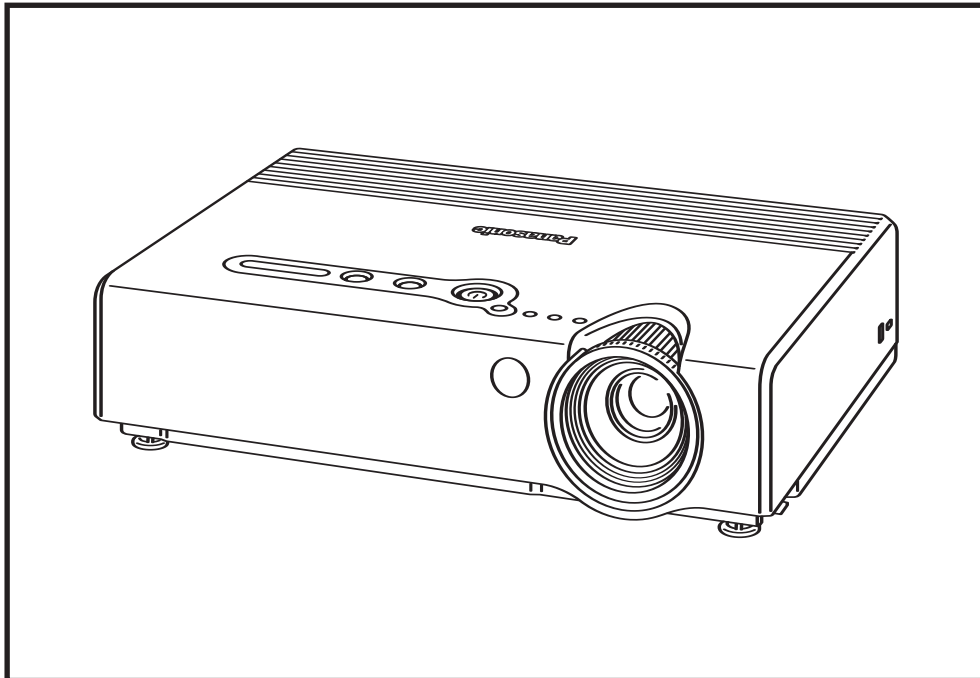

S P E C F I L E



Product Number : **PT-LB60NT**

Product Name : Micro-Portable Wireless LCD Projector

Specifications

| | | |
|-----------------------------------|---------------------------------------|--|
| Power supply | | 100–240 V AC, 50/60 Hz |
| Power consumption | | 300 W (approx. 3 W in standby mode with fan stopped) |
| Optical system | | Dichroic mirror separation/prism synthesis system |
| LCD panel | Panel size | 0.8" (20.32 mm) diagonal, micro lens array (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 1.7–1.8, f 24.0–28.8 mm |
| Lamp | | 220 W UHM™ lamp |
| Colors | | Full color (16,777,216 colors) |
| Brightness | | 3,200 lumens |
| Center-to-corner uniformity ratio | | 90% |
| Contrast ratio | | 400:1** (full on/full off) |
| Scanning frequency | RGB | Horizontal: 15–91 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 31.5 kHz; fV 60 Hz 576p (625p): fH 31.25 kHz; fV 50 Hz 720p (750p): fH 45 kHz; fV 60 Hz 1080i (1125i): fH 33.75 kHz; fV 60 Hz 1080i (1125i): fH 28.125 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 |
| Projection size | | 838–7,620 mm (33–300 inches) diagonally, 4:3 aspect ratio |
| Throw distance | | 1.1 m–10.8 m (3'7"–35'5") |
| Optical axis shift | | 6:1 (fixed) |
| Keystone correction range | | Vertical: approx. ±30° |
| On-screen menu | | 17 languages: English, French, German, Spanish, Italian, Korean, Russian, Chinese, Japanese, Swedish, Norwegian, Danish, Portuguese, Polish, Hungarian, Czech, and Thai |
| Installation | | Front/rear, ceiling/desk (menu selection) |
| Built-in speakers | Size | 4 x 3 cm x 1, oval |
| | Output power | 1.0 W (monaural) |
| Terminals | PC 1 IN (RGB 1 IN) | D-sub HD 15-pin x 1 |
| | RGB signal | R, G, B: 0.7 Vp-p, 75 Ω, Sync on green: 1.0 V [p-p], 75 Ω, HD/SYNC, VD: TTL (positive/negative polarity compatible) |
| | YPbPr signal | Y: 1.0 V [p-p] (including sync signal), 75 Ω, Pb, Pr: 0.7 Vp-p, 75 Ω |
| | PC 2 IN/PC 1 OUT (RGB 2 IN/RGB 1 OUT) | D-sub HD 15-pin x 1 (input/output selectable using on-screen menu) |
| | RGB signal | R, G, B: 0.7 V [p-p], 75 Ω, Sync on green: 1.0 V [p-p], 75 Ω, HD/SYNC, VD: TTL (positive/negative polarity compatible) |
| | YPbPr signal | Y: 1.0 V [p-p] (including sync signal), 75 Ω, Pb, Pr: 0.7 V [p-p], 75 Ω |
| | VIDEO IN | RCA pin x 1, 1.0 Vp-p, 75 Ω |
| | S-VIDEO IN | Mini DIN 4-pin x 1, Y: 1.0 V [p-p], C: 0.286 V [p-p], 75 Ω |
| | PC 1 (RGB 1) AUDIO IN | M3 (L, R) x 1, 0.5 V [rms] |
| | PC 2 (RGB 2) AUDIO IN | M3 (L, R) x 1, 0.5 V [rms] |
| | AUDIO IN | RCA (L, R) x 1, 0.5 V [rms], for VIDEO and S-VIDEO |
| | AUDIO OUT | M3 (L, R) x 1, 0–2.0 V [rms] (variable) |
| | SERIAL | Mini DIN 8-pin x 1, for external control (RS-232C) |
| Power cord length | | 2 m/6.6' |
| Cabinet material | | Moulded plastic (ABS/PC) |
| Dimensions (W x H x D) | | 327 x 75 x 233 mm (12-27/32" x 2-15/16" x 9-5/32") |
| Weight | | 2.6 kg (5.7 lbs.) |

| | | |
|-----------------------|------------------------|---|
| Operating environment | Temperature | 0°–40°C (32°–104°F) |
| | Humidity | 20%–80% (no condensation) |
| Remote control unit | Power supply | 3 V DC (AAA battery x 2) |
| | Operation range*3 | Approx. 7 m when operated from directly in front of the signal receptor |
| | Dimensions (W x H x D) | 52 x 123 x 21 mm (2-1/32" x 4-27/32" x 27/32") |
| | Weight | 74 g (2.6 ozs.) (including batteries) |
| Wireless LAN | Standard | IEEE 802.11b/g (ARIB STD-T66) |
| | Modulation | |
| | IEEE 802.11b | Direct sequence spread spectrum (DS-SS) system |
| | IEEE 802.11g | Orthogonal frequency division multiplex (OFDM) system |
| | Transmission system | |
| | IEEE 802.11b | CCK (11/5.5 Mbps), DQPSK (2 Mbps), DBPSK (1 Mbps) |
| | IEEE 802.11g | 64-QAM (54/48 Mbps), 16-QAM (36/24 Mbps), QPSK (18/12 Mbps), BPSK (9/6 Mbps) |
| | Transmission speed | |
| | IEEE 802.11b | 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps |
| | IEEE 802.11g | 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps |
| Operating range*2 | Approx. 30 m | |
| Frequency range | | PT-LB60NTE/LB60NTEA: 2,412 MHz–2,484 MHz |
| | | PT-LB60NTU: 2,412 MHz–2,462 MHz |
| Channels | | PT-LB60NTE/LB60NTEA: 1–13 ch |
| | | PT-LB60NTU: 1–11 ch |
| Supplied accessories | | Power cord Wireless remote control Batteries for remote control VGA cable Lens cover Carrying bag |
| Optional accessories | | Replacement lamp unit: ET-LAB30 Ceiling mount bracket: ET-PKB30 Full-function wireless remote control: ET-RM300 Serial adapter (DIN 8-pin/D-sub 9-pin): ET-ADSER |

*1: In AI mode.

*2: Operation range differs depending on environments.

Weights and dimensions shown are approximate.

Specifications subject to change without notice.

To use wireless functions, a PC is required that meets the conditions given below:

OS: Microsoft® Windows® 2000 Professional, Windows® XP Professional, Windows® XP Home Edition

CPU: Pentium® III or higher, or other compatible processor (1 GHz or higher is recommended).

Memory: 256 MB or more

Free hard disk space: 60 MB or more

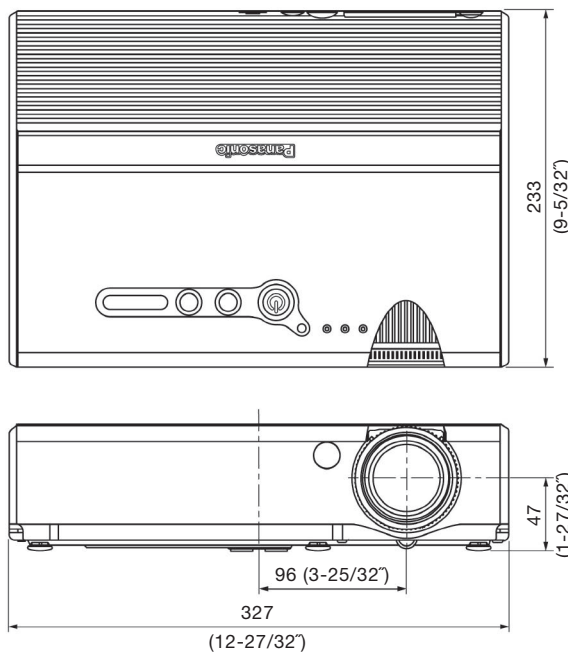
CD-ROM drive: CD-ROM drive or DVD drive

Wireless LAN: IEEE 802.11b/g compatible (built-in wireless LAN system or external IEEE 802.11b/g LAN card must be installed and running normally.) However, some IEEE 802.11g/b wireless LAN may not allow connection to the projector.

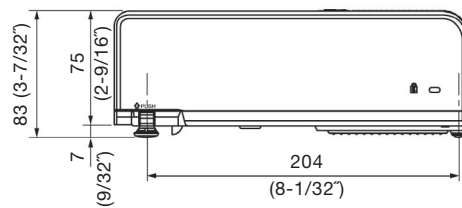
Web browser: Internet Explorer 6.0 or later, Netscape Communicator 7.0 or later

Direct X: DirectX® 8.1b or later must be installed.

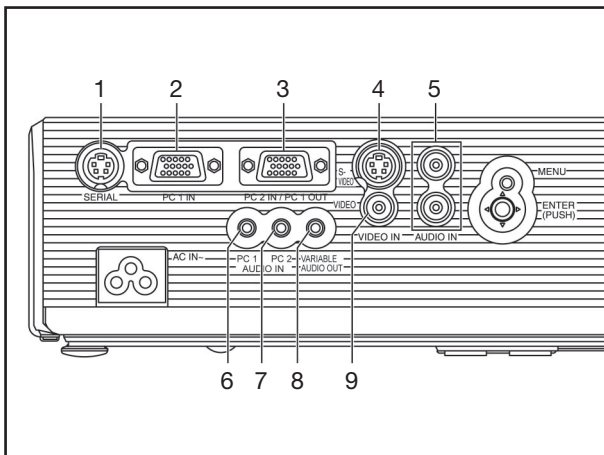
Dimensions



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

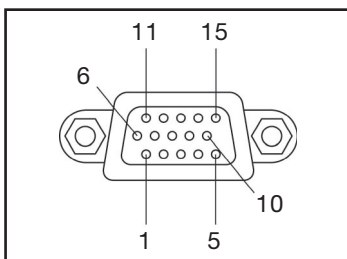


Terminals



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

RGB IN connector pin assignment

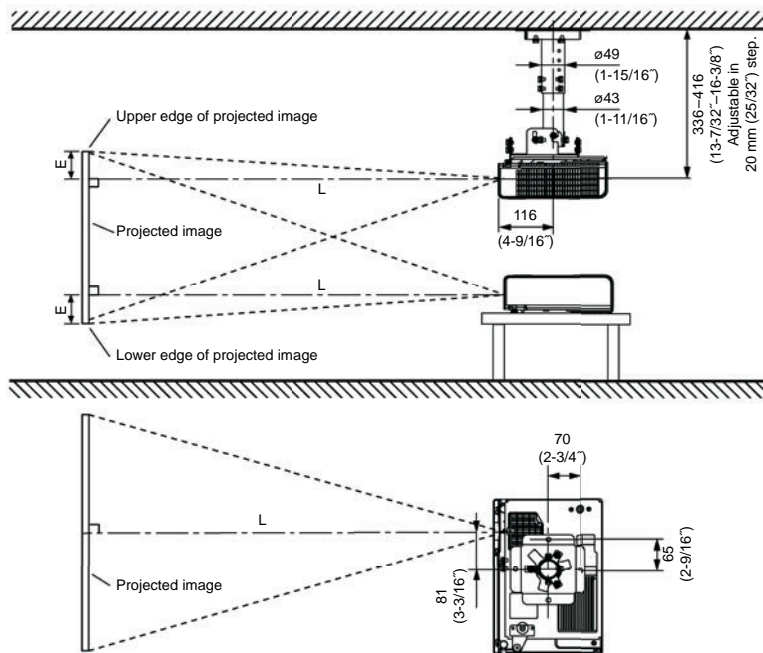


D-sub HD 15-pin, female

| no. | signal | no. | signal | no. | signal |
|-----|--------|-----|--------|-----|---------|
| 1 | R/Pr | 6 | GND | 11 | GND |
| 2 | G/Y | 7 | GND | 12 | SDA* |
| 3 | B/Pb | 8 | GND | 13 | HD/SYNC |
| 4 | NC | 9 | NC | 14 | VD |
| 5 | GND | 10 | GND | 15 | SCL* |

* Effective when connected to a PC having proper functions.

Standard setting-up positions



unit : mm (inch)

A: Distance to screen
E: Height from the edge of screen to center of lens

NOTE:
Illustrations show the projector installed using optional ceiling bracket.
This illustration is not drawn to scale.

| Diagonal image size (4:3 aspect ratio) | Distance to screen (L) | | | Height from the edge of screen to center of lens |
|---|------------------------|----------------|----------------|--|
| | min. | recommended* | max. | |
| 33" / 0.84 m / 2.7' | - | - | 1.1 m / 3.6' | 5 cm / 2.0" |
| 40" / 1.02 m / 3.3' | 1.2 m / 3.9' | 1.4 m / 4.6' | 1.4 m / 4.6' | 8 cm / 3.1" |
| 50" / 1.27 m / 4.2' | 1.5 m / 4.9' | 1.7 m / 5.6' | 1.7 m / 5.6' | 11 cm / 4.3" |
| 60" / 1.52 m / 4.9' | 1.8 m / 5.9' | 2.1 m / 6.9' | 2.1 m / 6.9' | 13 cm / 5.1" |
| 70" / 1.78 m / 5.8' | 2.1 m / 6.9' | 2.5 m / 8.5' | 2.5 m / 8.5' | 15 cm / 6.3" |
| 80" / 2.03 m / 6.7' | 2.4 m / 7.9' | 2.8 m / 9.2' | 2.8 m / 9.2' | 17 cm / 6.7" |
| 90" / 2.29 m / 7.5' | 2.7 m / 8.9' | 3.2 m / 10.5' | 3.2 m / 10.5' | 19 cm / 7.5" |
| 100" / 2.54 m / 8.3' | 3.0 m / 9.8' | 3.5 m / 11.5' | 3.5 m / 11.5' | 21 cm / 8.3" |
| 120" / 3.05 m / 10.0' | 3.6 m / 11.8' | 4.3 m / 14.1' | 4.3 m / 14.1' | 25 cm / 9.8" |
| 150" / 3.81 m / 12.5' | 4.6 m / 15.1' | 5.4 m / 17.7' | 5.4 m / 17.7' | 32 cm / 12.6" |
| 200" / 5.08 m / 16.7' | 6.1 m / 20.0' | 7.2 m / 23.6' | 7.2 m / 23.6' | 42 cm / 16.5" |
| 250" / 6.35 m / 20.8' | 7.6 m / 24.9' | 9.0 m / 29.5' | 9.0 m / 29.5' | 53 cm / 20.9" |
| 300" / 7.62 m / 25.0' | 9.1 m / 29.9' | 10.8 m / 35.4' | 10.8 m / 35.4' | 63 cm / 24.8" |

* 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 0.0303 - 0.044
 maximum L (m) = (diagonal screen size in inches) x 0.0364 - 0.044

Aspect ratio 16 : 9

minimum L (m) = (diagonal screen size in inches) x 0.0331 - 0.044
 maximum L (m) = (diagonal screen size in inches) x 0.0397 - 0.044

Computer data compatibility

This projector accepts up to 91 kHz horizontal scanning frequency and 162 MHz dot clock.

NOTE: The projector is not fully compatible with RGB signals of which dot clock is higher than 100 MHz.
 The display resolution of this projector is 1024 x 768 pixels. If the display resolution indicated in the above data does not match this resolution, the input signal will be converted to 1024 x 768 pixels.