

S P E C F I L E



The PT-DW740LS and PT-DW740LK are not equipped with a lens.

Product Number : **PT-DW740S/DW740K**
PT-DW740LS/DW740LK

Product Name : DLP™ Projectors

Specifications

Main unit

| | | |
|-------------------------------|------------------------|---|
| Power supply | | 120 V AC, 7.5 A, 50/60 Hz 220–240 V AC, 4.3 A, 50/60 Hz |
| Power consumption | 120 V AC, 60 Hz | 790 W (830 VA) (0.2 W with STANDBY MODE set to ECO*1, 6 W with STANDBY MODE set to NORMAL) |
| | 220–240 V AC, 50/60 Hz | 760 W (950 VA) (0.3 W with standby mode set to eco*1, 8 W with STANDBY MODE set to NORMAL) |
| DLP™ chip | Panel size | 16.5 mm (0.65 in) diagonal (16:10 aspect ratio) |
| | Display method | DLP™ chip × 1, DLP™ system |
| | Pixels | 1,024,000 (1,280 × 800) × 1, total of 1,024,000 pixels |
| Lens | PT-DW740S/DW740K | Powered zoom/focus lenses (1.8–2.5:1), F 1.7–1.9, f 25.6–35.7 mm |
| | PT-DW740LS/DW740LK | Optional powered zoom/focus lenses and fixed-focus lens |
| Lamp | | 300 W (max. 310 W) UHM lamps (× 2) (dual lamp system) |
| Screen size | | 1.27–15.24 m (50–600 inches) (1.27–5.08 m (50–200 inches) with the ET-DLE055), 16:10 aspect ratio |
| Brightness*2 | | 7,000 lumens (dual lamp, LAMP MODE: NORMAL) |
| Center-to-corner uniformity*2 | | 90% |
| Contrast*2 | | 2,500:1 (full on/full off, CONTRAST MODE: HIGH, brightness: 3,500 lumens) |
| Resolution | | 1,280 × 800 pixels (Input signals that exceed this resolution will be converted to 1,280 × 800 pixels.) |
| Scanning frequency | HDMI/DVI-D | fH: 15–91 kHz, fV: 50–85 Hz, dot clock: 25–162 MHz or lower |
| | RGB | fH: 15–91 kHz, fV: 50–85 Hz, dot clock: 162 MHz or lower |
| | YPbPr (YCbCr) | 480i (525i): fH 15.75 kHz; fV 60 Hz, 576i (625i): fH 15.63 kHz; fV 50 Hz, 480p (525p): fH 31.50 kHz; fV 60 Hz, 576p (625p): fH 31.25 kHz; fV 50 Hz, 720 (750)/60p: fH 45.00 kHz; fV 60 Hz, 720 (750)/50p: fH 37.50 kHz; fV 50 Hz, 1035/60i: fH 33.75 kHz; fV 60 Hz, 1080 (1125)/60i: fH 33.75 kHz; fV 60 Hz, 1080 (1125)/50i: fH 28.13 kHz; fV 50 Hz, 1080/25p: fH 28.13 kHz; fV 25 Hz, 1080/24p: fH 27.00 kHz; fV 24 Hz, 1080/24sF: fH 27.00 kHz; fV 48 Hz, 1080/30p: fH 33.75 kHz; fV 30 Hz, 1080/60p: fH 67.50 kHz; fV 60 Hz, 1080/50p: fH 56.25 kHz; fV 50 Hz |
| | Video/S-Video | fH: 15.75 kHz, fV: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: 15.63 kHz, fV: 50 Hz [PAL/PAL-N/SECAM] |
| Optical axis shift | | Vertical: +60% (powered), horizontal: ±10% (powered) NOTE: Optical axis shift function cannot be operated when used with the ET-DLE055. |
| Keystone correction range | | Vertical: ±40° (±30° with the ET-DLE055 and ET-DLE080) |
| Installation | | Ceiling/floor, front/rear |
| Terminals | HDMI IN | HDMI 19-pin × 1, HDCP compatible 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, VGA (640 × 480)–WUXGA*3 (1,920 × 1,200), compatible with non-interlaced signals only, dot clock: 25–162 MHz |
| | DVI-D IN | DVI-D 24-pin × 1, DVI 1.0 compliant, HDCP compatible, for single link only 480p, 576p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, VGA (640 × 480)–WUXGA*3 (1,920 × 1,200), compatible with non-interlaced signals only, dot clock: 25–162 MHz |

| | | |
|----------------------------|-----------------------|--|
| RGB 1 IN | | BNC × 5 |
| R, G, B | | R: 0.7 Vp-p, 75 ohms, G: 0.7 Vp-p (G: 1.0 Vp-p for sync on G), 75 ohms, B: 0.7 Vp-p, 75 ohms HD/VD, SYNC: High impedance, TTL (positive/negative) NOTE: HD/SYNC, and VD terminals do not accept tri-level sync signals. |
| | Y, PB, PR (Y, CB, CR) | Y: 1.0 Vp-p (including sync signal), PB/PR (CB/CR): 0.7 Vp-p, 75 ohms |
| RGB 2 IN | | D-sub HD 15-pin (female) × 1 |
| R, G, B | | R: 0.7 Vp-p, 75 ohms, G: 0.7 Vp-p (G: 1.0 Vp-p for sync on G), 75 ohms, B: 0.7 Vp-p, 75 ohms HD/VD, SYNC: High impedance, TTL (positive/negative) NOTE: HD/SYNC, and VD terminals do not accept tri-level sync signals. |
| | Y, PB, PR (Y, CB, CR) | Y: 1.0 Vp-p (including sync signal), PB/PR (CB/CR): 0.7 Vp-p, 75 ohms |
| VIDEO IN | | BNC × 1, 1.0 Vp-p, 75 ohms |
| S-VIDEO IN | | Mini DIN 4-pin × 1, Y: 1.0 Vp-p, C: 0.286 Vp-p, 75 ohms |
| SERIAL IN | | D-sub 9-pin (female) × 1 for external control (RS-232C compliant) |
| SERIAL OUT | | D-sub 9-pin (male) × 1 for link control (RS-232C compliant) |
| REMOTE 1 IN | | M3 jack × 1 for wired remote control |
| REMOTE 1 OUT | | M3 jack × 1 for link control |
| REMOTE 2 IN | | D-sub 9-pin (female) × 1 for external control (parallel) |
| LAN | | RJ-45 × 1 for network connection, 100Base-TX/10Base-T, compliant with PJLink™ |
| Power cord length | | 3.0 m (9 ft 10 in) |
| Cabinet materials | | Molded plastic |
| Dimensions (W × H × D) | PT-DW740S/DW740K | 498 × 175*4 × 466 mm (19-19/32 × 6-7/8*4 × 18-11/32 inches) (with supplied lens) |
| | PT-DW740LS/DW740LK | 498 × 175*4 × 432 mm (19-19/32 × 6-7/8*4 × 17 inches) (without lens) |
| Weight | PT-DW740S/DW740K | Approx. 16.3 kg (35.9 lbs) (with supplied lens) |
| | PT-DW740LS/DW740LK | Approx. 15.4 kg (34.0 lbs) (without lens) |
| Operation noise*2 | | 39 dB (dual lamp operation, LAMP MODE: NORMAL), 35 dB (dual lamp operation, LAMP MODE: ECO) |
| Operating temperature | | 0–45 °C (32–113 °F)*5 |
| Operating humidity | | 20%–80% (no condensation) |
| Remote control unit | | |
| Power supply | | 3 V DC (R6/AA type battery × 2) |
| Operation range*6 | | Approx. 30 m (98 ft 5 in) when operated from directly in front of the signal receptor |
| Dimensions (W × H × D) | | 51 × 176 × 23 mm (2 × 6-15/16 × 29/32 inches) |
| Weight | | Approx. 134 g (4.7 oz) (including batteries) |

Supplied accessories

Power cord (× 1)
 (× 2 for PT-DW740ES/DW740EK/DW740ELS/DW740ELK)
 Power cord security lock (× 1)
 Wireless/wired remote control unit (× 1)
 Batteries for remote control (R6/AA type × 2)
 Software CD-ROM (Logo Transfer Software, Multi Projector Monitoring
 & Control Software) (× 1)

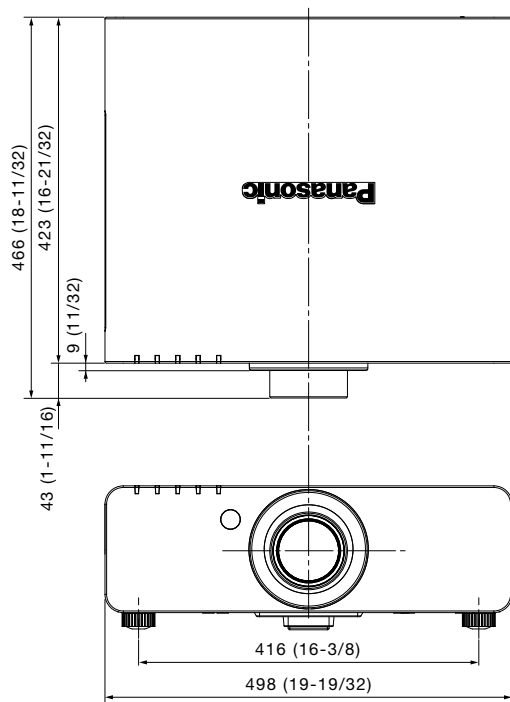
Optional accessories

| | |
|--------------------------|---|
| Zoom lens (0.8–1.0:1) | ET-DLE080 |
| Zoom lens (1.4–2.0:1) | ET-DLE150 |
| Zoom lens (2.4–3.8:1) | ET-DLE250 |
| Zoom lens (3.8–5.7:1) | ET-DLE350 |
| Zoom lens (5.6–9.0:1) | ET-DLE450 |
| Fixed-focus lens (0.8:1) | ET-DLE055 |
| Ceiling mount bracket | ET-PKD56H (for high ceilings) ET-PKD55S (for low ceilings) |
| Replacement lamp unit | ET-LAD60A ET-LAD60AW (Twin Pack) |
| Replacement filter unit | ET-EMF300 |

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice.

- *1 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.
- *2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
- *3 WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).
- *4 With legs at shortest position.
- *5 The operating temperature range is 0 °C to 40 °C (32 °F to 104 °F) when the fan control is set to High Altitude mode (for altitudes from 1,400 m to 2,700 m (4,593 ft to 8,858 ft) above sea level). Also, if the ambient temperature exceeds 40 °C (104 °F) (35 °C (95 °F) in High Altitude mode) when the projector is being used with Lamp Select set to Dual and Lamp Power set to High, the light output may be reduced approximately 20% to protect the projector.
- *6 Operation range differs depending on environments.

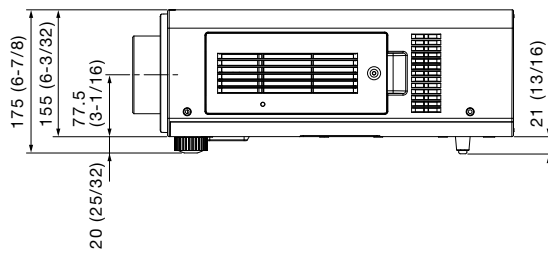
Dimensions



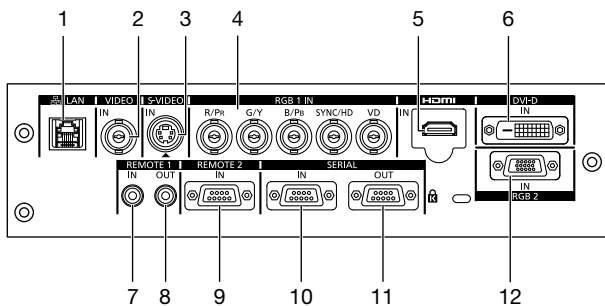
unit : mm (inch)

NOTE: This illustration is not drawn to scale.

The illustration shows the PT-DW740S/DW740K.

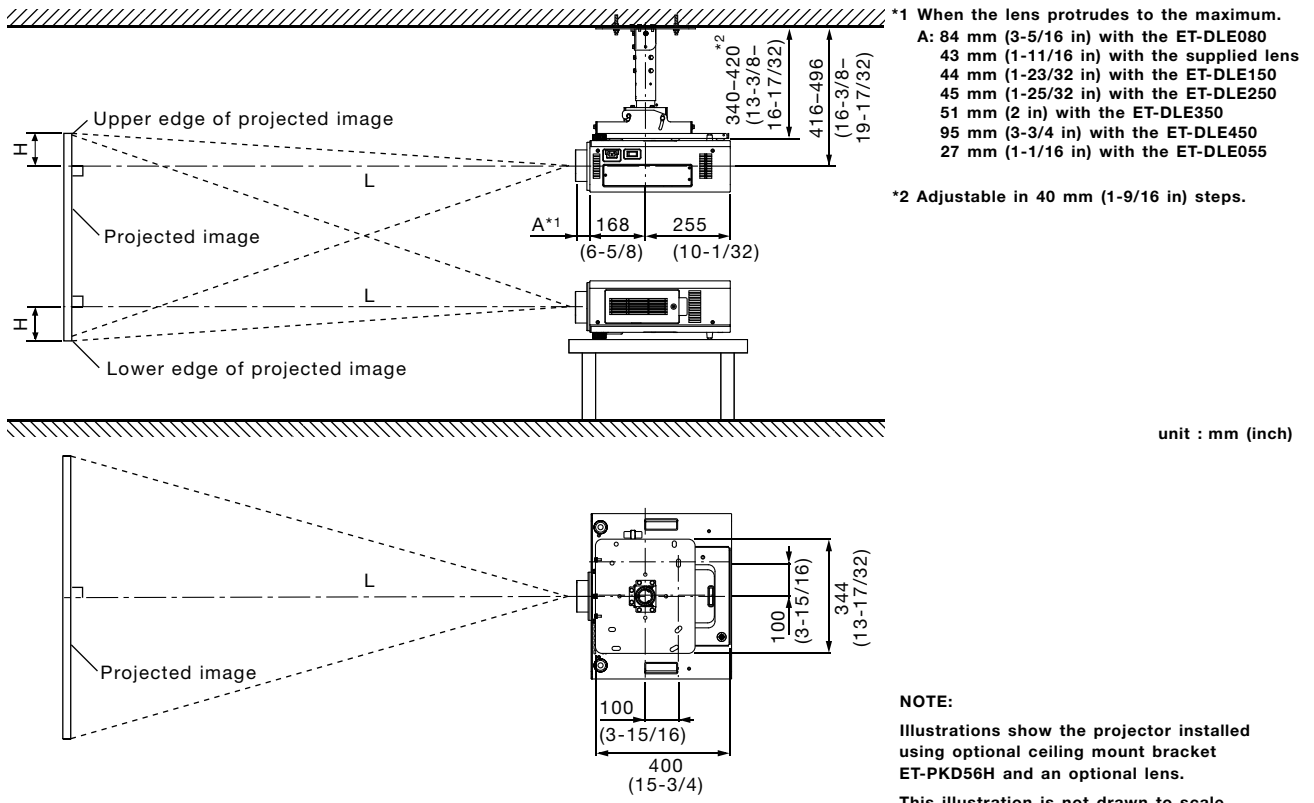


Terminals



- | | |
|-----------------|-------------------|
| 1 LAN connector | 7 Remote 1 input |
| 2 Video input | 8 Remote 1 output |
| 3 S-Video input | 9 Remote 2 input |
| 4 RGB 1 input | 10 Serial input |
| 5 HDMI input | 11 Serial output |
| 6 DVI-D input | 12 RGB 2 Input |

Standard setting-up position



Caution:

- All construction work should be done by a qualified technician.
- When mounting to the ceiling, use the special mounting bracket. To prevent the projector from swaying or dropping, attach the wire between the mounting bracket and the ceiling.

Projection distance for 16:10 aspect ratio screen

Unit: meters

| Screen size (diagonal) | | Distance to screen (L) | | | | | | | | | | | | Height from the edge of screen to center of lens (H) | | |
|---------------------------|------|------------------------|-------|------------------------|-------|----------------------|--------------|------------------------|-------|------------------------|-------|------------------------|--------|--|--------------|-------------|
| | | Zoom | | | | | | | | | | | | | | Fixed-focus |
| | | ET-DLE080 Zoom lens | | ET-DLE150 Zoom lens | | <i>Supplied lens</i> | | ET-DLE250 Zoom lens | | ET-DLE350 Zoom lens | | ET-DLE450 Zoom lens | | | | |
| [m] | [in] | min. | max. | min. | max. | <i>min.</i> | <i>max.</i> | min. | max. | min. | max. | min. | max. | | | |
| 1.27/ | 50 | 0.87 | 1.09 | 1.45 | 2.12 | 1.91 | 2.70 | 2.54 | 4.06 | 4.00 | 6.11 | 5.96 | 9.60 | 0.87 | -0.07 – 0.34 | 0.34 |
| 1.52/ | 60 | 1.05 | 1.32 | 1.75 | 2.55 | 2.31 | 3.26 | 3.07 | 4.89 | 4.83 | 7.36 | 7.21 | 11.57 | 1.06 | -0.08 – 0.40 | 0.40 |
| 1.78/ | 70 | 1.24 | 1.54 | 2.05 | 2.98 | 2.71 | 3.81 | 3.59 | 5.72 | 5.65 | 8.61 | 8.46 | 13.55 | 1.24 | -0.09 – 0.47 | 0.47 |
| 2.03/ | 80 | 1.42 | 1.77 | 2.35 | 3.42 | 3.11 | 4.37 | 4.12 | 6.55 | 6.48 | 9.86 | 9.71 | 15.53 | 1.42 | -0.11 – 0.54 | 0.54 |
| 2.29/ | 90 | 1.60 | 2.00 | 2.65 | 3.85 | 3.50 | 4.92 | 4.64 | 7.38 | 7.31 | 11.11 | 10.96 | 17.51 | 1.61 | -0.12 – 0.61 | 0.61 |
| 2.54/ | 100 | 1.78 | 2.22 | 2.95 | 4.28 | 3.90 | 5.48 | 5.17 | 8.20 | 8.13 | 12.36 | 12.22 | 19.49 | 1.79 | -0.14 – 0.67 | 0.67 |
| 3.05/ | 120 | 2.15 | 2.68 | 3.55 | 5.15 | 4.70 | 6.59 | 6.21 | 9.86 | 9.79 | 14.86 | 14.72 | 23.45 | 2.16 | -0.16 – 0.81 | 0.81 |
| 3.81/ | 150 | 2.70 | 3.36 | 4.45 | 6.45 | 5.89 | 8.25 | 7.79 | 12.35 | 12.27 | 18.61 | 18.47 | 29.38 | 2.71 | -0.20 – 1.01 | 1.01 |
| 5.08/ | 200 | 3.62 | 4.49 | 5.95 | 8.61 | 7.88 | 11.03 | 10.41 | 16.49 | 16.40 | 24.85 | 24.73 | 39.28 | 3.63 | -0.27 – 1.35 | 1.35 |
| 6.35/ | 250 | 4.53 | 5.62 | 7.45 | 10.78 | 9.86 | 13.81 | 13.03 | 20.63 | 20.53 | 31.10 | 30.99 | 49.17 | – | -0.34 – 1.68 | – |
| 7.62/ | 300 | 5.45 | 6.76 | 8.96 | 12.95 | 11.85 | 16.58 | 15.65 | 24.77 | 24.67 | 37.35 | 37.25 | 59.06 | – | -0.40 – 2.02 | – |
| 10.16/ | 400 | 7.28 | 9.02 | 11.96 | 17.28 | 15.83 | 22.13 | 20.90 | 33.06 | 32.94 | 49.84 | 49.76 | 78.85 | – | -0.54 – 2.69 | – |
| 12.70/ | 500 | 9.11 | 11.29 | 14.96 | 21.61 | 19.80 | 27.68 | 26.14 | 41.34 | 41.20 | 62.33 | 62.28 | 98.64 | – | -0.67 – 3.37 | – |
| 15.24/ | 600 | 10.94 | 13.56 | 17.96 | 25.94 | 23.78 | 33.23 | 31.39 | 49.62 | 49.47 | 74.82 | 74.80 | 118.43 | – | -0.81 – 4.04 | – |

Unit: feet

| Screen size (diagonal) | | Distance to screen (L) | | | | | | | | | | | | Height from the edge of screen to center of lens (H) | | |
|---------------------------|------|------------------------|------|------------------------|------|----------------------|--------------|------------------------|-------|------------------------|-------|------------------------|-------|--|-------------|-------------|
| | | Zoom | | | | | | | | | | | | | | Fixed-focus |
| | | ET-DLE080 Zoom lens | | ET-DLE150 Zoom lens | | <i>Supplied lens</i> | | ET-DLE250 Zoom lens | | ET-DLE350 Zoom lens | | ET-DLE450 Zoom lens | | | | |
| [m] | [in] | min. | max. | min. | max. | <i>min.</i> | <i>max.</i> | min. | max. | min. | max. | min. | max. | | | |
| 1.27/ | 50 | 2.8 | 3.6 | 4.7 | 6.9 | 6.3 | 8.9 | 8.3 | 13.3 | 13.1 | 20.1 | 19.5 | 31.5 | 2.9 | -0.2 – 1.1 | 1.1 |
| 1.52/ | 60 | 3.5 | 4.3 | 5.7 | 8.4 | 7.6 | 10.7 | 10.1 | 16.0 | 15.8 | 24.2 | 23.6 | 38.0 | 3.5 | -0.3 – 1.3 | 1.3 |
| 1.78/ | 70 | 4.1 | 5.1 | 6.7 | 9.8 | 8.9 | 12.5 | 11.8 | 18.8 | 18.5 | 28.3 | 27.8 | 44.5 | 4.1 | -0.3 – 1.6 | 1.6 |
| 2.03/ | 80 | 4.7 | 5.8 | 7.7 | 11.2 | 10.2 | 14.3 | 13.5 | 21.5 | 21.3 | 32.3 | 31.9 | 51.0 | 4.7 | -0.4 – 1.8 | 1.8 |
| 2.29/ | 90 | 5.3 | 6.5 | 8.7 | 12.6 | 11.5 | 16.2 | 15.2 | 24.2 | 24.0 | 36.4 | 36.0 | 57.4 | 5.3 | -0.4 – 2.0 | 2.0 |
| 2.54/ | 100 | 5.9 | 7.3 | 9.7 | 14.0 | 12.8 | 18.0 | 16.9 | 26.9 | 26.7 | 40.5 | 40.1 | 63.9 | 5.9 | -0.4 – 2.2 | 2.2 |
| 3.05/ | 120 | 7.1 | 8.8 | 11.6 | 16.9 | 15.4 | 21.6 | 20.4 | 32.4 | 32.1 | 48.7 | 48.3 | 76.9 | 7.1 | -0.5 – 2.7 | 2.7 |
| 3.81/ | 150 | 8.9 | 11.0 | 14.6 | 21.2 | 19.3 | 27.1 | 25.5 | 40.5 | 40.2 | 61.0 | 60.6 | 96.4 | 8.9 | -0.7 – 3.3 | 3.3 |
| 5.08/ | 200 | 11.9 | 14.7 | 19.5 | 28.3 | 25.8 | 36.2 | 34.2 | 54.1 | 53.8 | 81.5 | 81.1 | 128.9 | 11.9 | -0.9 – 4.4 | 4.4 |
| 6.35/ | 250 | 14.9 | 18.4 | 24.5 | 35.4 | 32.4 | 45.3 | 42.8 | 67.7 | 67.4 | 102.0 | 101.7 | 161.3 | – | -1.1 – 5.5 | – |
| 7.62/ | 300 | 17.9 | 22.2 | 29.4 | 42.5 | 38.9 | 54.4 | 51.4 | 81.3 | 80.9 | 122.5 | 122.2 | 193.8 | – | -1.3 – 6.6 | – |
| 10.16/ | 400 | 23.9 | 29.6 | 39.2 | 56.7 | 51.9 | 72.6 | 68.6 | 108.4 | 108.1 | 163.5 | 163.3 | 258.7 | – | -1.8 – 8.8 | – |
| 12.70/ | 500 | 29.9 | 37.0 | 49.1 | 70.9 | 65.0 | 90.8 | 85.8 | 135.6 | 135.2 | 204.5 | 204.3 | 323.6 | – | -2.2 – 11.0 | – |
| 15.24/ | 600 | 35.9 | 44.5 | 58.9 | 85.1 | 78.0 | 109.0 | 103.0 | 162.8 | 162.3 | 245.5 | 245.4 | 388.5 | – | -2.7 – 13.3 | – |

- The value for L (distance to screen) varies slightly within ±5% depending on the zoom lens characteristics.
- The zoom lens characteristics may cause slight image distortion.
- When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.
- The brightness varies depending on the zoom setting.

Note: When the ET-DLE055 is mounted, the optical lens shift function cannot be used.

Projection distance for 16:9 aspect ratio screen

Unit: meters

| Screen size (diagonal) | | Distance to screen (L) | | | | | | | | | | | | Height from the edge of screen to center of lens (H) | | |
|---------------------------|------|------------------------|-------|------------------------|-------|----------------------|--------------|------------------------|-------|------------------------|-------|------------------------|--------|--|----------------|-------------------------|
| | | Zoom | | | | | | | | | | | | | | Fixed-focus |
| | | ET-DLE080 Zoom lens | | ET-DLE150 Zoom lens | | <i>Supplied lens</i> | | ET-DLE250 Zoom lens | | ET-DLE350 Zoom lens | | ET-DLE450 Zoom lens | | | | |
| [m] | [in] | min. | max. | min. | max. | <i>min.</i> | <i>max.</i> | min. | max. | min. | max. | min. | max. | | Zoom lenses | Fixed- focus lens |
| 1.27/ | 50 | 0.89 | 1.12 | 1.49 | 2.18 | 1.97 | 2.78 | 2.62 | 4.18 | 4.11 | 6.29 | 6.13 | 9.87 | 0.90 | -0.14 – 0.31 | 0.31 |
| 1.52/ | 60 | 1.08 | 1.35 | 1.80 | 2.62 | 2.38 | 3.35 | 3.15 | 5.03 | 4.96 | 7.57 | 7.42 | 11.90 | 1.09 | -0.16 – 0.37 | 0.37 |
| 1.78/ | 70 | 1.27 | 1.59 | 2.11 | 3.07 | 2.79 | 3.92 | 3.69 | 5.88 | 5.81 | 8.85 | 8.70 | 13.94 | 1.28 | -0.19 – 0.44 | 0.44 |
| 2.03/ | 80 | 1.46 | 1.82 | 2.42 | 3.51 | 3.19 | 4.49 | 4.23 | 6.73 | 6.66 | 10.14 | 9.99 | 15.97 | 1.46 | -0.22 – 0.50 | 0.50 |
| 2.29/ | 90 | 1.65 | 2.05 | 2.72 | 3.96 | 3.60 | 5.06 | 4.77 | 7.58 | 7.51 | 11.42 | 11.28 | 18.01 | 1.65 | -0.25 – 0.56 | 0.56 |
| 2.54/ | 100 | 1.84 | 2.29 | 3.03 | 4.40 | 4.01 | 5.63 | 5.31 | 8.44 | 8.36 | 12.71 | 12.56 | 20.04 | 1.84 | -0.27 – 0.62 | 0.62 |
| 3.05/ | 120 | 2.21 | 2.75 | 3.65 | 5.29 | 4.83 | 6.77 | 6.39 | 10.14 | 10.06 | 15.27 | 15.14 | 24.11 | 2.22 | -0.33 – 0.75 | 0.75 |
| 3.81/ | 150 | 2.78 | 3.45 | 4.58 | 6.63 | 6.05 | 8.49 | 8.01 | 12.69 | 12.61 | 19.13 | 19.00 | 30.21 | 2.79 | -0.41 – 0.93 | 0.93 |
| 5.08/ | 200 | 3.72 | 4.62 | 6.12 | 8.86 | 8.10 | 11.34 | 10.70 | 16.95 | 16.86 | 25.55 | 25.43 | 40.38 | 3.73 | -0.55 – 1.25 | 1.25 |
| 6.35/ | 250 | 4.66 | 5.78 | 7.66 | 11.08 | 10.14 | 14.19 | 13.40 | 21.21 | 21.11 | 31.97 | 31.86 | 50.54 | – | -0.69 – 1.56 | – |
| 7.62/ | 300 | 5.60 | 6.94 | 9.21 | 13.31 | 12.18 | 17.04 | 16.09 | 25.46 | 25.36 | 38.39 | 38.29 | 60.71 | – | -0.82 – 1.87 | – |
| 10.16/ | 400 | 7.48 | 9.27 | 12.29 | 17.76 | 16.27 | 22.75 | 21.48 | 33.98 | 33.86 | 51.23 | 51.16 | 81.05 | – | -1.10 – 2.49 | – |
| 12.70/ | 500 | 9.36 | 11.60 | 15.38 | 22.21 | 20.36 | 28.46 | 26.87 | 42.49 | 42.35 | 64.07 | 64.02 | 101.39 | – | -1.37 – 3.11 | – |
| 15.24/ | 600 | 11.24 | 13.93 | 18.46 | 26.67 | 24.44 | 34.16 | 32.26 | 51.00 | 50.85 | 76.91 | 76.89 | 121.73 | – | -1.64 – 3.74 | – |

Unit: feet

| Screen size (diagonal) | | Distance to screen (L) | | | | | | | | | | | | Height from the edge of screen to center of lens (H) | | |
|---------------------------|------|------------------------|------|------------------------|------|----------------------|--------------|------------------------|-------|------------------------|-------|------------------------|-------|--|----------------|-------------------------|
| | | Zoom | | | | | | | | | | | | | | Fixed-focus |
| | | ET-DLE080 Zoom lens | | ET-DLE150 Zoom lens | | <i>Supplied lens</i> | | ET-DLE250 Zoom lens | | ET-DLE350 Zoom lens | | ET-DLE450 Zoom lens | | | | |
| [m] | [in] | min. | max. | min. | max. | <i>min.</i> | <i>max.</i> | min. | max. | min. | max. | min. | max. | | Zoom lenses | Fixed- focus lens |
| 1.27/ | 50 | 2.9 | 3.7 | 4.9 | 7.1 | 6.5 | 9.1 | 8.6 | 13.7 | 13.5 | 20.6 | 20.1 | 32.4 | 2.9 | -0.5 – 1.0 | 1.0 |
| 1.52/ | 60 | 3.5 | 4.4 | 5.9 | 8.6 | 7.8 | 11.0 | 10.3 | 16.5 | 16.3 | 24.8 | 24.3 | 39.1 | 3.6 | -0.5 – 1.2 | 1.2 |
| 1.78/ | 70 | 4.2 | 5.2 | 6.9 | 10.1 | 9.1 | 12.9 | 12.1 | 19.3 | 19.1 | 29.0 | 28.6 | 45.7 | 4.2 | -0.6 – 1.4 | 1.4 |
| 2.03/ | 80 | 4.8 | 6.0 | 7.9 | 11.5 | 10.5 | 14.7 | 13.9 | 22.1 | 21.9 | 33.3 | 32.8 | 52.4 | 4.8 | -0.7 – 1.6 | 1.6 |
| 2.29/ | 90 | 5.4 | 6.7 | 8.9 | 13.0 | 11.8 | 16.6 | 15.7 | 24.9 | 24.6 | 37.5 | 37.0 | 59.1 | 5.4 | -0.8 – 1.8 | 1.8 |
| 2.54/ | 100 | 6.0 | 7.5 | 9.9 | 14.4 | 13.2 | 18.5 | 17.4 | 27.7 | 27.4 | 41.7 | 41.2 | 65.7 | 6.0 | -0.9 – 2.0 | 2.0 |
| 3.05/ | 120 | 7.3 | 9.0 | 12.0 | 17.4 | 15.8 | 22.2 | 21.0 | 33.3 | 33.0 | 50.1 | 49.7 | 79.1 | 7.3 | -1.1 – 2.5 | 2.5 |
| 3.81/ | 150 | 9.1 | 11.3 | 15.0 | 21.7 | 19.9 | 27.8 | 26.3 | 41.6 | 41.4 | 62.7 | 62.3 | 99.1 | 9.1 | -1.3 – 3.1 | 3.1 |
| 5.08/ | 200 | 12.2 | 15.1 | 20.1 | 29.1 | 26.6 | 37.2 | 35.1 | 55.6 | 55.3 | 83.8 | 83.4 | 132.5 | 12.2 | -1.8 – 4.1 | 4.1 |
| 6.35/ | 250 | 15.3 | 19.0 | 25.1 | 36.4 | 33.3 | 46.6 | 44.0 | 69.6 | 69.3 | 104.9 | 104.5 | 165.8 | – | -2.3 – 5.1 | – |
| 7.62/ | 300 | 18.4 | 22.8 | 30.2 | 43.7 | 40.0 | 55.9 | 52.8 | 83.5 | 83.2 | 125.9 | 125.6 | 199.2 | – | -2.7 – 6.1 | – |
| 10.16/ | 400 | 24.5 | 30.4 | 40.3 | 58.3 | 53.4 | 74.6 | 70.5 | 111.5 | 111.1 | 168.1 | 167.8 | 265.9 | – | -3.6 – 8.2 | – |
| 12.70/ | 500 | 30.7 | 38.1 | 50.5 | 72.9 | 66.8 | 93.4 | 88.2 | 139.4 | 139.0 | 210.2 | 210.0 | 332.6 | – | -4.5 – 10.2 | – |
| 15.24/ | 600 | 36.9 | 45.7 | 60.6 | 87.5 | 80.2 | 112.1 | 105.9 | 167.3 | 166.8 | 252.3 | 252.2 | 399.4 | – | -5.4 – 12.3 | – |

- The value for L (distance to screen) varies slightly within ±5% depending on the zoom lens characteristics.
- The zoom lens characteristics may cause slight image distortion.
- When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.
- The brightness varies depending on the zoom setting.

Note: When the ET-DLE055 is mounted, the optical lens shift function cannot be used.

Calculation of the projection distance

For a screen size different from the above, use the equation below to calculate the projection distance.

Aspect ratio 16:10

| | | |
|----------------------|----------------|--|
| ET-DLE080 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0183 - 0.0471$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0227 - 0.0442$ |
| ET-DLE150 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0300 - 0.0540$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0433 - 0.0498$ |
| <i>Supplied lens</i> | <i>minimum</i> | $L (m) = (\text{diagonal screen size in inches}) \times 0.0398 - 0.0746$ |
| | <i>maximum</i> | $L (m) = (\text{diagonal screen size in inches}) \times 0.0555 - 0.0725$ |
| ET-DLE250 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0524 - 0.0800$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0828 - 0.0792$ |
| ET-DLE350 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0827 - 0.1351$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.1249 - 0.1346$ |
| ET-DLE450 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.1251 - 0.3017$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.1979 - 0.2991$ |
| ET-DLE055 | (fixed focus) | $L (m) = (\text{diagonal screen size in inches}) \times 0.0184 - 0.0476$ |

Aspect ratio 16:9

| | | |
|----------------------|----------------|--|
| ET-DLE080 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0188 - 0.0471$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0233 - 0.0442$ |
| ET-DLE150 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0309 - 0.0540$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0445 - 0.0498$ |
| <i>Supplied lens</i> | <i>minimum</i> | $L (m) = (\text{diagonal screen size in inches}) \times 0.0409 - 0.0746$ |
| | <i>maximum</i> | $L (m) = (\text{diagonal screen size in inches}) \times 0.0571 - 0.0725$ |
| ET-DLE250 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0539 - 0.0800$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0851 - 0.0792$ |
| ET-DLE350 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.0850 - 0.1351$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.1284 - 0.1346$ |
| ET-DLE450 | minimum | $L (m) = (\text{diagonal screen size in inches}) \times 0.1286 - 0.3017$ |
| | maximum | $L (m) = (\text{diagonal screen size in inches}) \times 0.2034 - 0.2991$ |
| ET-DLE055 | (fixed focus) | $L (m) = (\text{diagonal screen size in inches}) \times 0.0189 - 0.0476$ |

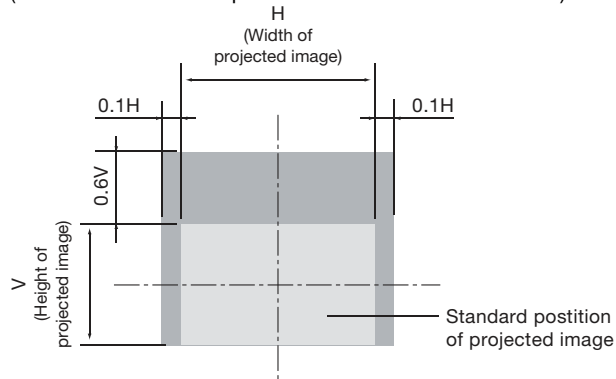
• Distances calculated with the above equations will include a slight error.

Shift range

Optical axis shift function allows to shift the position of a projected image as shown below.

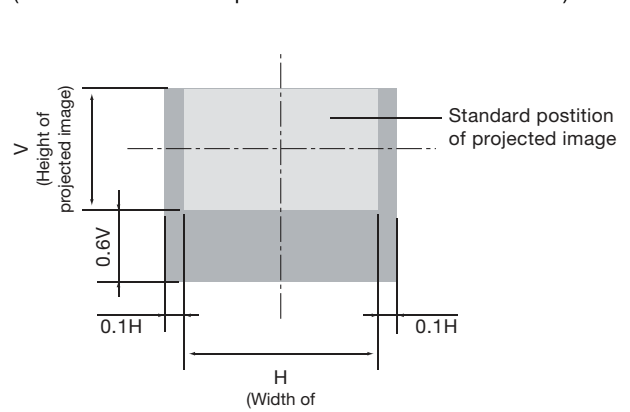
• Floor mount

(When the lens except the ET-DLE080 is mounted.)



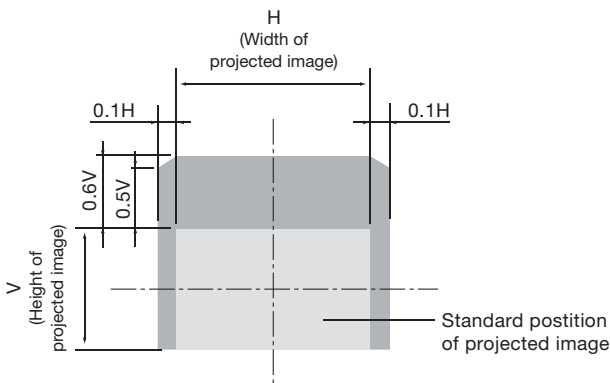
• Ceiling mount

(When the lens except the ET-DLE080 is mounted.)



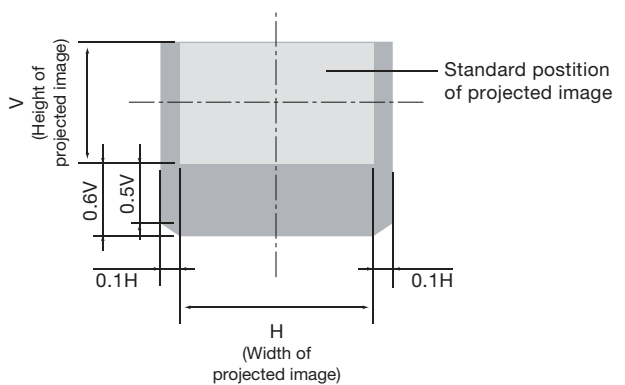
• Floor mount

(When the ET-DLE080 is mounted.)



• Ceiling mount

(When the ET-DLE080 is mounted.)



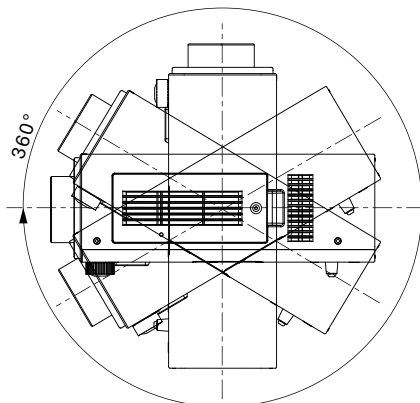
• The ET-DLE055 has a fixed short-focus lens. Therefore, the lens shift function provided in the main unit cannot be used.

Installable angle

Install the projector at an angle within the range shown below.

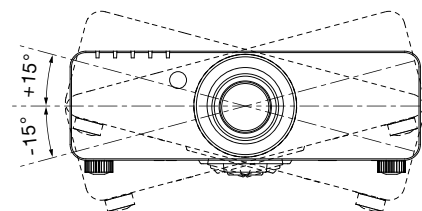
• Vertical direction

The projector may be installed at a vertical angle of 360°.



• Horizontal direction

The projector may be installed at a horizontal angle of ±15°.



List of compatible signals

The signals that can be input to this projector are shown in the table below. Horizontal scanning frequencies of 15 kHz to 91 kHz, vertical scanning frequencies of 50 Hz to 85 Hz, and a dot clock of 162 MHz maximum can be input.

NOTE: The native resolution of this projector is 1,280 × 800 pixels. If the display resolution of the input signal is different from the native resolution, image compression or expansion will be used to convert the input signal to a level within the native resolution.

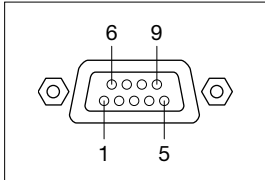
| Display mode | Display resolution (dots)*1 | Scanning frequency H (kHz) | Scanning frequency V (kHz) | Dot clock frequency (MHz) | Format |
|---------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|----------------|
| NTSC/NTSC4.43/PAL-M/PAL60 | 720 × 480i | 15.7 | 59.9 | – | VIDEO/S-VIDEO |
| PAL/PAL-N/SECAM | 720 × 576i | 15.6 | 50.0 | – | |
| 480i (525i) | 720 × 480i | 15.7 | 59.9 | 13.5 | YPbPr /RGB |
| 576i (625i) | 720 × 576i | 15.6 | 50.0 | 13.5 | |
| 480p (525p) | 720 × 483 | 31.5 | 59.9 | 27.0 | YPbPr /RGB/ |
| 576p (625p) | 720 × 576 | 31.3 | 50.0 | 27.0 | HDMI/DVI-D |
| 720/60p | 1,280 × 720 | 45.0 | 60.0 | 74.3 | |
| 720/50p | | 37.5 | 50.0 | 74.3 | |
| 1080/60i | 1,920 × 1,080i | 33.8 | 60.0 | 74.3 | |
| 1080/50i | | 28.1 | 50.0 | 74.3 | |
| 1080/24p | 1,920 × 1,080 | 27.0 | 24.0 | 74.3 | |
| 1080/24sF | 1,920 × 1,080i | 27.0 | 24.0 | 74.3 | |
| 1080/25p | 1,920 × 1,080 | 28.1 | 25.0 | 74.3 | |
| 1080/30p | | 33.8 | 30.0 | 74.3 | |
| 1080/60p | | 67.5 | 60.0 | 148.5 | |
| 1080/50p | | 56.3 | 50.0 | 148.5 | |
| VGA400 | 640 × 400 | 31.5 | 70.1 | 25.2 | RGB/HDMI/DVI-D |
| | | 37.9 | 85.1 | 31.5 | |
| VGA480 | 640 × 480 | 31.5 | 59.9 | 25.2 | |
| | | 35.0 | 66.7 | 30.2 | |
| | | 37.9 | 72.8 | 31.5 | |
| | | 37.5 | 75.0 | 31.5 | |
| | | 43.3 | 85.0 | 36.0 | |
| SVGA | 800 × 600 | 35.2 | 56.3 | 36.0 | |
| | | 37.9 | 60.3 | 40.0 | |
| | | 48.1 | 72.2 | 50.0 | |
| | | 46.9 | 75.0 | 49.5 | |
| | | 53.7 | 85.1 | 56.3 | |
| MAC16 | 832 × 624 | 49.7 | 74.6 | 57.3 | |
| XGA | 1,024 × 768 | 39.6 | 50.0 | 51.9 | |
| | | 48.4 | 60.0 | 65.0 | |
| | | 56.5 | 70.1 | 75.0 | |
| | | 60.0 | 75.0 | 78.8 | |
| | | 65.5 | 81.6 | 86.0 | |
| | | 68.7 | 85.0 | 94.5 | |
| | | 80.0 | 100.0 | 105.0 | |
| | | 96.7 | 120.0 | 130.0 | |
| MXGA | 1,152 × 864 | 64.0 | 71.2 | 94.2 | |
| | | 67.5 | 74.9 | 108.0 | |
| | | 77.1 | 85.0 | 119.7 | |
| MAC21 | 1,152 × 870 | 68.7 | 75.1 | 100.0 | |
| 1280 × 768 | 1,280 × 768 | 39.6 | 49.9 | 65.3 | |
| | | 47.8 | 59.9 | 79.5 | |
| 1280 × 800 | 1,280 × 800 | 41.3 | 50.0 | 68.0 | |
| | | 49.7 | 59.8 | 83.5 | |
| MSXGA | 1,280 × 960 | 60.0 | 60.0 | 108.0 | |
| SXGA | 1,280 × 1,024 | 64.0 | 60.0 | 108.0 | |
| | | 80.0 | 75.0 | 135.0 | |
| | | 91.1 | 85.0 | 157.5 | |
| SXGA+ | 1,400 × 1,050 | 64.0 | 60.0 | 108.0 | |
| | | 82.2 | 75.0 | 155.9 | |
| WXGA+ | 1,440 × 900 | 55.9 | 59.9 | 106.5 | |
| UXGA | 1,600 × 1,200 | 75.0 | 60.0 | 162.0 | |
| WSXGA+ | 1,680 × 1,050 | 65.3 | 60.0 | 146.3 | |
| 1920 × 1080*2 | 1,920 × 1,080 | 66.6 | 59.9 | 138.5 | |
| WUXGA*2 | 1,920 × 1,200 | 74.0 | 60.0 | 154.0 | |

1. The “i” appearing after the resolution indicates an interlaced signal.
2. Compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).

Serial connector

The serial connector complies with RS-232C. To control the projector from a personal computer, commands must be input through communication software, based on the format and satisfying the communication conditions shown below.

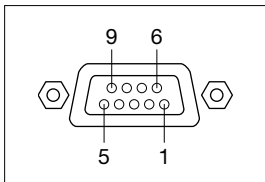
Pin assignments and signal names



D-sub 9-pin (female) Serial input

| No. | Signal name | Description | No. | Signal name | Description |
|-----|-------------|----------------------|-----|-------------|----------------------|
| 1 | - | NC | 6 | - | NC |
| 2 | TXD | Send data | 7 | CTS | Connected internally |
| 3 | RXD | Receive data | 8 | RTS | Connected internally |
| 4 | - | Connected internally | 9 | - | NC |
| 5 | GND | Ground | | | |

Pin assignments and signal names



D-sub 9-pin (male) Serial output

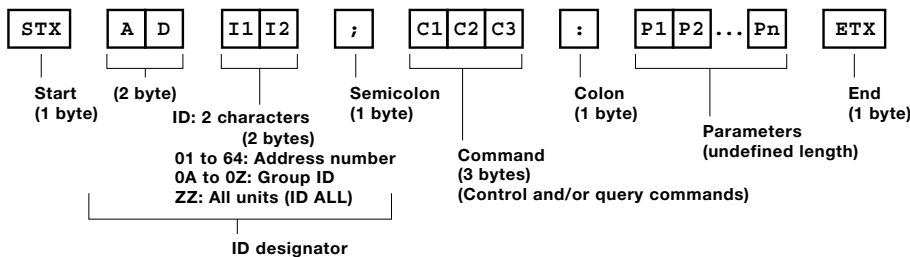
| No. | Signal name | Description | No. | Signal name | Description |
|-----|-------------|----------------------|-----|-------------|----------------------|
| 1 | - | NC | 6 | - | NC |
| 2 | RXD | Receive data | 7 | RTS | Connected internally |
| 3 | TXD | Send data | 8 | CTS | Connected internally |
| 4 | - | Connected internally | 9 | - | NC |
| 5 | GND | Ground | | | |

Communication conditions (factory setting)

| | |
|------------------------|----------------------------|
| Signal level | RS-232C-compliant |
| Synchronization method | Start-stop synchronization |
| Baud rate | 9,600 bps |
| Parity | None |
| Character length | 8 bits |
| Stop bit | 1 bit |
| X parameter | None |
| S parameter | None |

Basic format

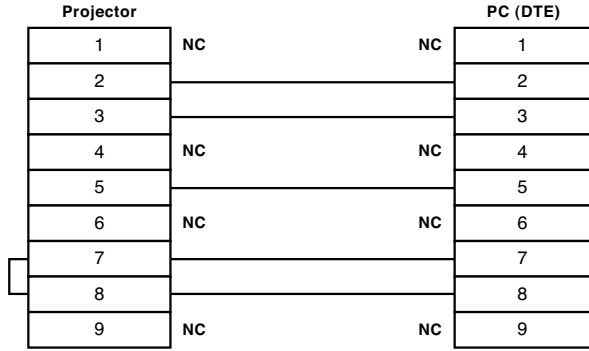
Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



CAUTION

- It may not be possible to send or receive commands for about 10 to 60 seconds when the lamp is first turned on. If this occurs, wait for 60 seconds, then try sending or receiving again.
- When sending multiple commands, be sure to wait for at least 0.5 second after receiving a response from the projector before sending the next command.
- Additional time is sometimes required for response due to processing inside the projector. Set the time-out period for command response to 10 seconds or more.
- When using two or more units:
 - 1) Set different IDs for each unit.
 - 2) Designate only one unit as RESPONSE (ID ALL) ON and the rest as RESPONSE (ID ALL) OFF.
 - 3) Each group should have only one RESPONSE (ID GROUP) ON and the rest should be RESPONSE (ID GROUP) OFF.

Cable specifications



Control commands

| Command : Parameter | Function | | Callback |
|------------------------------|-------------------|-----------------------|-------------------------|
| PON | POWER (STANDBY) | Standby power on | PON |
| POF | | Standby power off | POF |
| IIS:HD1 | INPUT SELECT | HDMI | IIS:HD1 |
| IIS:DVI | | DVI-D | IIS:DVI |
| IIS:RG1 | | RGB 1 | IIS:RG1 |
| IIS:RG2 | | RGB 2 | IIS:RG2 |
| IIS:VID | | Video | IIS:VID |
| IIS:SVD | | S-Video | IIS:SVD |
| LPM:0 | LAMP SELECT | Dual (two lamps) | LPM:0 |
| LPM:1 | | Single lamp | LPM:1 |
| LPM:2 | | Lamp 1 | LPM:2 |
| LPM:3 | | Lamp 2 | LPM:3 |
| OSH:0 | SHUTTER | Shutter on | OSH:0 |
| OSH:1 | | Shutter off | OSH:1 |
| OFZ:0 | FREEZE | Off | OFZ:0 |
| OFZ:1 | | On | OFZ:1 |
| OAS | AUTO SETUP | | OAS |
| VPM:NAT | PICTURE MODE | Natural | VPM:NAT |
| VPM:STD | | Standard | VPM:STD |
| VPM:DYN | | Dynamic | VPM:DYN |
| VPM:CIN | | Cinema | VPM:CIN |
| VPM:GRA | | Graphic | VPM:GRA |
| VPM:709 | | Rec. 709 | VPM:709 |
| VPM:DIC | | DICOM | VPM:DIC |
| VXX:DLVI0=+00000 | DAYLIGHT VIEW | Off | VXX:DLVI0=+00000 |
| VXX:DLVI0=+00001 | | 1 | VXX:DLVI0=+00001 |
| VXX:DLVI0=+00002 | | 2 | VXX:DLVI0=+00002 |
| VXX:DLVI0=+00003 | | 3 | VXX:DLVI0=+00003 |
| OTE:1 | COLOR TEMPERATURE | Middle | OTE:1 |
| OTE:2 | | High | OTE:2 |
| OTE:4 | | User | OTE:4 |
| OTE:10 | | Default | OTE:10 |
| TSD:y1y2y3y4m1m2d1d2w | | DATE | Date setting |
| TST:h1h2m1m2s1s2 | TIME | Time setting | TST:h1h2m1m2s1s2 |
| OOS:0 | ON SCREEN | On-screen display off | OOS:0 |
| OOS:1 | | On-screen display on | OOS:1 |

- * Do not send PON, POF or OSH commands continuously in a short period of time. Doing so may burst the lamp or shorten the lamp replacement cycle.
- * When a command that cannot be executed during standby mode is sent, the projector will send an ER401 command in reply.

Status request commands

| Command:Parameter | Function | Callback | Description |
|-------------------|----------------------------|-----------------------------------|--|
| QPW | Main power status | 000 | Off |
| | | 001 | On |
| QSH | Shutter function status | 0 | Off |
| | | 1 | On |
| QFZ | Freeze function status | 0 | Off |
| | | 1 | On |
| QIN | Input signal status | HD1 | HDMI |
| | | DVI | DVI-D |
| | | RG1 | RGB 1 |
| | | RG2 | RGB 2 |
| | | VID | Video |
| | | SVD | S-Video |
| QOS | On-screen display status | 0 | Off |
| | | 1 | On |
| QST | Projector run time | p1p2p3p4p5 | 00000h–99999h |
| Q\$L:1 | Lamp 1 run time | p1p2p3p4 | 0000h–9999h |
| Q\$L:2 | Lamp 2 run time | p1p2p3p4 | 0000h–9999h |
| QSL | Lamp operation mode status | 0 | Dual |
| | | 1 | Single |
| | | 2 | Lamp 1 |
| | | 3 | Lamp 2 |
| QLP | Lamp power mode status | 0 | High |
| | | 1 | Low |
| QPM | Picture mode status | NAT | Natural |
| | | STD | Standard |
| | | DYN | dynamic |
| | | CIN | Cinema |
| | | GRA | Graphic |
| | | 709 | Rec. 709 |
| | | DIC | DICOM |
| QVX:DLVIO | Daylight view status | DLVIO=+00000 | Off |
| | | DLVIO=+00001 | 1 |
| | | DLVIO=+00002 | 2 |
| | | DLVIO=+00003 | 3 |
| QTM:0 | Temperature status | p1p2p3p4/p5p6p7p8 ^{(*)1} | p0 = Intake air |
| QTM:1 | | | p1 = Exhaust air |
| QTM:2 | | | p2 = Optical module |
| QGD | Date setting status | y1y2y3y4m1m2d1d2w | yyyymmdd (day of week) ^{(*)2} |
| QGT | Time setting status | h1h2m1m2s1s2 | hhmmss |

*1 p1p2p3p4: Celsius (°C), p5p6p7p8: Fahrenheit (°F)
 *2 Day of week: Monday = 1, Tuesday = 2, ... Sunday = 7

NOTE: If a wrong command is received, the projector will send an ER401 or ER402 command to the computer.

Command example

To set the on-screen display off, send the command as shown below.

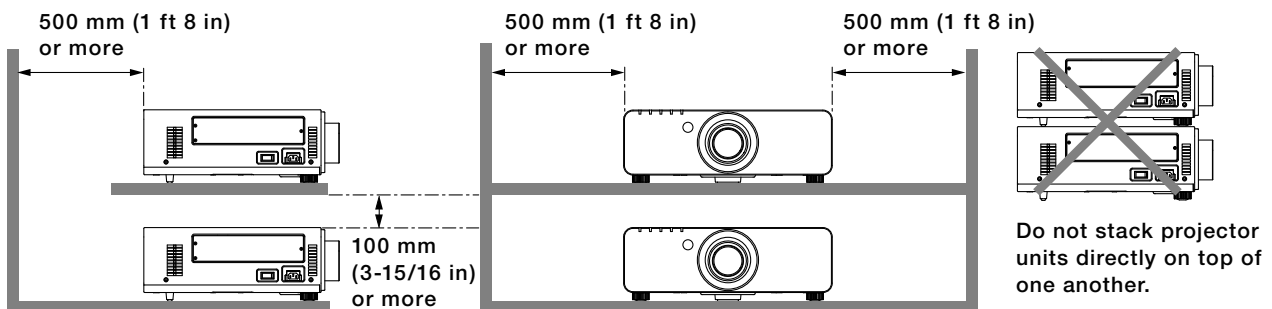


NOTE: When sending commands without parameters, a colon (:) is not necessary.

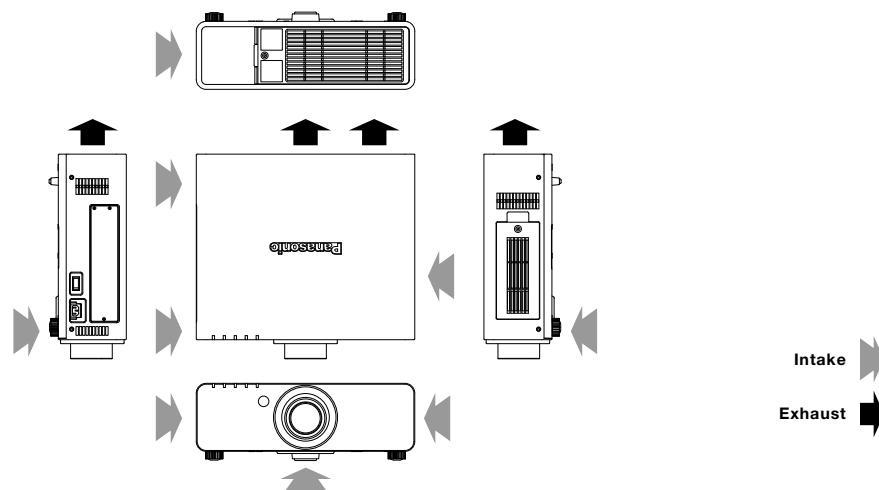
Notes on projector placement and operation

The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following precautions.

1. Never place objects on top of the projector.
2. Make sure there is an unobstructed space of 500 mm (1 feet 8 inches) or more around the projector's exhaust openings.
3. Do not stack projector units directly on top of one another for the purpose of multiple (stacked) projection. When stacking projector units, be sure to provide the amount of space indicated below between them. These space requirements also apply to installations where only one projector unit is operating at one time and the other unit is used as a backup.
4. Make sure that nothing blocks the projector's air intake and exhaust openings. Also, install the projector so that cool or hot air from other air conditioning equipment does not flow directly toward the projector's air intake or exhaust openings.
5. Do not install the projector in an enclosed space. If it is necessary to install it in an enclosed space, add a separate ventilation system. If ventilation is insufficient, hot air will accumulate at the intake opening. This may cause the projector's protective circuit to interrupt projector operation.
6. If the projector is installed in an enclosed space, ensure that 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.
7. When installing the projector in any manner other than floor mounting with the adjuster legs, use the five threaded ceiling mount holes (screw diameter: M6, projector interior thread length: 12 mm) to secure the projector.



Direction of air intake and exhaust



Operating the projector continuously

1. If the projector is to be operated continuously for 24 hours, use the dual-lamp optical system's alternating lamp operation (lamp relay) function. Continuously operating the projector for 24 hours in the dual-lamp mode is not recommended. Allow a minimum of two hours per day of non-operation time for each lamp if the projector is to be operated continuously for more than 22 hours.
2. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.

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.

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