to be replaced for up to 10,000 hours*5 or more, greatly reducing the hassle of maintenance.

**Optional Smoke Cut Filter ET-SFD310**
The projector can be equipped with an optional, extra-strong air filter to prevent the entry of smoke, such as those used for special effects at events and stage performances.

**Quiet 37-dB*6 Operation**
An original cooling system enhances the compact body and enables the projector to operate at a silent 37 dB.

**NOTES**
1. The PT-DW90XE has 9,600 lm of brightness.
2. In Dynamic Iris mode 3.
3. This product is not a medical instrument. Do not use it for actual medical diagnosis.
4. The usage environment influences the duration of the filter.
5. In dual lamp operation, with lamp low mode.
6. Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
## Enhanced Installation Flexibility

### Flexible Installation
The wide adjustment range of the powered horizontal/vertical lens shift function ensures virtually distortion-free images and adds convenience and versatility. It lets you easily make adjustments with the remote control. The unit can also be rotated 360° vertically. This means you can install it at any angle you want, to accommodate different installation conditions. The lens-centred design also contributes to easy installation.

### Geometric Adjustment for Specially Shaped Screens
This function adjusts the image for projection onto spherical, cylindrical and other specially shaped screens. You can make the adjustment easily using just the remote control, with no external equipment needed. Used together with the multi-screen support system, Geometric Adjustment expands your application possibilities, letting you create a wide range of image effects for digital signage, concerts, performances and other special events.

### Multi-Screen Support System
**Seamlessly Connects Multiple Screens**
- **Edge Blending**
  The edges of adjacent screens can be blended and their luminance controlled.
- **Color Matching**
  This function corrects for slight variations in the colour reproduction range of individual projectors. The PC software assures easy, accurate control.
- **Multi-Screen Processor**
  The PT-DZ110X Series can project large, multi-screen images without any additional equipment. Up to 100 units (10 x 10) can be edge-blended at a time.

### Multi-Unit Brightness Control
This function automatically corrects the brightness fluctuations that occur over time in the individual projectors of a multi-screen system. A maximum of eight projectors can be controlled by connecting each other via a hub, and this can be increased to a maximum of 2,048 projectors by using "Multi Projector Monitoring & Control Software Ver. 2".

### A Wide Selection of Lenses (optional)
Choose from a wide lineup of lenses for your system, including short-throw, long-throw zoom and fixed-throw lenses for rear projection use. The additional lenses make it easy to adapt your projector to the installation site. The lenses attach and detach with one-touch ease.

### Multiple Terminals with HD-SDI Compatibility
The PT-DZ110X Series has an array of terminals, including a DVI-D (HDCP compliant), to support a broad range of projection needs. Using the serial terminal (RS-232C), it is possible to connect and operate AMX and Crestron control systems with ease. In addition, the PT-DZ110XE and PT-DS100XE accommodate the HD/SD-SDI input signals that are widely used in broadcasting.

### Web Browser Control
The PT-DZ110X Series can be easily operated remotely over a LAN network, because it is all done using the computer’s familiar web browser. Furthermore, the projector sends an e-mail message to notify the operator when an error has occurred, or a lamp needs to be replaced.

### Direct Power Off
The cooling fan continues to operate even when the main power switch is turned off after projection is finished. This also allows the power to be turned off by directly switching off the room’s main breaker for systems, such as ceiling mounted systems, where the main power switch cannot be reached.

### Scheduling Function
Scheduled operation is possible using the built-in timer function, without having to use a PC and software. For example, when using the projector for digital signage in a store, it can be set to operate with two lamps in the daytime and one lamp at night.

### NOTES
- *7 Featured on the PT-DZ110XE and PT-DS100XE only.
- *8 Featured on the PT-DZ110XE and PT-DS100XE only.
The PT-DZ110X Series has attained a low stand-by power level of 0.3 W**, which is a top-class level for the projector industry. It also helps to slash running costs, and reduces environmental impact.

Other Valuable Features
- Operation in temperatures up to 45°C (113°F)**
- Picture in picture**
- Mechanical lens shutter
- 30km long range wireless remote control
- Anti-theft features with chain opening
- ID assignment for up to 64 units
- Built-in test pattern
- Selectable 9-language on-screen menu (English, German, French, Spanish, Italian, Japanese, Russian, Japanese, Chinese, Korean)

---

**Standby Mode: Eco**

The PT-DZ110X Series has attained a low stand-by power level of 0.3 W**, which is a top-class level for the projector industry. It also helps to slash running costs, and reduces environmental impact.

**Other Valuable Features**
- Operation in temperatures up to 45°C (113°F)**
- Picture in picture**
- Mechanical lens shutter
- 30km long range wireless remote control
- Anti-theft features with chain opening
- ID assignment for up to 64 units
- Built-in test pattern
- Selectable 9-language on-screen menu (English, German, French, Spanish, Italian, Japanese, Russian, Japanese, Chinese, Korean)

---

**Ecology-Conscious Design**

Panasonic works from every angle to minimize environmental impact in the product design, production and delivery processes, and in the performance of the prod-

---

**Projection Distance**

**PT-DZ110XE (16:10 aspect ratio)**

<table>
<thead>
<tr>
<th>Image size</th>
<th>Throw distance 1</th>
<th>Throw distance 2</th>
<th>Throw distance 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET-DZ110L6</td>
<td>109.40 m (357.8 ft)</td>
<td>57.11 m (188.1 ft)</td>
<td>301.5 m (989.4 ft)</td>
</tr>
<tr>
<td>ET-DZ110L6</td>
<td>109.40 m (357.8 ft)</td>
<td>57.11 m (188.1 ft)</td>
<td>301.5 m (989.4 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>122.51 m (400.1 ft)</td>
<td>91.79 m (299.5 ft)</td>
<td>594.1 m (1947.1 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>122.51 m (400.1 ft)</td>
<td>91.79 m (299.5 ft)</td>
<td>594.1 m (1947.1 ft)</td>
</tr>
<tr>
<td>ET-DZ110L6</td>
<td>109.40 m (357.8 ft)</td>
<td>57.11 m (188.1 ft)</td>
<td>301.5 m (989.4 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>122.51 m (400.1 ft)</td>
<td>91.79 m (299.5 ft)</td>
<td>594.1 m (1947.1 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>122.51 m (400.1 ft)</td>
<td>91.79 m (299.5 ft)</td>
<td>594.1 m (1947.1 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>122.51 m (400.1 ft)</td>
<td>91.79 m (299.5 ft)</td>
<td>594.1 m (1947.1 ft)</td>
</tr>
</tbody>
</table>

**PT-D5100XE (4:3 aspect ratio)**

<table>
<thead>
<tr>
<th>Image size</th>
<th>Throw distance 1</th>
<th>Throw distance 2</th>
<th>Throw distance 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET-DZ110L6</td>
<td>99.8 m (327.1 ft)</td>
<td>51.2 m (167.7 ft)</td>
<td>296.4 m (971.7 ft)</td>
</tr>
<tr>
<td>ET-DZ110L6</td>
<td>99.8 m (327.1 ft)</td>
<td>51.2 m (167.7 ft)</td>
<td>296.4 m (971.7 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>112.08 m (366.7 ft)</td>
<td>77.92 m (255.2 ft)</td>
<td>468.8 m (1536.9 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>112.08 m (366.7 ft)</td>
<td>77.92 m (255.2 ft)</td>
<td>468.8 m (1536.9 ft)</td>
</tr>
<tr>
<td>ET-DZ110L6</td>
<td>99.8 m (327.1 ft)</td>
<td>51.2 m (167.7 ft)</td>
<td>296.4 m (971.7 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>112.08 m (366.7 ft)</td>
<td>77.92 m (255.2 ft)</td>
<td>468.8 m (1536.9 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>112.08 m (366.7 ft)</td>
<td>77.92 m (255.2 ft)</td>
<td>468.8 m (1536.9 ft)</td>
</tr>
</tbody>
</table>

**PT-DV900XE (16:9 aspect ratio)**

<table>
<thead>
<tr>
<th>Image size</th>
<th>Throw distance 1</th>
<th>Throw distance 2</th>
<th>Throw distance 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET-DZ110L6</td>
<td>102.7 m (336.9 ft)</td>
<td>55.6 m (182.4 ft)</td>
<td>290.4 m (952.1 ft)</td>
</tr>
<tr>
<td>ET-DZ110L6</td>
<td>102.7 m (336.9 ft)</td>
<td>55.6 m (182.4 ft)</td>
<td>290.4 m (952.1 ft)</td>
</tr>
<tr>
<td>ET-DZ110E8</td>
<td>114.81 m (377.0 ft)</td>
<td>81.99 m (268.7 ft)</td>
<td>499.2 m (1639.0 ft)</td>
</tr>
<tr>
<td>ET-DZ110E10</td>
<td>123.2 m (402.7 ft)</td>
<td>94.7 m (310.3 ft)</td>
<td>583.8 m (1914.0 ft)</td>
</tr>
<tr>
<td>ET-DZ110E20</td>
<td>141.5 m (463.0 ft)</td>
<td>114.7 m (376.8 ft)</td>
<td>709.5 m (2328.4 ft)</td>
</tr>
</tbody>
</table>

---

**Dimensions**

Unit: mm (inch)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>530</th>
<th>548.5</th>
<th>25.5 (inch)</th>
</tr>
</thead>
</table>

---

**NOTES**

*9 When the STANDBY MODE is set to eco, network functions such as power on over the LAN network will not operate, and the serial output terminal cannot be used. Also, only certain commands can be received for external control using the serial terminal.

*10 With the STANDBY MODE set to ECO, the operating temperature is 0°C to 40°C (32°F to 104°F) when the fan control is set to High Altitude mode (for over 1,400 m (4,593 ft) to 2,700 m (8,858 ft) above sea level).

*12 This function cannot be used with some input signals and selected inputs.
### Specifications

#### Model
- **PT-DZ110XE**
- **PT-D5100XE**
- **PT-DW80XE**

#### Power supply
- 220~240 V AC, 50/60 Hz
- 220~240 V AC, 4.8 A, 50/60 Hz
- 220~240 V AC, 4.8 A, 50/60 Hz

#### Power consumption
- 920 W (980 VA at 240 V) (0.3 W with standby mode set to con*2) 8 W with standby mode set to normal. Both with fan stopped.
- 900 W (950 VA at 240 V) (0.3 W with standby mode set to con*2) 8 W with standby mode set to normal. Both with fan stopped.
- 21.6 mm (0.85 in) diagonal (16:9 aspect ratio) DLP® chip x 3 (R, G, B). DLP® projection system 1,470,800 (1,400 x 1,050) x 3, total of 4,410,000 pixels

#### DLP® chip
- Panel size
- Display method
- Pixels
- 24.4 mm (0.98 in) diagonal (16:10 aspect ratio) DLP® chip x 3 (R, G, B). DLP® projection system 3,204,000 (1,920 x 1,200) x 3, total of 9,612,000 pixels
- 24.1 mm (0.95 in) diagonal (4:3 aspect ratio) DLP® chip = 3 (R, G, B). DLP® projection system 1,470,800 (1,400 x 1,050) x 3, total of 4,410,000 pixels

#### Lens
- Optional powered zoom/focus lenses
- Weight and dimensions shown are approximate. Specifications are subject to change without notice. This model may be subject to export regulations. All other trademarks are the property of their respective trademark owners. Projection images simulated. DLP, DLP logo and DLP projection system are trademarks or registered trademarks of Texas Instruments. The PJLink trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. © 2012 Panasonic Corporation All rights reserved.

#### Lamp
- 355 W UMH lamp x 2 (dual lamp system)
- Regulation. All other trademarks are the property of their respective trademark owners. Projection images simulated. DLP, DLP logo and DLP projection system are trademarks or registered trademarks of Texas Instruments. The PJLink trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. © 2012 Panasonic Corporation All rights reserved.

#### Screen size (diagonal)
- 1.78~15.24 m (70~600 in) (16:10 aspect ratio)
- 1.78~15.24 m (70~600 in) (4:3 aspect ratio)
- 1.78~15.24 m (70~600 in) (16:9 aspect ratio)

#### Brightness
- 10,600 lm (dual lamp mode, high mode)
- 6,900 lm (dual lamp, high mode)

#### Centre-to-corner uniformity
- 90 %

#### Contrast
- 10,000:1 (full on/full off, in dynamic iris 3 mode)

#### Resolution
- 1,920 x 1,200 pixels
- Image quality will be decreased when using modes lower than this resolution.

#### Scanning frequency
- SD: 50/60 Hz
- HD: 50/60 Hz
- SDI: 50/60 Hz
- HDMI: 50/60 Hz
- DVI: 50/60 Hz
- RGB: 50/60 Hz
- VIDEO: 50/60 Hz
- S-VIDEO: 50/60 Hz

#### Linear luminance response
- 1080/24p: ±1 % from centre of screen (powered)
- S-SDI: ±4 % from centre of screen (powered)
- SDI: ±2 % from centre of screen (powered)
- 1080/50i: ±3 % from centre of screen (powered)
- 1080/25i: ±5 % from centre of screen (powered)
- HDTV: ±1 % from centre of screen (powered)

#### Temperature
- 0°C to 40°C (32°F to 104°F)

#### Humidity
- 20 to 90% (non-condensation)

#### Altitude
- ±55% from centre of screen (powered)
- ±44% with the ET-D75LE6
- ±30% from centre of screen (powered) 
- ±20% with the ET-D75LE6

#### Keystone correction range
- Vertical: ±40° (±22° with the ET-D75LE50, ±28° with the ET-D75LE6)
- Horizontal: ±20% from centre of screen (powered)
- ±15% from centre of screen with the ET-D75LE6

#### Lamp replacement cycle duration
- 2,000 hours (ET-D75LE60, ET-D75LE80)
- 1,000 hours (ET-D75LE50)
- 800 hours (ET-D75LE6)

#### Lamp input power
- 980 VA at 240 V

#### Lamp life
- 10,600 lm (dual lamp, high mode)
- 6,900 lm (dual lamp, high mode)

#### Cabinet materials
- Plastic molded material

#### Dimensions (W x H x D)
- 530 x 200 x 548.5 mm (20-7/8 x 7-7/8 x 21-19/32 in)

#### Weight
- Approximately 24 kg (52.9 lb)

#### Operating environment
- Operating temperature: 0°C to 40°C (32°F to 104°F)
- Operating humidity: 10%–80% (no condensation)

#### Supplied accessories
- Power cord with secure lock, wireless remote control unit, batteries for remote control (R6/LR6 type x 2), safety wire rope

### Notes on Use
1. Do not install the projector in locations that are subject to excessive water, humidity, steam, or oil. This may result in fire, malfunction, or electric shock.
2. The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fail to illuminate, due to impact or extended use. Do not install in locations that are subject to excessive water, humidity, steam, or oily smoke. Doing so may result in fire, malfunction, or electric shock.
3. The projector uses a high-voltage lamp that becomes hot very fast during operation. Please observe the following precautions.
4. Never place objects on top of the projector while it is operating.
5. Always install the projector in a vertical position, allowing the ventilation holes to face down. If the projector is inclined at an angle, the internal temperature of the lamp may become abnormally high.
6. Do not stack projectors directly on top of one another for the purpose of multiple (stacked) projections. When stacking projector units, be sure to provide the space around the projectors to allow for proper ventilation.
7. If the projector is placed in a box or enclosure, temperature of the air surrounding the projector must be between 0°C (32°F) and 35°C (95°F). Also make sure the projector’s intake and exhaust openings are not blocked. Take particular care to ensure that hot air from the exhaust openings is not sucked into the intake openings.
8. The temperature range is 0°C (32°F) to 40°C (104°F) when used in High Altitude mode (1,400 m (4,593 ft) to 2,700 m (8,888 ft)).