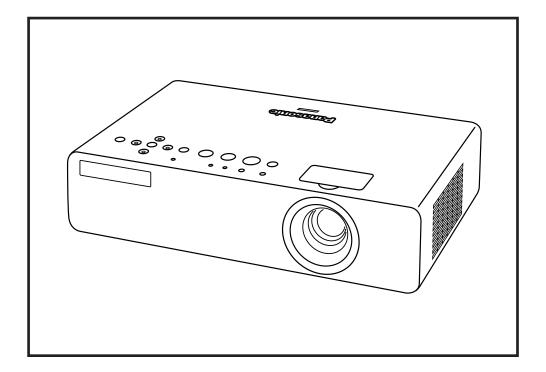
Panasonic ideas for life

SPEC FILE



Product Number: PT-LB78V

Product Name: LCD Projector

Portable LCD Projector

PT-LB78V

Specifications

Installation

Power supply 100-240 V AC, 50/60 Hz

Power consumption 300 W (0.9 W*1 in standby eco mode. 15 W in normal standby mode.

18 W in normal standby mode when set to audio monitor out and with

fan stopped).)

Optical system Dichroic mirror separation/prism synthesis system

LCD panel Panel size 0.63" (16 mm) diagonal (4:3 aspect ratio)

Display method Transparent LCD panel (x 3, R/G/B)
Drive method Active matrix

Pixels 786,432 (1,024 x 768) x 3, total of 2,359,296 pixels

Pixel configuration Stripe

Lens Manual zoom (1:1-1:1.2), manual focus

F 1.65-1.93, f 18.53-22.18 mm

Throw ratio 1.4–1.7:1

Lamp 220 W UHM lamp

Projection size 838-7,620 mm (33-300 inches) diagonally, 4:3 aspect ratio

Colors Full color (16,777,216 colors)

Brightness*2 3,000 lumens

Center-to-corner uniformity ratio*2 85%

Contrast ratio*2 500:1 (full on/full off)

Resolution RGB 1,024 x 768 pixels (Input signals that exceed this resolution will be

converted to 1,024 x 768 pixels.)

Scanning frequency RGB Horizontal: 15.00-91.00 kHz, Vertical: 50-85 Hz

YPBPR 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 720/60p (750p): fh 45.00 kHz; fv 60 Hz

576p (625p): fH 31.25 kHz; fv 50 Hz 720/60p (750p): fH 45.00 kHz; fv 60 Hz 720/50p (750p): fH 37.50 kHz; fv 50 Hz 1080/60i (1125i): fH 33.75 kHz; fv 60 Hz 1080/50i (1125i): fH 28.13 kHz; fv 50 Hz

S-Video/Video NTSC, NTSC4.43, PAL-M, PAL60: fh 15.75 kHz; fv 60 Hz

PAL, SECAM, PAL-N: fH 15.63 kHz; fv 50 Hz

Optical axis shift 5:1 (fixed)

Keystone correction range Approx. ±30° vertically

On-screen menu 17 languages: English, French, German, Spanish, Italian, Korean,

Russian, Chinese, Japanese, Swedish, Norwegian, Danish, Portuguese,

Polish, Hungarian, Czech, and Thai Front/rear, ceiling/desk (menu selection)

Built-in speakers Size 4 x 2 cm, x 1, oval

Output power 1.0 W (monaural)

Terminals COMPUTER (RGB) 1 IN D-sub HD 15-pin (female) x 1

RGB signal G: 0.7 V [p-p] (1.0 V [p-p] for sync on green signals), 75 ohms,

R, B: 0.7 V [p-p], 75 ohms, HD/SYNC, VD: TTL (positive/negative

polarity compatible)

YPBPR signal Y: 1.0 V [p-p] (including sync signal), 75 ohms,

PB, PR: 0.7 V [p-p], 75 ohms

COMPUTER (RGB) 2 IN D-sub HD 15-pin (female) x 1

RGB signal G: 0.7 V [p-p] (1.0 V [p-p] for sync on green signals), 75 ohms,

R, B: 0.7 V [p-p], 75 ohms, HD/SYNC, VD: TTL (positive/negative

polarity compatible)

YPBPR signal Y: 1.0 V [p-p] (including sync signal), 75 ohms,

PB, PR: 0.7 V [p-p], 75 ohms

VIDEO IN RCA pin x 1, 1.0 V [p-p], 75 ohms

S-VIDEO IN Mini DIN 4-pin x 1, Y: 1.0 V [p-p], C: 0.286 V [p-p], 75 ohms

COMPUTER (RGB) 1/2 AUDIO IN

M3 (L, R) x 1, 0.5 V [rms] RCA (L, R) x 1, 0.5 V [rms]

SERIAL D-sub 9-pin x 1, for external control (RS-232C compliant)

Power cord length 2 m/6

Cabinet material Moulded plastic (PC+ABS)

Portable LCD Projector

PT-LB78V

Dimensions (W x H x D) 368 x 88 x 233 mm (14-1/2" x 3-15/32" x 9-3/16")*3

Weight* 4 Approx. 2.96 kg (6.5 lbs.) Operating environment Temperature 0 $^{\circ}$ -40 $^{\circ}$ C (32 $^{\circ}$ -104 $^{\circ}$ F)

Humidity 20%-80% (no condensation)

Operation range*s Approx. 15 m (49'3') when operated from directly in front of the signal

receptor

Dimensions (W x H x D) 48 x 163 x 24.5 mm (1-7/8" x 6-13/32" x 31/32") Weight*4 Approx. 117 g (4.1 oz) (including batteries)

Supplied accessories Power cord

Power cord secure lock Wireless remote control Batteries for remote control

VGA cable for RGB signals (1.8 m/5'11")

Carrying bag

Optional accessories Replacement lamp unit: ET-LAB80

Ceiling mount bracket: ET-PKB80

*1: In standby eco mode, only certain commands can be received from RS-232C control.

Weights and dimensions shown are approximate. Specifications are subject to change without notice. This product may be subject to export control regulations. Intel and Pentium are registered trademarks of Intel Corporation. Microsoft, Windows Vista and Windows are either registered trademarks or trademarks of Microsoft Corp. in the United States and/or other countries. Apple, Mac, Mac OS, Macintosh and Safari are trademarks of Apple Inc., registered in the U.S. and other countries. All other trademarks are the property of their respective trademark owners. Projection images simulated.

^{*2:} Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.

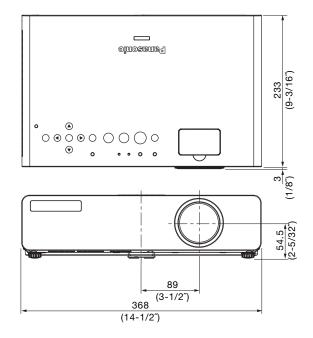
^{*3:} Protruding parts not included.

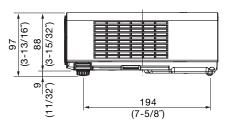
^{*4:} Average value. May differ depending on models.

^{*5:} Operation range differs depending on environments.

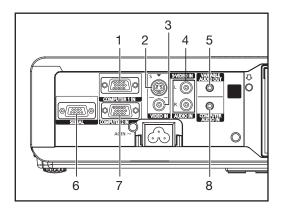
Dimensions

unit : mm (inch) NOTE: This illustration is not drawn to scale.





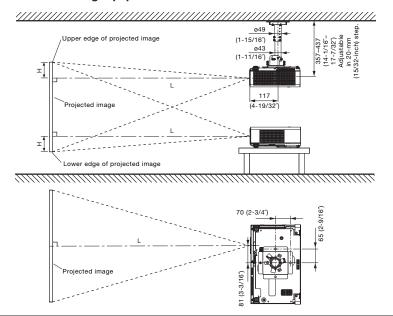
Terminals



- 1 COMPUTER (RGB) 1 input
- 2 S-Video input
- 3 Video input
- 4 Audio input for Video/S-Video
- 5 Audio output
- 6 Serial input
- 7 COMPUTER (RGB) 2 input
- 8 Audio input for COMPUTER 1/2

PT-LB78V

Standard setting-up positions



Projection size Projection distance (L) Height from the edge of screen to center of lens (H) (diagonal) Min (wide) Max (telephoto) 0.84 m / 33" 1.1 m / 3.7 0.08 m / 0.28 0.10 m / 0.33 1.02 m / 40° 1.1 m / 3.7 1.4 m / 4.5 1.27 m / 50° 1.4 m / 4.7 1.7 m / 5.6 0.13 m / 0.42 1.52 m / 60° 1.7 m / 5.6 2.1 m / 6.8 0.15 m / 0.50° 1.78 m / 70" 2.0 m / 6.6 2.4 m / 7.9° 0.18 m / 0.58 2.03 m / 80° 2.8 m / 9.1 0.20 m / 0.67 2.3 m / 7.6 2.29 m / 90° 2.6 m / 8.5° 3.1 m / 10.2° 0.23 m / 0.75 2.54 m / 100° 2.9 m / 9.5° 3.5 m / 11.4° 0.25 m / 0.83 3.5 m / 11.4° 0.30 m / 1.00° 3.05 m / 120" 4.2 m / 13.7 3.81 m / 150° 4.3 m / 14.3 5.2 m / 17.1 0.38 m / 1.25 5.08 m / 200" 5.8 m / 19.0° 7.0 m / 22.9[°] 0.51 m / 1.67 6.35 m / 250" 7.3 m / 23.8° 8.7 m / 28.7 0.64 m / 2.08 7.62 m / 300" 8.7 m / 28.6' 10.5 m / 34.4 0.76 m / 2.50°

unit : mm (inch)

- L: Distance to screen
- H: Height from the edge of screen to

NOTE:

Illustrations show the projector installed using optional ceiling bracket.

This illustration is not drawn to scale.

* This distance is especially recommended for ceiling-mounted use and other permanent installations.

NOTE:

Values shown are approximate.

The value for L (distance to screen) varies slightly depending on the zoom lens characteristics.

When the shortest projection distance is used, a small amount of distortion may occur in the image due to the zoom lens characteristics.

Calculation of the projection distance

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

Aspect ratio 4:3

minimum L (m) = (diagonal screen size in inches) x 0.0292 - 0.036maximum L (m) = (diagonal screen size in inches) x 0.0351 - 0.044

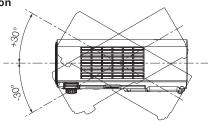
NOTE: Distances calculated with the above equations will include a slight error.

Installable Angle

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

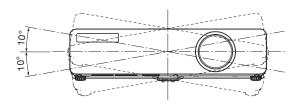
Vertical direction

The projector may be installed at a vertical angle of ±30°.



Horizontal direction

The projector may be installed at a horizontal angle of ±10°.



Computer data compatibility

This projector accepts up to 91 kHz horizontal scanning frequency and 193 MHz dot clock.

NOTE: Pixel thinning is applied to signals that exceed a dot clock frequency of 110 MHz. The display resolution of this projector is 1,024 x 768 pixels. Input signals that exceed this resolution will be converted to 1,024 x 768 pixels.

List of compatible signals

| PAL/PAL-N/SECAM 720 x 576i 15.6 50.0 - A 525i (480i) 720 x 480i 15.7 59.9 13.5 A 625i (576i) 720 x 576i 15.6 50.0 13.5 A 525p (480p) 720 x 576i 15.6 50.0 13.5 A 625p (576p) 720 x 576i 15.0 50.0 27.0 A 625p (576p) 720 x 576 31.3 50.0 27.0 A 625p (576p) 720 x 576 31.3 50.0 27.0 A 750 (720)/60p 1280 x 720 45.0 60.0 74.3 A 750 (720)/50p 1280 x 720 45.0 60.0 74.3 A 1125 (1080)/60i 1920 x 1080i 33.8 60.0 74.3 A 1125 (1080)/50i 28.1 50.0 66.7 30.2 A 40.0 | Display mode | Display resolution (dots) ¹ | Scanning H (kHz) | frequency V (kHz) | Dot clock frequency (MHz) | Picture quality ² | Input terminal |
|---|---------------------------|--|------------------------|-------------------------|---------------------------------|---------------------------------|----------------------|
| 625i (480l) 720 x 480l 15.7 59.9 13.5 A COMPUTER (6 626i (576i) 720 x 576i 15.6 50.0 13.5 A COMPUTER (6 626i (576i) 720 x 576i 15.6 50.0 13.5 A COMPUTER (6 625i (576p) 720 x 576i 15.5 59.9 27.0 A A CAPPUTER (6 752p) A CAPPUTER (7 752p) A A CAPPUTER (7 752p) A CAPPUTER (7 752p) A A CAPPUTER (7 752p) A A CAPPUTER (7 752p) A | NTSC/NTSC4.43/PAL-M/PAL60 | 720 x 480i | 15.7 | 59.9 | _ | Α | VIDEO/S-VIDEO |
| 625i (576i) 720 x 576i 15.6 50.0 13.5 A 525p (480p) 720 x 483 31.5 59.9 27.0 A 625p (576p) 720 x 576 31.3 50.0 27.0 A 750 (720)/60p 1280 x 720 45.0 60.0 74.3 A 750 (720)/60p 1280 x 720 37.5 50.0 74.3 A 1125 (1080)/50i 1920 x 1080i 33.8 60.0 74.3 A 1125 (1080)/50i 640 x 400 31.5 70.1 25.2 A VESA70 640 x 480 31.5 59.9 25.2 A VGA60 640 x 480 31.5 59.9 25.2 A VGA672 40.0 43.3 85.0 36.0 A VGA75 80.0 800 x 600 37.9 75.8 31.5 A VGA660 800 x 600 37.9 76.8 36.0 A SVGA75 800 x 600 37.9 76.8 <t< td=""><td>PAL/PAL-N/SECAM</td><td>720 x 576i</td><td>15.6</td><td>50.0</td><td>-</td><td>Α</td><td>-</td></t<> | PAL/PAL-N/SECAM | 720 x 576i | 15.6 | 50.0 | - | Α | - |
| 525p (480p) 720 x 483 31.5 59.9 27.0 A 625p (576p) 720 x 576 31.3 50.0 27.0 A 750 (720)/50p 1280 x 720 45.0 60.0 74.3 A 750 (720)/50p 1280 x 720 37.5 50.0 74.3 A 750 (720)/50p 1280 x 720 37.5 50.0 74.3 A 1125 (1080)/50i 1920 x 1080i 33.8 60.0 74.3 A VESA70 640 x 480 31.5 70.1 25.2 A VESA85 640 x 480 31.5 59.9 25.2 A VGA60 640 x 480 35.0 66.7 30.2 A VGA75 30.2 31.5 A A VGA75 30.3 36.0 A A SVGA60 80 x 600 35.2 56.3 36.0 A SVGA75 30.2 48.1 72.2 50.0 A SVGA85 40.2< | 525i (480i) | 720 x 480i | 15.7 | 59.9 | 13.5 | Α | COMPUTER (RGB/YPBPR) |
| 625p (576p) 720 x 576 31.3 50.0 27.0 A 750 (720)/60p 1280 x 720 45.0 60.0 74.3 A 750 (720)/50p 1280 x 720 37.5 50.0 74.3 A 1125 (1080)/60i 1920 x 1080i 33.8 60.0 74.3 A 1125 (1080)/50i 28.1 50.0 74.3 A VESA70 640 x 400 31.5 70.1 25.2 A VGA60 640 x 400 31.5 59.9 25.2 A VGA60 640 x 400 31.5 59.9 25.2 A VGA65 66.7 30.2 A A VGA72 80.0 66.7 30.2 A VGA75 75.0 31.5 A VGA85 800 x 600 37.9 72.8 31.5 A SVGA76 800 x 600 35.2 56.3 36.0 A SVGA75 85.1 56.3 36.0 A </td <td>625i (576i)</td> <td>720 x 576i</td> <td>15.6</td> <td>50.0</td> <td>13.5</td> <td>Α</td> <td>- '</td> | 625i (576i) | 720 x 576i | 15.6 | 50.0 | 13.5 | Α | - ' |
| 625p (576p) 720 x 576 31.3 50.0 27.0 A 750 (720)/60p 1280 x 720 45.0 60.0 74.3 A 750 (720)/50p 1280 x 720 37.5 50.0 74.3 A 1125 (1080)/60i 1920 x 1080i 33.8 60.0 74.3 A 1125 (1080)/50i 28.1 50.0 74.3 A VESA70 640 x 400 31.5 70.1 25.2 A VGA60 640 x 400 31.5 59.9 25.2 A VGA60 640 x 400 31.5 59.9 25.2 A VGA65 66.7 30.2 A A VGA72 80.0 66.7 30.2 A VGA75 75.0 31.5 A VGA85 800 x 600 37.9 72.8 31.5 A SVGA76 800 x 600 35.2 56.3 36.0 A SVGA75 85.1 56.3 36.0 A </td <td>525p (480p)</td> <td>720 x 483</td> <td>31.5</td> <td>59.9</td> <td>27.0</td> <td>Α</td> <td>-</td> | 525p (480p) | 720 x 483 | 31.5 | 59.9 | 27.0 | Α | - |
| 750 (720)/60p 1280 x 720 45.0 60.0 74.3 A 750 (720)/50p 1280 x 720 37.5 50.0 74.3 A 1125 (1080)/60i 1920 x 1080i 33.8 60.0 74.3 A 1125 (1080)/50i 28.1 50.0 74.3 A VESA85 640 x 400 31.5 70.1 25.2 A VGA60 640 x 480 31.5 59.9 25.2 A VGA65 640 x 480 31.5 59.9 25.2 A VGA72 37.5 75.0 31.5 A VGA75 37.5 75.0 31.5 A VGA72 37.5 75.0 31.5 A VGA75 80.3 36.0 A A VGA85 800 x 600 35.2 56.3 36.0 A SVGA76 37.9 60.3 40.0 A SVGA76 37.9 60.3 40.0 A SVGA76 | | 720 x 576 | 31.3 | 50.0 | 27.0 | Α | - |
| 750 (720)/50p 1280 x 720 37.5 50.0 74.3 A 1125 (1080)/60i 1920 x 1080i 33.8 60.0 74.3 A VESA70 640 x 400 31.5 70.1 25.2 A COMPUTER (No.10) VESA85 640 x 400 31.5 70.1 25.2 A COMPUTER (No.10) A VGA60 640 x 480 31.5 59.9 25.2 A COMPUTER (No.10) A VGA65 640 x 480 31.5 59.9 25.2 A A VGA72 37.5 75.0 31.5 A | | | | | | Α | - |
| 1125 (1080)/60i 1920 x 1080i 33.8 60.0 74.3 A VESA70 640 x 400 28.1 50.0 74.3 A VESA85 31.5 70.1 25.2 A COMPUTER (60) VESA85 37.9 85.1 31.5 A | 750 (720)/50p | | 37.5 | 50.0 | 74.3 | Α | - |
| 1125 (1080)/50i 28.1 50.0 74.3 A VESA70 640 x 400 31.5 70.1 25.2 A VESA85 37.9 85.1 31.5 A VGA60 640 x 480 31.5 59.9 25.2 A VGA65 37.9 72.8 31.5 A VGA72 37.9 72.8 31.5 A VGA75 43.3 85.0 36.0 A VGA660 800 x 600 35.2 56.3 36.0 A SVGA60 37.9 60.3 40.0 A SVGA60 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA85 48.4 49.7 74.6 57.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA80 1024 x 768 39.6 50.1 51.9 AA XGA75 1280 x 768 39.6 | | 1920 x 1080i | 33.8 | 60.0 | 74.3 | Α | - |
| VESA70 640 x 400 (VESA85) 31.5 (PESA85) 70.1 (PESA85) 25.2 (PESA85) A (PESA85) COMPUTER (VESA85) VGA60 640 x 480 (PESA85) 31.5 (PESA85) 31.5 (PESA85) A (PESA85) <td></td> <td></td> <td>28.1</td> <td></td> <td>74.3</td> <td>Α</td> <td>-</td> | | | 28.1 | | 74.3 | Α | - |
| VESA85 37.9 85.1 31.5 A VGA60 640 x 480 31.5 59.9 25.2 A VGA65 35.0 66.7 30.2 A VGA72 37.9 72.8 31.5 A VGA75 37.5 75.0 31.5 A VGA85 800 x 600 35.2 56.3 36.0 A SVGA60 37.9 60.3 40.0 A SVGA70 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA86 53.7 85.1 56.3 A SVGA85 49.7 74.6 57.3 A SVGA86 1024 x 768 39.6 50.1 51.9 AA SVGA85 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA70 75.0 78.8 AA XGA75 KA | | 640 x 400 | 31.5 | 70.1 | 25.2 | Α | COMPUTER (RGB only) |
| VGA60 640 x 480 y 6865 31.5 s 59.9 s 25.2 s A 3 a c 66.7 s 30.2 s A 37.9 s 72.8 s 31.5 A A 68.7 s 75.0 s 31.5 A A 68.5 s 36.0 s A 68.7 s 75.0 s 31.5 A 69.8 s 75.0 s 36.0 s 36 | | | | | | | _ |
| VGA65 VGA72 35.0 66.7 30.2 A VGA75 37.9 72.8 31.5 A VGA85 43.3 85.0 31.5 A SVGA55 800 x 600 35.2 56.3 36.0 A SVGA60 48.1 72.2 50.0 A SVGA70 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA76 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A MAGA50 1024 x 768 39.6 50.1 51.9 AA XGA50 1024 x 768 39.6 50.1 51.9 AA XGA70 66.5 70.1 75.0 AA XGA75 48.8 59.9 74.5 A XGA75 48.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 56.3< | | 640 x 480 | | | | | = |
| VGA72 VGA75 37.9 72.8 31.5 A VGA85 37.5 75.0 31.5 A SVGA55 800 x 600 35.2 56.3 36.0 A SVGA60 48.1 72.2 50.0 A SVGA70 48.1 72.2 50.0 A SVGA85 53.7 85.1 56.3 A SVGA85 53.7 74.6 57.3 A SVGA85 53.7 74.6 57.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA75 70.1 75.0 AA XGA75 70.1 75.0 AA XGA75 85.0 94.5 AA WXGA768 1280 x 768 39.6 50.1 51.9 A WXGA768 1280 x 768 </td <td></td> <td>2.2 % .00</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> | | 2.2 % .00 | | | | | - |
| VGA75 VGA85 37.5 75.0 31.5 A VGA85 43.3 85.0 36.0 A SVGA60 37.9 60.3 36.0 A SVGA70 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA75 60.0 75.0 78.8 AA XGA75 68.7 85.0 94.5 AA WXGA76 1280 x 768 39.6 49.9 65.3 A WXGA768 1280 x 800 49.9 65.3 A WXGA800 1280 x 800 49.9 65.3 A <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td></tr<> | | | | | | | - |
| VGA85 43.3 85.0 36.0 A SVGA55 800 x 600 35.2 56.3 36.0 A SVGA70 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA75 60.0 75.0 78.8 AA XGA76 48.8 59.9 74.5 A WXGA75 1280 x 700 44.8 59.9 74.5 A WXGA768 1280 x 700 44.8 59.9 74.5 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA800 1152 x 864 64.0 | | | | | | | - |
| SVGA55 800 x 600 35.2 56.3 36.0 A SVGA60 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA75 68.7 85.0 94.5 AA XGA75 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 768 39.6 49.9 65.3 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA75 49.5 80.0 A 49.1 60.2 69.1 A | | | | | | | - |
| SVGA60 37.9 60.3 40.0 A SVGA70 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA75 60.0 75.0 78.8 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA768 1280 x 800 41.3 50.0 68.0 A WXGA800 1152 x 864 64.0 71.2 94.2 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 76 | | 800 x 600 | | | | | - |
| SVGA70 48.1 72.2 50.0 A SVGA75 46.9 75.0 49.5 A SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA75 60.0 75.0 78.8 AA XGA75 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 66.3 A WXGA768 1280 x 800 41.3 50.0 68.0 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA75 49.1 60.2 69.1 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 76 | | 000 X 000 | | | | | - |
| SVGA75 46.9 75.0 49.5 A SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA75 60.0 75.0 78.8 AA XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA800 1280 x 800 41.3 50.0 68.0 A MXGA75 49.1 60.2 69.1 A MXGA76 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA75 6 | | | | | | | = |
| SVGA85 53.7 85.1 56.3 A MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 66.3 A WXGA860 1280 x 768 39.6 49.9 66.3 A WXGA8800 1280 x 800 41.3 50.0 68.0 A WXGA800 152 x 864 64.0 71.2 94.2 A MXGA75 75.9 85.0 12.1 A MXGA75 152 x 864 64.0 71.2 94.2 A MXGA75 76.7 85.0 121.5 B < | | | | | | | = |
| MAC16 832 x 624 49.7 74.6 57.3 A XGA50 1024 x 768 39.6 50.1 51.9 AA XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA768 1528 x 804 46.0 71.2 94.2 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 76.7 85.0 121.5 B MXGA76 1152 x 870 68.7 75.1 100.0 A MXGA75 121.5 B A A | | | | | | | - |
| XGA50 1024 x 768 XGA60 39.6 50.1 51.9 AA 51.9 AA XGA70 48.4 60.0 65.0 AA AA XGA75 56.5 70.1 75.0 AA AA XGA85 60.0 75.0 78.8 AA AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A AA WXGA768 1280 x 768 39.6 49.9 65.3 A AA WXGA800 1280 x 800 49.9 65.3 A AA WXGA800 1280 x 800 49.9 65.3 A AA WXGA75 49.1 60.2 69.1 A AA MXGA70 1152 x 864 64.0 71.2 94.2 A AA MXGA75 64.0 71.2 94.2 A AA MXGA85 76.7 85.0 121.5 B B MAC21 1152 x 870 68.7 75.1 100.0 A A MSXGA60 1280 x 960 60.0 60.0 108.0 A A SXGA65 1280 x 1024 64.0 60.0 108.0 A A SXGA85 91.1 85.0 157.5 B B SXGA60+ 1400 x 1050 65.9 59.9 106.5 A A | | 932 v 624 | | | | | - |
| XGA60 48.4 60.0 65.0 AA XGA70 56.5 70.1 75.0 AA XGA75 60.0 75.0 78.8 AA XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA76 49.1 60.2 69.1 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A SXGA60 1280 x 960 60.0 60.0 108.0 A SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 | | | | | | | - |
| XGA70 56.5 70.1 75.0 AA XGA75 60.0 75.0 78.8 AA XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A 44.8 59.9 79.5 A WXGA800 1280 x 800 41.3 50.0 68.0 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA85 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA65 80.0 75.0 135.0 B SXGA85 91.1 <t< td=""><td></td><td>1024 X 700</td><td></td><td></td><td></td><td></td><td>-</td></t<> | | 1024 X 700 | | | | | - |
| XGA75 60.0 75.0 78.8 AA XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A 49.1 60.2 69.1 A 49.7 59.8 83.5 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 | | | | | | | - |
| XGA85 68.7 85.0 94.5 AA WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA70 1152 x 864 64.0 60.2 69.1 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> | | | | | | | - |
| WIDE750 (720) 1280 x 720 44.8 59.9 74.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 59.9 79.5 A WXGA800 1280 x 800 41.3 50.0 68.0 A 49.1 60.2 69.1 A 49.7 59.8 83.5 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> | | | | | | | - |
| 37.1 49.8 60.5 A WXGA768 1280 x 768 39.6 49.9 65.3 A A WXGA800 1280 x 800 49.1 60.2 69.1 A 49.1 60.2 69.1 A A MXGA70 1152 x 864 64.0 71.2 94.2 A A MXGA75 67.5 74.9 108.0 A A MXGA85 76.7 85.0 121.5 B B MAC21 1152 x 870 68.7 75.1 100.0 A A MXGA60 1280 x 960 60.0 60.0 108.0 A A SXGA60 1280 x 1024 80.0 75.0 135.0 B B SXGA85 91.1 85.0 157.5 B B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A A 65.1 59.9 122.4 B B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | 1000 v 700 | | | | | - |
| WXGA768 1280 x 768 39.6 49.9 65.3 A WXGA800 1280 x 800 41.3 50.0 68.0 A WXGA70 49.7 59.8 83.5 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA65 1280 x 1024 64.0 60.0 108.0 A SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | WIDE/30 (720) | 1280 X 720 | | | | | - |
| 47.8 59.9 79.5 A WXGA800 1280 x 800 41.3 50.0 68.0 A 49.1 60.2 69.1 A 49.7 59.8 83.5 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A SXGA60+ 1400 x 1050 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | MVCAZCO | 1000 × 700 | | | | | - |
| WXGA800 1280 x 800 41.3 50.0 68.0 A 49.1 60.2 69.1 A 49.7 59.8 83.5 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A SXGA60+ 1400 x 1050 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | WAGA/00 | 1∠8U X /68 | | | | | - |
| MXGA70 1152 x 864 49.1 60.2 69.1 A MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | WYCAROO | 1000 v 000 | | | | | - |
| 49.7 59.8 83.5 A MXGA70 1152 x 864 64.0 71.2 94.2 A A MXGA75 67.5 74.9 108.0 A A MXGA85 76.7 85.0 121.5 B B MAC21 1152 x 870 68.7 75.1 100.0 A A MSXGA60 1280 x 960 60.0 60.0 108.0 A A SXGA60 1280 x 1024 80.0 75.0 135.0 B B SXGA75 80.0 75.0 135.0 B B SXGA85 91.1 85.0 157.5 B B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A A 65.1 59.9 122.4 B B WXGA+ 1440 x 900 55.9 59.9 106.5 A | WAGAOUU | 1200 X 800 | | | | | - |
| MXGA70 1152 x 864 64.0 71.2 94.2 A MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | | | | | | - |
| MXGA75 67.5 74.9 108.0 A MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | MVCA70 | 1150 ~ 004 | | | | | - |
| MXGA85 76.7 85.0 121.5 B MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | 115∠ X 864 | | | | | - |
| MAC21 1152 x 870 68.7 75.1 100.0 A MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | | | | | | - |
| MSXGA60 1280 x 960 60.0 60.0 108.0 A SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | 1150 070 | | | | | - |
| SXGA60 1280 x 1024 64.0 60.0 108.0 A SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | | | | | | - |
| SXGA75 80.0 75.0 135.0 B SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | | | | | | - |
| SXGA85 91.1 85.0 157.5 B SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | 1280 x 1024 | | | | | - |
| SXGA60+ 1400 x 1050 64.0 60.0 108.0 A 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | | | | | | - |
| 65.1 59.9 122.4 B WXGA+ 1440 x 900 55.9 59.9 106.5 A | | | | | | | - |
| WXGA+ 1440 x 900 55.9 59.9 106.5 A | SXGA60+ | 1400 x 1050 | - | | | | - |
| | MVQA | 4440 000 | | | | | - |
| UXGA60 1600 x 1200 /5 0 60 0 162 0 B | | | | | | | - |
| | | | | 60.0 | | | - |
| WSXGA+ 1680 x 1050 65.3 60.0 146.3 B WUXGA 1920 x 1200 74.6 59.9 193.3 B | | | | | | | - |

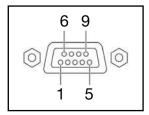
- 1. The "i" appearing after the resolution indicates an interlaced signal.
- 2. The following symbols are used to indicate picture quality.
 - AA Maximum picture quality can be obtained.
 - ${\bf A} \qquad {\bf Signals} \ \ {\bf are} \ \ {\bf converted} \ \ {\bf by} \ \ {\bf the} \ \ {\bf image} \ \ {\bf processing} \ \ {\bf circuit} \ \ {\bf before} \ \ {\bf projected}.$
 - B Signals are compressed by the image processing circuit before picture is projected.

Portable LCD Projector

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



| No. | Signal name | Description | No. | Signal name | Signal name |
|-----|-------------|----------------------|-----|-------------|----------------------|
| 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 | | | |

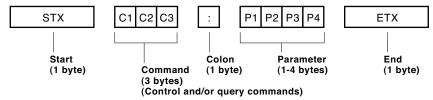
D-sub HD 9-pin, female

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.

NOTE:

If a wrong command is received, the projector will send an ER401 command to the computer. When sending commands without parameters, a colon (:) is not necessary.

Cable specifications

| Projector | | PC (DTE) |
|-----------|--------|----------|
| 1 | NC NO | 1 |
| 2 | | 2 |
| 3 | | 3 |
| 4 | NC NO | 4 |
| 5 | | - 5 |
| 6 | DSR NO | 6 |
| 7 | | 7 |
| 8 | | - 8 |
| 9 | NC NO | 9 |

PT-LB78V

Control commands

| Command: <parameter></parameter> | Function Callback: <parameter< th=""><th colspan="2">> Parameter</th></parameter<> | | > Parameter | |
|----------------------------------|---|-------------------------|-------------|-----|
| | | | Min | Max |
| PON*1/*2 | Power on (standby mode on) | PON*1/*2 | _ | _ |
| POF *1/*2 | Power off (standby mode off) | POF * 1/* 2 | | - |
| AVL: <pl></pl> | Volume control | AVL: <pl></pl> | 0 | 63 |
| IIS: <input signal=""/> | Input signal selection | IIS: <input signal=""/> | - | - |
| OST | The same function as "default" button | OST | - | - |
| OFZ: <off on=""></off> | Freeze | OFZ: <off on=""></off> | 0 | 1 |
| OEN | Enter | OEN | - | - |
| OXG: 0 | Wide mode: Off | OXG: 0 | - | - |
| OXG:1 | Wide mode: On | OXG:1 | - | _ |
| OXG:2 | Wide mode: Auto | OXG:2 | - | - |
| VPM: <nat></nat> | Picture mode: Natural | VPM: <nat></nat> | - | - |
| VPM: <std></std> | Picture mode: Standard | VPM: <std></std> | - | - |
| VPM: < DYN> | Picture mode: Dynamic | VPM: < DYN> | - | - |
| VPM: <bbd></bbd> | Picture mode: Blackboard | VPM: <bbd></bbd> | - | - |
| VPM: <wbd></wbd> | Picture mode: Whiteboard | VPM: <wbd></wbd> | - | _ |
| VXX:DLVI0=<+00000> | Daylight View: Off | VXX:DLVI0=<+00000> | - | - |
| VXX:DLVI0=<+00001> | Daylight View: Auto | VXX:DLVI0=<+00001> | - | - |
| VXX:DLVI0=<+00002> | Daylight View: On | VXX:DLVI0=<+00002> | - | - |
| AUU | Volume up | AUU | - | _ |
| AUD | Volume down | AUD | - | - |
| OMN | Menu | OMN | - | _ |
| OCU | Cursor up | ocu | | _ |
| OCD | Cursor down | OCD | - | _ |
| OCL | Cursor left | OCL | - | - |
| OCR | Cursor right | OCR | - | - |
| OAS | Auto setup | OAS | _ | _ |
| OSH*1 | AV mute | OSH*1 | - | _ |
| OIX | Index window | OIX | _ | _ |
| DZU | Digital zoom: Enlargement | DZU | - | _ |
| DZD | Digital zoom: Reduction | DZD | - | - |

 ^{*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.
 *2 When a command other than OSH is sent while the shutter function is operating, the projector will send an ER401 command in reply and release the shutter function.

Status asking commands

| Command | Description | | Callback |
|-----------|-------------------------------------|-------------|---------------------------------------|
| | | | <parameter></parameter> |
| QPW | Standby power status | | <power condition=""></power> |
| Q\$S | Lamp status | | <pre><lamp condition=""></lamp></pre> |
| QIN | Input signal status | | <input signal=""/> |
| QAV | Volume adjustment value | Э | <p1></p1> |
| QVC | Color adjustment value | | <p1></p1> |
| QVT | Tint adjustent value | | <p1></p1> |
| QVB | Brightness adjustment va | alue | <p1></p1> |
| QVR | Contrast adjustment valu | ıe | <p1></p1> |
| QVS | Sharpness adjustment va | alue | <pl><p1></p1></pl> |
| QWR | White balance: R adjustr | nent value | <p1></p1> |
| QWG | White balance: G adjustr | ment value | <p1></p1> |
| QWB | White balance: B adjustr | nent value | <p1></p1> |
| QHP | Horizontal position adjus | tment value | <p1></p1> |
| QVP | Vertical position adjustm | ent value | <p1></p1> |
| QCP | Clock phase adjustment | value | <p1></p1> |
| QDC | Dot clock adjustment val | lue | <pl><p1></p1></pl> |
| QSP | Projection method status | 3 | <pl><p1></p1></pl> |
| QLG | On-screen menu languag | ge | <pl><p1></p1></pl> |
| QXG | Wide mode status C | Off | < 0 > |
| | | On | <1> |
| | | luto | <2> |
| QVX:DLVI0 | Daylight View status C | Off | <+00000> |
| | A | luto | <+00001> |
| | |)n | <+00002> |
| QPM | Picture mode status N | latural | < NAT > |
| | | Standard | <std></std> |
| | | Dynamic | <dyn></dyn> |
| | E | Blackboard | <bbd></bbd> |
| | V | Vhiteboard | <wbd></wbd> |
| QFZ | Freeze status | | <off_on></off_on> |
| Q\$L | Lamp run time | | <acctch></acctch> |
| QSH | Shutter function status | | <off_on></off_on> |
| QKS | Keystone correction status | | <p1></p1> |
| QTE | Color temperature adjustment status | | <color temp=""></color> |

Parameter format

| Parameter format | Size (Byte) | Definition |
|---|----------------------|---|
| <pl><pl></pl></pl> | 3 (1 or 2 bytes also | Decimal without signs: 0 to 999 (000, 001, 002999) |
| | possible when | Decimal with signs: -99 to +99 (-9901, +00, +01, +02+99) |
| | under control) | Callback from the projector is 3 Byte. |
| <off on=""></off> | 1 | 0 = off, 1 = on |
| <input signal=""/> | 3 | RG1 = computer 1, RG2 = computer 2, VID = video, SVD = S-Video |
| <installation></installation> | 1 | 0 = front, 1 = rear, 2 = ceiling and front, 3 = ceiling and rear |
| <language></language> | 3 | ENG = English, DEU = German, FRA = French, ESP = Spanish, |
| | | ITL = Italian, JPN = Japanese, CHI = Chinese, POR = Portuguese, |
| | | SVE = Swedish, NOR = Norwegian, DAN = Danish, POL = Polish, |
| | | CES = Czech, MAG = Hungarian, RUS = Russian, THA = Thai, KOR = Korean |
| <pre><power condition=""></power></pre> | 3 | 000 = power off (standby mode off), 001 = power on (standby mode on) |
| <lamp condition=""></lamp> | 1 | 0 = standby, 1 = lamp on under control, 2 = lamp off, |
| | | 3 = lamp off under control |
| <acctch></acctch> | 4 | Decimal without signs: 0000-9999 hours |
| <color temp=""></color> | 1 | 0 = economy, 1 = normal, 2 = high |
| <date></date> | 8 | y1y2y3y4m1m2d1d2w = year (y) month (m) day (d) day of week (w) |
| | | Day of week: Monday = 1, Tuesday = 2, Sunday = 7 |
| <time></time> | 6 | h1h2m1m2s1s2 = hour (h) minute (m) second (s) |
| | | |

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

Command example

To set the volume to +30, send the command as shown right.

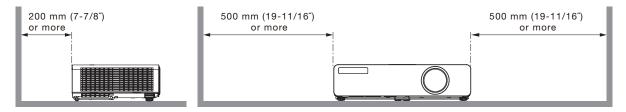
NOTE: When sending commands without parameters, a colon (:) is not necessary.



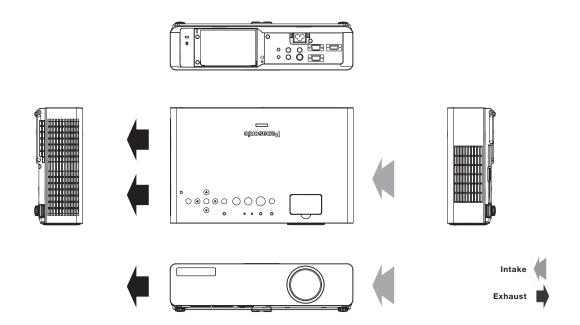
Notes on projector placement and operation

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 while it is operating.
- 2. Make sure there is an unobstructed space of 500 mm (19-11/16") or more around the projector's exhaust openings.
- 3. If the projector is placed in a box or enclosure, ensure the temperature of the air surrounding the projector is 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.



Direction of air intake and exhaust



Operating the projector continuously

- If the projector is to be operated continuously 10 hours or more, lamp replacement cycle duration becomes shorter.
- 2. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods (one hour or less).

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