Panasonic ideas for life



PT-LB3EA PT-LB2VEA PT-LB1VFA







Superb Performance with a 5,000-Hour Lamp Replacement Cycle

Compact, Mobile Projectors

FOR BUSINESS





Outstanding Performance and Excellent Mobility Ideal for a Wide Range of Uses — From Business to Education

The PT-LB3 Series offers superb basic performance, such as a 5,000-hour*1 lamp replacement cycle.

Its Intelligent Power Management function allows resistance to sudden voltage fluctuations.

A network function reduces management tasks with a wired LAN connection, and allows flexible system upgrading.

And an easy setup function enables quick operation for portable use.

This kind of versatility brings efficient visual communication to all kinds of applications.

■ Enhanced Basic Performance



A 5,000-hour*1 lamp replacement cycle saves operating costs. Also, the Intelligent Power Management function allows the projector to continue operating even when the power supply voltage is fluctuated.

Installation Flexibility



The PT-LB3 Series has useful features such as a wired LAN network. It is a mobile projector, but can also be used on a desktop or mounted to the ceiling.

Easy Operation



Setup is fast and easy thanks to features like Speed Start, which brings up the image quickly*2, and simple, single-leg adjustment of the projector angle.

Balanced Quality and Performance















^{*1} This value is calculated by continuously turning the lamp on for 2 hours and off for 0.25 hour.

The lamp replacement cycle will decrease if the lamp is turned on/off more frequently, or if it is left on for longer intervals.

Portable Convenience and High Basic Performance, Including a 5,000-hour*1 Lamp Replacement Cycle and a Resistance to Sudden Voltage Fluctuations*3



The New Lamp Drive System Enables a 5,000-hour" Lamp Replacement Cycle

Panasonic employs a number of advanced technologies - including a proprietary lamp drive system — that help maintain lamp performance. This has resulted in a 5,000-hour*1 lamp replacement cycle. It helps saving operating cost by providing longer usage between lamp replacements.



Intelligent Power Management Function Allows Resistance to Sudden Voltage Fluctuations¹³

Momentary power outages*4 or voltage drops*5 can cause the projector to shut down interrupting the projection. The PT-LB3 Series equipped with the Intelligent Power Management function controls the power supply to cope with power fluctuations, to enable continued projection.



The Daylight View Basic Function Ensures Clear Images Even in Brightly Lit Rooms

Panasonic's Daylight View Basic technology achieves sharp, easy-to-see images by clearly reproducing the details in dark image

areas, which were previously difficult to see in brightly lit rooms. A built-in sensor measures the ambient light, and the Daylight View Basic function adjusts the halftone colour and brightness level according to the surrounding illumination.



Quiet 29 dB * Design Helps to Hold Viewers' Attention

The noise level is as low as 29 dB*6. This helps your audience to keep their attention on the discussion or on the screen images during quiet scenes.



Easy Portability with a Compact, A4-File-Size Body

The compact body is the size of an A4 file and weighs only about 2.3 kg, while producing a brightness of 3,200 $\,\mathrm{lm}^{*7}$. Its handy size and weight make it easy to carry from room to room, or to a client's office for an on-site presentation. It gives you sharp, clear images wherever and whenever you need them.



Low Standby Power Consumption of 0.4 W* Helps the Environment

The ecological design of the PT-LB3 Series greatly reduces its environmental impact. In Eco Standby mode*9, power consumption is only 0.4 W*8. As examples of other environmental design features, the uncoated cabinet uses no halogenated flame retardants, the lens uses lead-free glass, and an Auto Off Timer switches the projector to Standby mode when no input signal is received for a preset time. The PT-LB3 Series also complies with the standards of the RoHS Directive*10

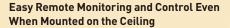
- *1 This value is calculated by continuously turning the lamp on for 2 hours and off for 0.25 hour.
- The lamp replacement cycle will decréase if the lamp is turned on/off more frequently, or if it is left on for longer intervals.
- *3 Fluctuations may occur in the electricity power supply except the power outage.
 *4 Continuing 0V power supply during several tens of milliseconds.

- *5 Power supply voltage reduction. Excluding momentary power outage.
 *6 Lamp mode : Eco
 *7 For the PT-LB3EA. The brightness of the PT-LB2VEA is 2,600 lm and that of the PT-LB1VEA is 2,200 lm.
- *8 0.4 W at 220-240 V AC. 0.3 W at 100-120 V AC.

 *9 When the standby mode is set to ECO, network functions such as power on over the LAN will not operate.

 Also, only certain commands can be received for external control using the serial terminal.
- *10 Restriction of the use of certain Hazardous Substances. The specified toxic substances used in the electrical and electronic equipment that is manufactured and distributed within Europe are controlled (the six substances are lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl esters (PBDE)), and all Panasonic projectors comply with the standards of the European RoHS Directive.

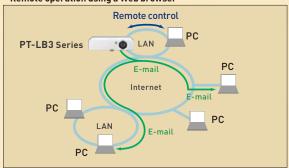
A Wired LAN Network Function and Other Functions Allow Easy System Integration



A Web browser on a computer connected through a wired LAN system lets you remotely operate projectors and check their status. An e-mail messaging function can also notify you when a lamp needs replacement, and indicate the overall projector status. In addition, Multi Projector Monitoring and Control Software is included for monitoring and controlling multiple Panasonic projectors from a single PC. The wired LAN terminal is compatible with PJLinkTM (Class1), an open protocol that is used by many manufacturers, to enable integrated control of systems that contain different brands of projectors.

PJLink[™]

■ Remote operation using a Web browser



■ Basic concept of the Multi Projector Monitoring and Control Software



Top-Panel Lamp Replacement and Side Air Filter Replacement Simplify Maintenance Even for a Ceiling-Mounted Projector

The lamp can be accessed through the top panel for easy replacement, and the air filter can be removed and installed through the side panel. This eliminates the need to detach the projector from its ceiling bracket and greatly simplifies maintenance. The air filter uses a Micro Cut Filter, which is an electrostatic filter that employs an ion effect to attract and trap dust particles with high efficiency.





Optional Highly Durable Filter for Use in Dusty Areas

The external ET-KFB2 highly durable filter mounts to the PT-LB3 Series projector to boost dust and particle collection. This optional filter is recommended if the projector is to be installed in a dusty area.



Serial input

S-Video input

Audio output

Audio 1 input

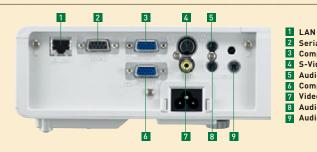
Audio 2 input

Computer 1 input

Computer 2 input Video input

Various Interfaces Allow Use with a Wide Range of Systems

Various interfaces: Interfaces include two computer (RGB) inputs, a wired LAN terminal, and a serial (RS-232C) terminal for external control. The serial terminal has an Emulate function that lets you continue using existing control systems when replacing a previous Panasonic model. It is also possible to output audio during Standby mode. This is convenient when connecting an external audio system*11 through the projector.



Usability was Also a High Design Priority, as Seen in Versatile Functions for Easy Setup.

A Variety of Functions Provide Easy Setup

- •With Speed Start, the image quickly appears*12 after you press the power button.
- •Single-leg simplifies adjustment of the projector angle.



- •With Real-Time Keystone Correction, the projector automatically senses if you adjust its angle (in the vertical direction) during operation and instantly makes whatever keystone correction is necessary for optimal viewing.
- •Auto Signal Search automatically detects what kind of source is connected and begins projection.*13
- •On-Screen Help Display: If images cannot be projected when a PC is connected by a VGA cable, this function displays the output setting method for the PC. The Help screen guides you through the button operations according to the maker of the connected PC.
- •Input Guidance Function: This function displays on-screen illustrations to show the selected channel and whether the input signal is being received or not. It lets you confirm the input conditions at a glance, even when multiple devices are connected to the input terminals.
- •Whiteboard and Blackboard modes are convenient when projecting in rooms that don't have a screen.



Direct Power Off Function — Unplug the Power Cord Immediately After Use

The Direct Power Off function keeps the cooling fan turned on even when you unplug the power cord right after use. Electric power stored inside the unit is used to operate the cooling fan to lower the internal temperature. This lets you put everything away and carry the projector quickly to your next presentation or lecture.



Convenient Carrying Bag

A carrying bag with a handy shoulder strap comes with the projector. It also protects the projector from impacts.



Effective Theft Prevention with the Startup Logo

You can change the default Panasonic start up logo to any logo you want. A new logo can be easily uploaded by connecting a computer to the PT-LB3 Series through the LAN or serial connection by using the Logo Transfer Software¹¹⁴. An abundance of other security measures are also included, such as a security anchor, a user password, a control panel lock, and text superimposing.





Other Features

times their original size.*15

 Index Window: You can split the screen into two windows, right and left, and display a frozen (still) image in one and a real-time action image in the other.



- •Digital Zoom: Expands selected parts of the display up to three
- Freeze Function: This function lets you display still images by freezing a motion image.
- •AV mute: Temporarily turns off both the image and the sound.
- •Background Colour: When there is no signal from the source device, a solid background colour (settable to either blue or black) is displayed on the screen to help prevent connection errors.
- •A Compact, Easy-to-Use Wireless Remote Control
- •Selectable 17-language on-screen menu



Eco Information

- No halogenated flame retardants are used in the cabinet.
- Non-coated cabinet for easy recycling.
- Daylight View Basic function makes the screen seem brighter without increasing power consumption.
- Lead-free glass is used for the lens.
- Standby power consumption of only 0.4 W*8 has been achieved (standby mode: ECO)*9.
- An Auto Off Timer switches the projector to Standby mode when no input signal is received for a preset time.



The PT-LB3 Series projectors are carefully designed by Panasonic in Japan to meet demands for high quality and performance.

Specifications

Models		PT-LB3EA		PT-LB2VEA			PT-LB1VEA		
Power supply		100-240 V AC, 50/60 Hz							
Power consumption		300 W 290 W							
		0.4 W at 220-240 V AC, 0.3 W at 100-120 V AC when standby mode set to eco**, 15 W when standby mode set to normal, 18 W when standby mode set to normal and audio monitor out.							
Optical system		Dichroic mirror separation/prism synthesis system							
LCD panel	Panel size	16 mm (0.63") diagonal, 4:3 aspect ratio							
	Display method	Transparent LCD panel (x 3, R/G/B)							
	Drive method	Active matrix							
	Pixels	786,432 pixels (1,024 x 768) x 3 panels							
Lens		Manual zoom (1:1-1:1.2), manual focus, F 1.64-1.87, f 18.80-22.56 mm, throw ratio: 1.4-1.7:1 f 19.22-22.68 mm, throw ratio: 1.5-1.7:1				20,			
Lamp		220 W UHM lamp (The lamp replacement cycle is 5,000 hours.*2)							
Screen size (diagonal)		0.84-7.62 m (33-300 inches) (4:3 aspect ratio)							
Colour		Full colour (16,777,216 colours)							
Brightness		3,200 lumens*3		2,600 lumens*3	2,600 lumens*3		2,200 lumens*3		
Centre-to-corner uniformity		85% ⁻²							
Contrast		600:1 (full on/full off) ^{ca}							
Resolution		1,024 x 768 ¹⁴							
Scanning	RGB	Horizontal: 15-91 kHz, Vertical: 50-85 Hz							
frequency	YP _B P _R /YC _B C _R	480(625)): fix 15.75 kHz; fv 60 Hz 480p(525p): fix 31.50 kHz; fv 60 Hz 720p(750p): fix 45.00 kHz; fv 60 Hz 1080i(1125i): fix 33.75 kHz; fv 60 Hz 576i(625i): fix 15.63 kHz; fv 50 Hz 576p(625p): fix 31.25 kHz; fv 50 Hz 720p(750p): fix 37.50 kHz; fv 50 Hz 1080i(1125i): fix 28.13 kHz; fv 50 Hz							
	S-Video/Video	NTSC, NTSC4.43, PAL-M, PAL60: fn 15.75 kHz; fv 60 Hz PAL, SECAM, PAL-N: fn 15.63 kHz; fv 50 Hz							
Optical axis shift		5:1 (fixed)							
Keystone correction range		Vertical: ±30°							
Installation		Front/rear ceiling/desk (menu selection)							
Built-in speaker		1.0 W (monaural)							
Terminals	COMPUTER 1 IN	D-sub HD 15-pin x 1 (RGB/YP ₆ P ₆ /YC ₆ C ₆ x 1)							
	COMPUTER 2 IN	D-sub HD 15-pin x 1 (RGB/YP ₈ P ₈ /YC ₈ C ₈ x 1)							
	VIDEO IN	RCA pin x 1 (Composite video x 1)							
	S-VIDEO IN	Mini DIN 4-pin x 1 (S-Video x 1)							
	AUDIO IN	M3 x 2 (L-R x 2)							
	VARIABLE AUDIO OUT	M3 x 1 (L-R x 1)							
	SERIAL	D-sub 9-pin x 1 (RS-232C)							
	LAN	RJ-45 x 1, compatible with PJLink™ (class 1), 100BASE-TX/10BASE-T							
Cabinet material		Moulded plastic (PC+ABS)							
Dimensions (W x H x D)		307 x 69 x 210 mm (12-3/32" x 2-23/32" x 8-9/32")*5							
Weight		Approx. 2.3 kg (5.07 lbs.)*6							
Noise level		37 dB(Lamp mode : Normal) , 29 dB(Lamp mode : Eco)							
Operation environment		Temperature: 0°-40°C (32°-104°F)*, Humidity: 20%-80% (no condensation)							
Supplied acce	essories	Power cord, pow	ver cord secure lock, wire	less remote control unit, batteries (R03 typ	oe x2), VGA cab	ole, carrying bag, softwa	are CD-ROM		

*1: When the standby mode is set to eco, network functions such as power on over the LAN will not operate.

Also, only certain commands can be received for external control using the serial terminal.

*2: This value is calculated by continuously turning the lamp on for 2 hours and off for 0.25 hour.

The lamp replacement cycle will decrease if the lamp is turned on/off more frequently, or if it is left on for longer intervals.

*3: Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.

*4: Input signals that exceed this resolution will be converted to 1,024 x 768 pixels.

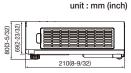
*5: Protruding parts not included.

*6: Average value (excluding lens cap). May differ depending on models.

*7: The operating temperature range is 0°C to 35°C (32°F to 95°F) when used in High-Altitude mode (1,400 to 2,700 m (4,593 to 8,858 feet)). Also, in Lamp Normal mode, if the ambient temperature exceeds 35°C /95°F (30°C /85°F in High-Altitude mode), the light output may be reduced approximately 30% to protect the projector.

Dimensions





Optional Accessories









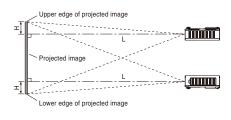
Ceiling mount bracket: ET-PKB2

Highly durable filter unit: ET-KFB2

Replacement filter for ET-KFB2: ET-RFB2

Replacement lamp unit: ET-LAB2

Projection Distance (Screen aspect ratio = 4:3)



Project size	[PT-LB3EA] Projection distance (L)		[LB2VEA/LB1VEA] P	Height from the edge	
(diagonal)	Min (wide)	Max (telephoto)	Min (wide)	Max (telephoto)	of screen to centre of lens (H)
0.84 m (33")	-	1.1 m (3.7')	-	1.1 m (3.8°)	0.08 m (0.28')
1.02 m (40")	1.1 m (3.7')	1.4 m (4.5')	1.2 m (3.9')	1.4 m (4.6')	0.10 m (0.33')
1.27 m (50")	1.4 m (4.7')	1.7 m (5.6')	1.5 m (4.8')	1.8 m (5.8')	0.13 m (0.42')
1.52 m (60")	1.7 m (5.6')	2.1 m (6.8')	1.8 m (5.8')	2.1 m (6.9°)	0.15 m (0.50°)
1.78 m (70")	2.0 m (6.6')	2.4 m (7.9')	2.1 m (6.8')	2.5 m (8.1')	0.18 m (0.58')
2.03 m (80")	2.3 m (7.6')	2.8 m (9.1')	2.4 m (7.8')	2.8 m (9.3')	0.20 m (0.67')
2.29 m (90")	2.6 m (8.5')	3.1 m (10.2')	2.7 m (8.8')	3.2 m (10.5')	0.23 m (0.75')
2.54 m (100")	2.9 m (9.5')	3.5 m (11.4')	3.0 m (9.8')	3.5 m (11.6')	0.25 m (0.83')
3.05 m (120")	3.5 m (11.4')	4.2 m (13.7')	3.6 m (11.8')	4.3 m (14.0°)	0.30 m (1.00°)
3.81 m (150")	4.4 m (14.4')	5.2 m (17.1')	4.5 m (14.8')	5.3 m (17.5')	0.38 m (1.25')
5.08 m (200")	5.8 m (19.0')	7.0 m (22.9')	6.0 m (19.7')	7.1 m (23.4')	0.51 m (1.67')
6.35 m (250")	7.3 m (23.8')	8.7 m (28.7')	7.5 m (24.7')	8.9 m (29.3')	0.64 m (2.08')
7.62 m (300")	8.7 m (28.6')	10.5 m (34.4')	9.0 m (29.6')	10.7 m (35.1')	0.76 m (2.50°)

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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.

Also, the throw ratios shown are the values for an 80-inch image size (measured diagonally). The throw ratio varies depending on the diagonal image size. The PJLink trademark is an application trademark in Japan, the United States,



For more information about Panasonic projectors

>>> http://panasonic.net/avc/projector



