







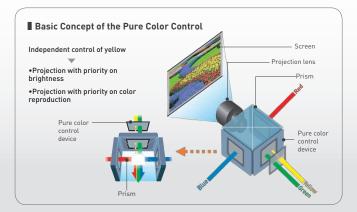
Bright, Vibrant Large-Screen Images

A Full 16,000 lm of Brightness and 2,500:1 Contrast

The 4-lamp optical system uses high-output, 380 W lamps to deliver remarkable 16,000 lm brightness. And the contrast ratio is a high 2,500:1, to ensure bright, crisp, large-screen projection.

Excellent Colors with Pure Color Control

It is inherently difficult for LCD projectors to attain both high brightness and superb color reproduction. For this reason, in addition to the three conventional LCD panels that control the light intensity for the red, blue and green primary colors, the PT-EX16K also features a Pure Color Control function that independently controls the light intensity of yellow coloring. This provides rich overall color expression while maintaining brightness.



Full 10-Bit Image Processing System

The use of a full 10-bit image processing system provides smooth tonal expression. For example, skin tones appear natural and true to life.

High Reliability for Long-Time Use

4-Lamp Optical System Enables Stable, Extended Operation

Even if one lamp goes out during use, the other lamps continue, so projection is not interrupted. Lamp Relay mode also allows long-time, continuous operation.

■ Brightness and Lamp Replacement Cycle Guideline

Lamp	Brightness (lm)	Lamp replacement cycle (hours)*1
Four lamps (Standard mode)	16,000	2,000
Four lamps (Eco1,Eco2 mode)	12,320	3,000
Two lamps (Standard mode)	8,000	4,000
Two lamps (Eco1,Eco2 mode)	6,160	6,000

Highly Durable Optical Engine Ensures Excellent Long-Time Image Quality

The LCD panels and polarizers inside the LCD projector's optical block tend to degrade over time. Their degradation strongly and adversely affects image quality. The inorganic LCD panels and polarizers in the PT-EX16K resist time-related changes to achieve a replacement cycle of up to 10,000 hours. This maintains high image quality for a very long time.

Adverse Dust Effects Prevented by a Long-Lasting Air Filter

The use of a large pleated air filter has made it possible to achieve a replacement cycle of up to 5,000 hours.*2 This greatly reduces maintenance hassles. The filter is also replaced from the front, so there is no need to detach the projector from its bracket in ceiling-mounted applications.

Optional Smoke Cut Filter Provides Protection from Fine Smoke Particles

The projector can be equipped with an optional Smoke Cut Filter ET-SFE16 to prevent the entry of not only dust but also fine smoke particles, such as those used for special effects at events and stage performances.



ET-SFE16

Excellent System Expandability for Versatile Installation

The Horizontal/Vertical Lens Shift Function and a Variety of Lenses

Both zooming and focusing can be done by remote control. The wide adjustment range of the powered horizontal/vertical lens shift function assures convenience and versatility during installation. A variety of lenses are also available, from short or long focus zoom lenses to fixed focus lenses for rear projection. This makes it possible to install the projector in a variety of locations.

Flexible Installation

The projector can be rotated 360° vertically for flexible installation. This allows projection from directly above or below, for exciting visual prossibilities in art galleries, theaters and showrooms.



Corner Keystone Correction Enables Angled Projection

All you need to do is designate four points as the corners of the projected image, and this function automatically carries out horizontal and vertical keystone correction.

Multi-Screen Support System Seamlessly Connects Multiple Screens

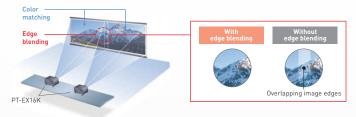
The Multi-Screen Support System optimally adjusts multiple screens: Edge blending, color matching and multi-screen processor.

• Edge Blending

The edges of adjacent screens can be blended and their luminance controlled.

Color Matching

This function corrects for slight variations in the color reproduction range of individual projectors.



Versatile Interfaces and Illuminated Terminals and Control Panel

The wide-ranging terminals include 2 sets of RGB inputs, an HDMI input, and a DVI-D input. Mounting the optional Interface Board ET-MD16SD1 also accommodates HD/SD-SDI signal input. The terminal connection area is LED illuminated, and a backlight is provided for the control panel buttons, ensuring smooth and easy operation in the dark.



Mechanical Shutter for a Total Screen Blackout

The Mechanical Shutter lets you mechanically block the light to completely blackout the screen, and prevents light leakage from the lens. When closing the shutter, the projection image gradually fades out, then gradually fades in when opening, which brings more attractive stage effects.

Easy Remote Control and Observation

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 available for monitoring and controlling

multiple Panasonic projectors from a single PC. The wired LAN terminal is compatible with PJLink™(Class1), an open protocol that is used by many manufacturers, to enable integrated control of systems that contain different brands of projectors.

■ Basic Concept of the Multi Projector Monitoring and Control Software



Robust Carrying Handles

An iron base plate is mounted to the bottom of the main unit. Also, robust carrying handles attached to the base plate are designed for easy carrying of the projector.



Top-Panel Lamp Replacement Simplifies Maintenance

The lamp can be reached through the top panel for easy replacement. This eliminates the need to detach the projector from its ceiling bracket and greatly simplifies maintenance.



Other Features

- Direct Power Off allows the power cord to be unplugged right after use.
- Wireless and wired remote control that allows the allocation of up to 64 IDs.
- Logo Transfer Software*3 lets you upload any startup logo you want.

Ecology-Conscious Design

- No halogenated flame retardants are used in the cabinet.
- Lead-free glass is used for the lens.
- Lamp power switching further reduces power consumption.
- RoHS compliant

^{*1} The values above are maximum values when they are used in cycles of being turned on for 2 hours and off for 0.25 hours. When the lamps are turned on and off more frequently, the lamp replacement cycle is shortened.

^{*2} The usage environment affects the duration of the filter.

^{*3} Still images that can be uploaded are limited to 1,024 x 768 pixel bitmap files. Also, the application reduces the number of colors to 191.

Chacifications **Dimensions** unit: mm (inch)

	v		200-240 V AC(11A), 50/60 Hz										
Power supply Power consumption			1,850 W (18 W with standby mode)										
-uwei cuiisi	Panel si	70	46 mm (1.8 inches) diagonal (4:3 aspect ratio)										
	Display		Transparent LCD panel (× 3, R/G/B)										
.CD panel	Pixels	Illetilou	786,432 (1,024 × 768) × 3, total of 2,359,296 pixels										
		nfiguration	700,402 (1,024 × 700) × 0, total of 2,037,270 pixels Stripe										
ens.	TIACCCO	iiiguratioii	Optional										
.amp			380 W × 4, lamp replacement cycle (Normal/Eco1, Eco2): 2,000 hours/3,000 hours+1										
Screen size	[diagonal]	1	1.02–15.24 m (40–600 inches) [2.54–15.24 m (100–600 inches) with the ET-ELS03), 4:3 aspect ratio										
Brightness*		J	16,000 lm (4-Lamps, Lamp power: Auto, Image select: Dynamic/Standard, Advanced color: Auto, Optional lens: ET-ELSO3)										
Center-to-co		iormitu*?	90%										
Contrast*2	Jiliei ullii	ornincy	2,500:1 (full on/full off, 4-Lamps, Lamp power: Auto, Image select: Dynamic/Standard, Advanced color: Auto)										
Resolution			1,024 × 768 pixels [Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.]										
resoration	HDMI/D	VI D	Horizontal: 26–80 kHz, vertical: 23–85 Hz, dot clock: 162 MHz or lower										
	חטווויטח	עו-ט											
	RGB (an	alog)	fix: 15-120 kHz, fix: 48-120 Hz, dot clock: 230 MHz or lower (Signals exceeding the dot clock rate of 165 MHz are downsampled.)										
Scanning requency	YPBPR (YCBCR)		fix: 15.5 kHz, fix: 60 Hz (1400 [1525i]) fix: 37.5 kHz, fix: 60 Hz (1720 [750])(50) fix: 27.00 kHz, fix: 24 Hz [1080 [724]) fix: 31.50 kHz, fix: 60 Hz (1400 [1525i]) fix: 33.75 kHz, fix: 60 Hz (1035 (60)) fix: 27.00 kHz, fix: 48 Hz [1080 [725]] fix: 33.75 kHz, fix: 60 Hz (1700 [125])(60) fix: 33.75 kHz, fix: 60 Hz (1700 [1025]) fix: 63.50 kHz, fix: 60 Hz (1700 [705])(60) fix: 63.33 kHz, fix: 60 Hz (1700 [705])(60) fix: 63.53 kHz, fix: 60 Hz (1700 [705])(60)										
	Video/S-Video		fn: 45.00 kHz, fv: 60 Hz [720 [750]/60p] fn: 28.13 kHz, fv: 25 Hz [1080/25p] fn: 56.25 kHz, fv: 50 Hz [1080/50p] fn: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M], fn: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM]										
)ptical axis		Tiuco	With the ET-ELW06-vertical ±39% from center of screen [powered]** With the ET-ELW06LY-certical ±39% from center of screen [powered]** With the ET-ELW06LY-certical ±39% from center of screen [powered] ** With the ET-ELW05LY-certical ±30% from center of screen [powered] With the ET-ELW05LY-certical ±30% from center of screen [powered] With the ET-ELW05LY-certical ±30% from center of screen [powered]										
Keystone correction range			Vertical: Maximum ±40° (with XGA signal input, for vertical correction only), Horizontal: Maximum ±40° (with XGA signal input, for horizontal correction only)										
nstallation			Ceiling/floor, front/rear										
		DVI-D IN	DVI-D 24-pin x 1 (DVI 1.0 compliant, compatible with HDCP, compatible with single link only) 480p, 576p, 720/60p, 720/90p, 1880/60p, 1880/50p, 1880/74p, 188										
	INPUT1	HDMI IN	HDM119-pin x1 (compatible with HDCP, compatible with Deep Cotor) 40M119-pin x1 (compatible with HDCP, compatible with Deep Cotor) 40M2/se, 1080/35p, 1080/30p, 1080/40p, 1080/50p, 40M2/50p, 40M2/se, 1080/35p, 1080/30p, 1080/40p, 1080/50p, 40M2/se, 1080/35p, 1080/30p, 1080/40p, 1080/50p, 40M2/se, 1080/35p, 40M2/se, 1080/35p, 1080/30p, 1080/40p, 1080/50p, 40M2/se, 1080/35p, 40M2/se, 1080/35p, 1080/35p, 1080/30p, 1080/40p, 1080/35p, 1080/30p, 1080/40p, 1080/35p, 1080/35										
		ANALOG IN	D-Sub HD 15-pin (female) × 1 (RGB × 1)										
	INPUT2	RGB 5BNC IN/ VIDEO IN	$BNC \times 5 \ (RGB/VPBPR/VCBCR \times 1), shared with VIDEO \ IN \ (BNC \times 1) \ (composite video)$										
erminals		S-VIDEO IN	Mini DIN 4-pin × 1 (S-Video)										
	INPUT3		Optional interface board slot, with the ET-MD16SD1:SERIAL IN(BNC)×2 (SD-SDI signal/single link HD-SDI signal), SERIAL OUT(BNC)×1 (active through)										
	INPUT4		Optional interface board slot, with the ET-MD16SD1:SERIAL IN(BNC)×2 (SD-SDI signal/single link HD-SDI signal), SERIAL OUT(BNC)×1 (active through)										
	SERIAL	IN	D-sub 9-pin (male) × 1 for external control										
	SERIAL	OUT	D-sub 9-pin (male) × 1 for link control										
	LAN		RJ-45 × 1 (for network connection, 10Base-T/100Base-TX, compliant with PJLink™ (class1))										
	REMOTE	IN	M3 Jack x 1 (for wired remote control)										
	USB		USB type-B (USB connector) x 1*5										
abinet mat	erials		Molded plastic										
imensions	(W×H×	D)	650 × 349 × 815 mm (25.6" × 13.7" × 32.1")										
Veight			Approximately 46.5 kg (102.5 lbs)										
loise level			51 dB (lamp: Standard mode), 49 dB (lamp: Eco1, Eco2 mode)										
Operating environment			Operating temperature: 5°C- 40°C (less than 1,800 m above sea level), 5°C- 30°C (between 1,800 m and 2,700 m above sea level), operating humidity: 20%-80% (no condensation)										
Supplied accessories			Power cord × 1, fixing bracket for power cord × 1, wireless/wired remote control unit, batteries (R03/AAA type × 2), VBA cable × 1, software CD-ROM (Logo Transfer Software, Mutt Projector Monitoring & Control Software, Real Color Manager Pro.), leas attachment 1, Lens safety Campa × 2, Light blook plate × 3, lens spacer × 1, rock band × 3										
1 The valu 2 Measure 3 The ET-F	es given ement, m	for the recor	lens attachment × 1, lens safety clamp × 2, light block plate × 3, lens spacer × 1, rick band × 3 nmended lamp replacement cycles are maximum. didnos, and method of notation all comply with ISO 21118 international standards. th only vertical optical axis shift.										

Optional accessories

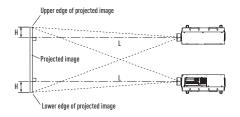
650 (25-5/8)



815 (32-1/8)

6 This product is used together with an optional bracket assembly (sold separately)

Projection distance



unit: meters (feet)

Diagonal		Projection distance (L.)														Height from the edge of screen to center of lens (H)						
image size	v ratio 12 – 15·1		ET-E	ET-ELW02		ET-ELW04		ET-ELS02		ET-ELS03		ET-ELM01		ET-ELT02		ET-ELT03		ET-ELW06 / ELW02 / ELW04 / ELS03 / ELM01 / ELT02 /ELT03		ET-ELS02		ET-ELW03
Throw ratio (4:3 aspect			1.4 - 1.8:1		1.5 – 2.0:1		2.0 - 2.6:1		2.6 - 3.5:1		3.5 - 4.5:1		4.4 - 6.2:1		6.3 - 9.0:1		0.8:1					
ratio)	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	fixed	min.	max.	min.	max.	fixed
1.02 [40"]	0.91 (3.0)	1.17 (3.8)	1.07 [3.5]	1.42 [4.7]	1.15 (3.8)	1.56 (5.1)	1.48 [4.9]	1.99 (6.5)	- [-]	- (-)	2.87 [9.4]	3.69 [12.1]	3.75 (12.3)	5.11 (16.8)	5.27 (17.3)	7.58 (24.9)	0.60 (2.0)					
1.27 [50"]	1.16 (3.8)	1.49 [4.9]	1.36 [4.5]	1.80 (5.9)	1.47 (4.8)	1.98 (6.5)	1.90 (6.2)	2.54 [8.3]	- [-]	- (-)	3.56 (11.7)	4.58 (15.0)	4.63 (15.2)	6.35 (20.8)	6.50 (21.3)	9.38 (30.8)	0.77 (2.5)					
1.52 [60"]	1.40 (4.6)	1.81 (5.9)	1.65 (5.4)	2.18 [7.2]	1.79 (5.9)	2.40 [7.9]	2.32 [7.6]	3.08 (10.1)	- [-]	- (-)	4.26 [14]	5.48 (18)	5.51 (18.1)	7.58 (24.9)	7.73 (25.4)	11.19 [36.7]	0.94 (3.1)					
1.78 [70"]	1.65 (5.4)	2.12 [7.0]	1.94 [6.4]	2.56 [8.4]	2.12 (7.0)	2.82 [9.3]	2.74 (9.0)	3.63 (11.9)	- (-)	- (-)	4.95 [16.2]	6.38 (20.9)	6.39 (21.0)	8.82 (28.9)	8.96 (29.4)	13.00 (42.7)	1.10 (3.6)					
2.03 [80"]	1.89 (6.2)	2.44 [8]	2.23 [7.3]	2.93 [9.6]	2.44 [8]	3.24 (10.6)	3.16 (10.4)	4.18 (13.7)	- (-)	- [-]	5.65 (18.5)	7.28 (23.9)	7.27 (23.9)	10.05 (33.0)	10.19 (33.4)	14.80 (48.6)	1.27 [4.2]					
2.29 [90"]	2.13 (7.0)	2.76 (9.1)	2.52 (8.3)	3.31 (10.9)	2.76 [9.1]	3.66 (12.0)	3.58 (11.7)	4.72 (15.5)	- (-)	- [-]	6.34 (20.8)	8.18 (26.8)	8.14 (26.7)	11.28 (37.0)	11.42 (37.5)	16.61 (54.5)	1.44 [4.7]					
2.54[100"]	2.38 (7.8)	3.08 (10.1)	2.81 (9.2)	3.69 [12.1]	3.08 (10.1)	4.08 (13.4)	4.00 (13.1)	5.27 (17.3)	5.22 (17.1)	7.10 (23.3)	7.04 (23.1)	9.08 (29.8)	9.02 (29.6)	12.52 [41.1]	12.65 (41.5)	18.42 (60.4)	1.60 (5.2)					
3.05 [120"]	2.87 [9.4]	3.71 [12.2]	3.39 (11.1)	4.44 [14.6]	3.72 [12.2]	4.92 [16.1]	4.85 (15.9)	6.36 (20.9)	6.30 (20.7)	8.56 (28.1)	8.42 (27.6)	10.88 (35.7)	10.78 (35.4)	14.99 [49.2]	15.11 (49.6)	22.03 (72.3)	1.94 [6.4]					
3.81 [150"]	3.6 (11.8)	4.66 [15.3]	4.26 [14]	5.57 (18.3)	4.69 (15.4)	6.18 (20.3)	6.11 [20]	8.00 (26.2)	7.92 (26.0)	10.73 (35.2)	10.51 (34.5)	13.57 (44.5)	13.42 [44.0]	18.69 (61.3)	18.80 (61.7)	27.45 (90.1)	2.44 [8.0]					
5.08 [200"]	4.82 (15.8)	6.25 (20.5)	5.71 (18.7)	7.46 (24.5)	6.29 (20.6)	8.28 (27.2)	8.21 [26.9]	10.74 (35.2)	10.61 (34.8)	14.36 [47.1]	13.98 (45.9)	18.07 (59.3)	17.82 (58.5)	24.86 (81.6)	24.94 (81.8)	36.49(119.7)	3.27 (10.7)					
6.35 [250"]	6.04 (19.8)	7.83 (25.7)	7.16 (23.5)	9.35 (30.7)	7.90 (25.9)	10.38 (34.1)	10.32 [33.9]	13.47 [44.2]	13.31 [43.7]	18.00 (59.1)	17.45 (57.3)	22.56 (74.0)	22.22 [72.9]	31.03(101.8)	31.09(102.0)	45.52(149.3)	4.10 (13.5)					
7.62 [300"]	7.26 (23.8)	9.42 (30.9)	8.61 (28.2)	11.23 (36.8)	9.51 (31.2)	12.48 [40.9]	12.42 [40.7]	16.21 [53.2]	16.00 (52.5)	21.63 (71.0)	20.92 (68.6)	27.05 (88.7)	26.62 [87.3]	37.20[122.0]	37.24[122.2]	54.55(179.0)	4.94 [16.2]					
10.16 [400"]	9.70 (31.8)	12.59 (41.3)	11.51 (37.8)	15.00 (49.2)	12.72 [41.7]	16.68 (54.7)	16.63 (54.6)	21.68 [71.1]	21.39 (70.2)	28.89 [94.8]	27.87 (91.4)	36.04(118.2)	35.42[116.2]	49.54[162.5]	49.53[162.5]	72.62[238.3]	6.60 (21.7)					
12.70 [500"]	12.13 (39.8)	15.76 (51.7)	14.41 [47.3]	18.78 (61.6)	15.94 (52.3)	20.88 (68.5)	20.84 [68.4]	27.15 (89.1)	26.79 [87.9]	36.15[118.6]	34.81(114.2)	45.03(147.7)	44.22(145.1)	61.88 (203)	61.83(202.9)	90.69(297.5)	8.27 (27.1)					
15.24[600"]	14.57 (47.8)	18.93 (62.1)	17.30 (56.8)	22.55 (74.0)	19.15 (62.8)	25.07 (82.3)	25.05 (82.2)	32.61 (107)	32.18(105.6)	43.41[142.4]	41.76 [137]	54.01(177.2)	53.02 (174)	74.22[243.5]	74.12(243.2)	108.76 (356.8)	9.94 (32.6)					

NOTE ON USE

- 1 This product must not be used in residential areas. 2 This product may cause interference if used in residential areas. Such use must be avoided unless the user takes special measures to reduce electromagnetic emissions to prevent interference to the reception of radio and television broadcasts.

 3 Do not install the projector in locations that are subject to excessive water, humidity, steam or oily smoke.
- Doing so may result in fire, malfunction or electric shock.
- The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fail to illuminate, due to impact or extended use.

 The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the
- following precautions:
- Never place objects on top of the projector while it is in operation.
 Make sure there is an unobstructed space of 500 mm (19-11 / 16 in) or more around the projector's exhaust openings.
- 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 between them. These when stacking projector units, be sure to provide the articulant or space indicated between trein. These space requirements also apply to installation where only one projector unit is operating at one time and the other unit is used as a backup.

 If the projector is placed in a box or enclosure, the temperature of the air surrounding the projector must be between 0°C (32°F) and 40°C (104°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.

 The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.

 The length of time that it takes for the lamp to break or fail to illuminate varies greatly depending on individual lamp characteristics and useen conditions.

- individual lamp characteristics and usage conditions.

 The brightness of the lamp will gradually decrease with use.

 7 Due to natural characteristics of lamps, screen brightness may vary (flicker). This is not an indication of faulty lamp performance.

Panasonic

For more information about Panasonic projectors

http://panasonic.net/avc/projector

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, and other countries and regions or registered trademarks. All other trademarks are the property of their respective trademark owners. Projection images simulated. © 2011 Panasonic Corporation. All rights reserved.

All information included here is valid as of August 2011.