

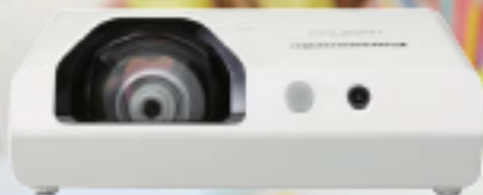
# Panasonic

PT-TX312ae

Short Throw LCD Projector



Short-Throw Convenience Meets  
Wireless Projection Capability



| Specification                       |  |   |
|-------------------------------------|--|---|
| Model                               | PT-TX312ae   |   |
| Power supply                        | AC 100-240 V, 50/60 Hz   |   |
| Power consumption                   | 300 W (6 W when STANDBY MODE set to Normal, 0.5 W when STANDBY MODE set to ECO*1)                          |   |
| LCD Panel                           | Display method   | Transparent LCD panel (x 3, R/G/B)  |
|                                     | Drive method   | Active matrix method  |
|                                     | Panel size   | 16 mm (0.63 in) diagonal (4:3 aspect ratio)   |
|                                     | Pixels   | 786,432 (1,024 x 768) x 3, total of 2,359,296 pixels  |
| Lens                                | Manual focus lens, F = 1.8, f = 6.08 mm, Throw Ratio: 0.46:1   |   |
| Lamp                                | 230 W x 1; Lamp replacement cycle*2 (lamp control: Normal/Eco1/Eco2): 5,000 hours/6,000 hours/10,000 hours |   |
| Screen size (diagonal)              | 1.27-2.54 m (50-100 in) diagonally, 4:3 aspect ratio   |   |
| Brightness*3 (Lamp control: Normal) | 3,200 lm   |   |
| Center-to-corner uniformity*3       | 80%  |   |
| Contrast*3                          | 12,000:1 (all white/all black, Iris: On) (Image mode: Dynamic, Lamp control: Normal)                       |   |
| Resolution                          | 1,024 x 768 pixels*4   |   |
| Scanning frequency                  | HDMI   | 525i (480i)*5, 625i (576i)*5, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/60p, 1125 (1080)/50p, 1125 (1080)/24p, 1125 (1080)/25p, 1125 (1080)/24sF, 1125 (1080)/30p, VGA (640 x 480)-VUXGA (1,920 x 1,200),*6 dot clock: 25 MHz-162 MHz   |
|                                     | RGB (analog)   | fH: 15-91 kHz, fV: 24-85 Hz, dot clock: 162 MHz or lower  |
|                                     | YPBPR (YCBCR)  | fH: 15.73 kHz, fV: 59.94 Hz [480i (525i)], fH: 31.47 kHz, fV: 59.94 Hz [480p (525p)], fH: 45.00 kHz, fV: 60 Hz [720 (750)/60p], fH: 33.75 kHz, fV: 60 Hz [1080 (1125)/60i], fH: 28.13 kHz, fV: 25 Hz [1080 (1125)/25p], fH: 27.00 kHz, fV: 48 Hz [1080 (1125)/24sF], fH: 67.50 kHz, fV: 60 Hz [1080 (1125)/60p], fH: 15.63 kHz, fV: 50 Hz [576i (625i)], fH: 31.25 kHz, fV: 50 Hz [576p (625p)], fH: 37.50 kHz, fV: 50 Hz [720 (750)/50p], fH: 28.13 kHz, fV: 50 Hz [1080 (1125)/50i], fH: 27.00 kHz, fV: 24 Hz [1080 (1125)/24p], fH: 33.75 kHz, fV: 30 Hz [1080 (1125)/30p], fH: 56.25 kHz, fV: 50 Hz [1080 (1125)/50p] |
|                                     | Video/S-Video  | fH: 15.73 kHz, fV: 59.94 Hz [NTSC/NTSC4.43/PAL-M/PAL60], fH: 15.63 kHz, fV: 50 Hz [PAL/SECAM/PAL-N]   |
| Optical axis shift                  | 21:-1 (fixed)  |   |
| Keystone correction range           | Vertical: ±15° (Auto, Manual), horizontal: ±15° (Manual)   |   |
| Installation                        | Ceiling/floor, front/rear  |   |
| Terminals                           | HDMI IN  | HDMI 19-pin x 1 (HDCP compatible, Deep Color compatible), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)   |
|                                     | COMPUTER 1 IN  | D-sub HD 15-pin (female) x 1 (RGB/YPBPR/YCBCR/S-VIDEO)<br>(The D-Sub/S-VIDEO conversion cable ET-ADSV is required for inputting S-VIDEO signals.)   |
|                                     | COMPUTER 2 IN  | D-sub HD 15-pin (female) x 1 (RGB)  |
|                                     | VIDEO IN   | Pin jack x 1  |
|                                     | AUDIO 1 IN   | M3 x 1 (L-R x 1)  |
|                                     | AUDIO 2 IN   | Pin jack x 2 (L, R x 1)   |
|                                     | AUDIO OUT  | M3 x 1 (L-R x 1) for output (variable)  |
|                                     | SERIAL IN  | D-sub 9-pin (female) x 1 for external control (RS-232C compliant)   |
|                                     | LAN  | RJ-45 x 1 (for network connection, 10BASE-T/100BASE-TX, compliant with PLink™(class 1))   |
|                                     | USB A  | USB type-A (for the Memory Viewer/Wireless Module,*7 DC 5V max. 500 mA) x 1   |
|                                     | USB B  | USB type-B (for the USB Display) x 1  |
| Built-in speaker                    | 10 W (monaural)  |   |
| Noise level*                        | 37 dB (lamp control: Normal), 33 dB (lamp control: Eco1), 28 dB (lamp control: Eco2)                       |   |
| Cabinet materials                   | Molded plastic (PC)  |   |

| Specification          |   |
|------------------------|---|
| Dimensions (W x H x D) | 335 x 134.1*8 x 329 mm (13-3/16 x 5-9/32*8 x 12-15/16 in)   |
| Weight*9               | Approximately 3.9 kg (8.6 lbs)  |
| Operating temperature  | 5 °C-40 °C (41 °F-104 °F)<br>(less than 1,400 m [4,593 ft] above sea level, High land: Off),<br>5 °C-35 °C (41 °F-95 °F)<br>(between 1,400 m and 2,700 m [4,593 ft and 8,858 ft] above sea level, High land: On1),<br>5 °C-30 °C (41 °F-86 °F)<br>(between 2,700 m and 3,000 m [8,858 ft and 9,843 ft] above sea level, High land: On2) |
| Operating humidity     | 20-80 % (no condensation)   |
| Supplied accessories   | Power cord x 1*10, wireless remote control unit x 1, batteries (AAA/R03/LR03 type x 2), computer cable x 1, Software CD-ROM (Multi Projector Monitoring & Control Software*11)  |

**Remark\*:**

- When the Standby mode is set to Eco, network functions such as power on over the LAN network will not operate.
- Also, only certain commands can be received for external control using the serial terminal.
- The value for the recommended lamp replacement cycle is the maximum value, at which luminance will become 50 %. The usage environment affects the lamp replacement cycle.
- Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
- Input signals that exceed this resolution will be converted to 1,024 x 768 pixels.
- Only compatible with dot clock frequency of 27 MHz (pixel repetition signal).
- Compliant with VESA CVT-RB.
- To operate wireless projection, the optional ET-WML100 Wireless Module is required.
- With legs at shortest position.
- The above values are averages. Actual values may be different according to the product.
- Power cords available (x 2) for the PT-TX402Ae
- Compatible with the Multi Monitoring & Control Software.

**Caution**

Do not install the projector in locations that are subject to excessive water, humidity, steam or oily smoke. Doing so may result in fire, malfunction or electric shock.

**NOTES ON USE**

- The projector uses a high-voltage mercury lamp under high internal pressure. This lamp may break, emitting a popping sound, or fail to illuminate, due to impact or extended use.
- The high-wattage lamp becomes very hot during operation. Please observe the following precautions:
  - Never place objects on top of the projector while it is in operation.
  - Make sure there is an unobstructed space of 1,000 mm (39-3/8 in) or more around the projector's exhaust openings.
  - If stacking projector units, care must be taken to provide the recommended space between units. These space requirements also apply to installation where only one projector unit is operating at one time and the other unit is used as a backup.
  - If the projector is placed in a box or enclosure, the temperature of the air surrounding the projector must match the operating temperature listed in the specifications table during use. Also, make sure the projector's intake and exhaust openings are not blocked. Ensure there is sufficient ventilation to prevent hot air from the exhaust openings being recirculated into the intake opening.
- The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.
  - The lamp replacement cycle varies greatly depending on individual lamp characteristics and usage conditions.
  - The brightness of the lamp will gradually decrease with use.
- Due to natural characteristics of lamps, screen brightness may fluctuate. This is not an indication of faulty lamp performance.

**Optional accessories**

ET-PKL100H  
Ceiling Mount Bracket  
for High Ceilings



ET-PKL100S  
Ceiling mount bracket  
for low ceilings\*



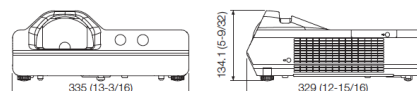
ET-PKL430B  
Bracket assembly



ET-ADSV  
D-Sub/S-VIDEO  
conversion cable



**Dimension unit: mm [inches]**



\*Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.  
 \*1 When the Standby mode is set to Eco, network functions such as power on over the LAN network will operate. Also, only certain commands can be received for external control using the serial terminal. \*2 The value for the recommended lamp replacement cycle is the maximum value, at which luminance became 50%. The usage environment affects the lamp replacement cycle. \*3 Pixels-Repetition signal (dot clock frequency 27.0 MHz) only. \*4 This products is used together with an optional bracket attached (sold separately).

ET-LAL500  
Replacement lamp unit



ET-RFL300  
Replacement filter unit



ET-WML100  
Wireless module



\* Featured image: ET-WML100E.

# Panasonic

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations. The projection distances and throw ratios given in this brochure are for use only as guidelines. For more detailed information, please consult the dealer from whom you are purchasing the product. The PJLink trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. HDMI, the HDMI logo and High-Definition Multimedia Interface is a trademark or registered trademark of HDMI Licensing LLC. All other trademarks are the property of their respective trademark owners. Projection images simulated.

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