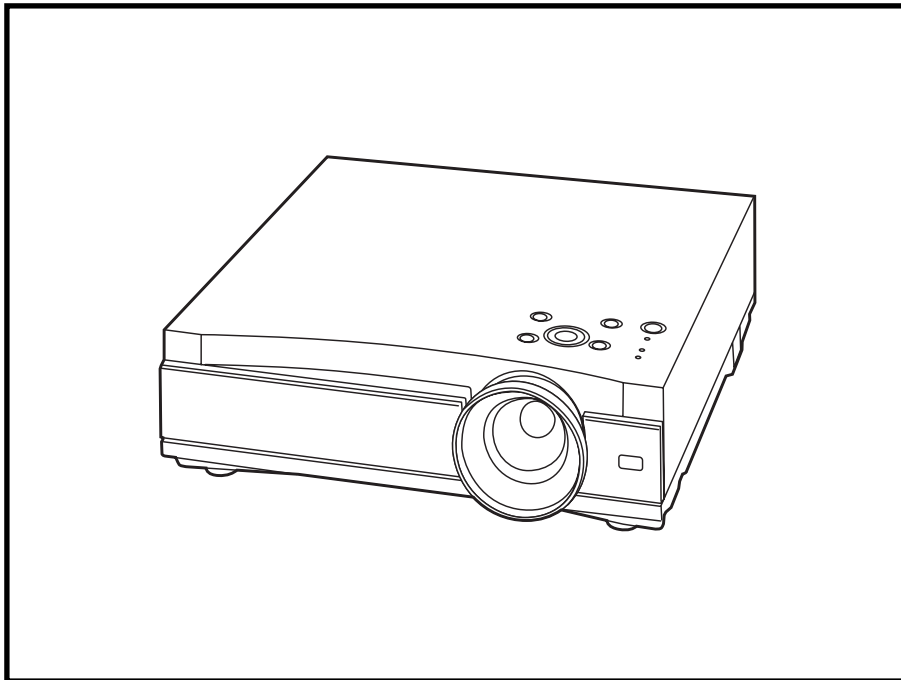


S P E C F I L E

PRODUCT NO.: PT-AE500U
PRODUCT NAME: Home Cinema Projector



MAJOR FEATURES

- High-Definition 1280 x 720 LCD panels for high quality images
- Newly-developed “Cinema Works” circuit
 - 10-bit full digital processing and digital gamma correction
 - Projector AI
 - Dynamic Sharpness Control (DSC)
 - Digital Cinema Reality (DCR)
- New Smooth Screen technology for film-like smooth image reproduction
- 2058-pattern user-adjustable picture equalizing including 6 picture mode (Normal, Dynamic, Cinema 1, Cinema 2, Video, Natural)
- 850 lumens brightness and 1300:1** contrast ratio
- Vertical/horizontal keystone correction
- Quiet 27 dB*
- A wide variety of terminals featuring DVI with HDCP

* In AI mode

** In low lamp power mode

Specifications

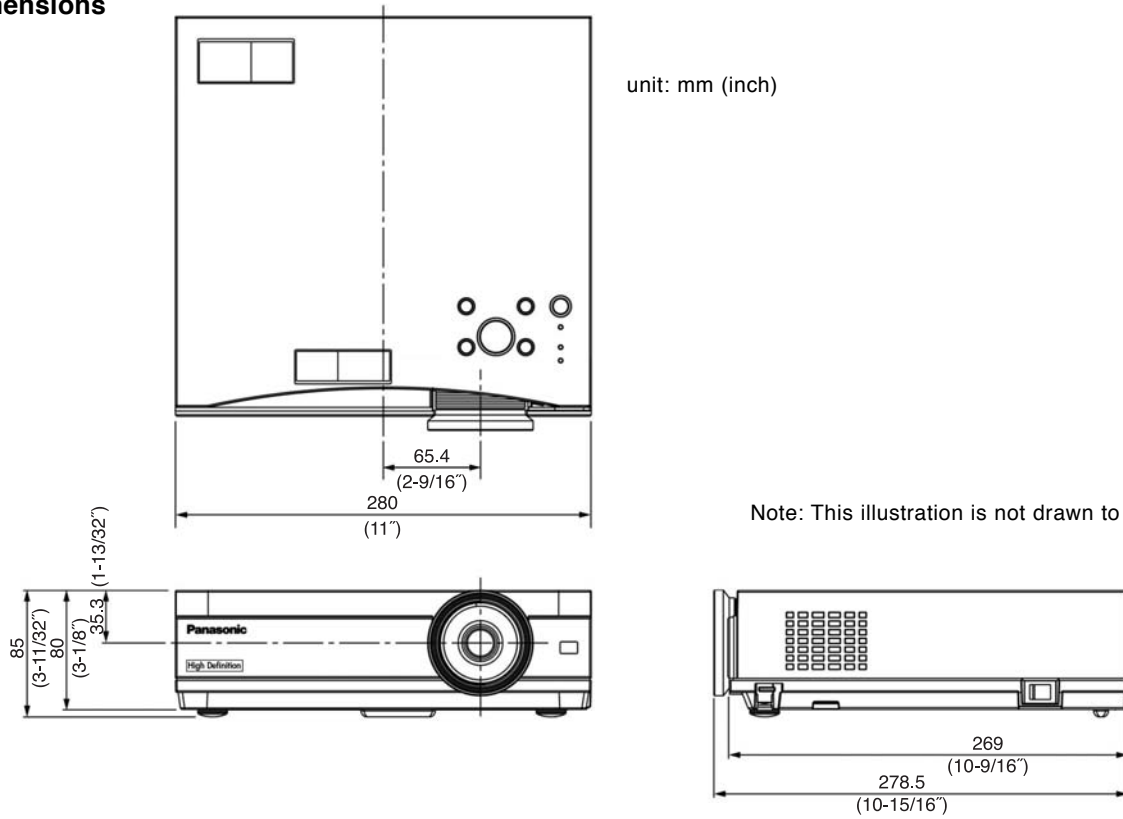
Power supply:	100–240 V AC, 50/60 Hz
Power consumption:	180 W (1 W in standby mode with fan stopped)
Optical system:	Dichroic mirror separation/prism synthesis system
LCD panel:	0.7" (diagonal) (16:9 aspect ratio)
Panel size:	Transparent LCD panel (x 3, R/G/B)
Display method:	Active matrix
Drive method:	921,600 (1280 x 720) x 3, total of 2,764,800 pixels
Pixels:	Stripe
Pixel configuration:	Manual zoom/focus lens (1:1–1:1.2), F 1.9–2.2, f 22.0–26.2 mm
Lens:	130 W UHM™ lamp
Lamp:	1,016–5,080 mm (40–200 inches) diagonally, 16:9 aspect ratio
Screen size:	Full color (16,777,216 colors)
Colors:	NTSC/M-NTSC/PAL/PAL-M/PAL-N/SECAM
Color system:	16:9 (4:3 compatible)
Screen aspect ratio:	850 lumens*1
Brightness:	90%
Center-to-corner uniformity ratio:	1300:1*2 (full on/full off)
Contrast:	RGB: 1280 x 720 pixels (1920 x 1080 pixels with compression)
Resolution:	Horizontal: 30–70 kHz, Vertical: 50–87 Hz
Scanning frequency:	RGB: YPbPr: 480i (525i): fH 15.75 kHz; fV 60 Hz 625i (576i): fH 15.63 kHz; fV 50 Hz 480p (525p): fH 31.5 kHz; fV 60 Hz 625p (576p): 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:	fH 15.75 kHz; fV 60 Hz (NTSC, NTSC4.43, PAL-M, PAL60) fH 15.75 kHz; fV 60 Hz (PAL, SECAM, PAL-N) 17:1 (fixed)
Optical axis shift:	Vertical: approx. ±30°, horizontal: approx. ±30°
Keystone correction range:	Ceiling/desk, front/rear (menu selection)
Installation:	DVI-D 24-pin x 1
Terminals:	DVI-D IN: PC (RGB) IN: R, G, B: HD/VD/SYNC: TTL, high impedance (positive/negative polarity) COMPONENT IN: RCA pin (Y, Pb/Cb, Pr/Cr) x 1, Y: 1.0 p-p, 75Ω Pb/Pr (Cb/Cr): 0.7 Vp-p, 75Ω VIDEO IN: RCA pin x 1, 1.0 Vp-p, 75Ω S-VIDEO IN: Mini DIN 4-pin x 1, Y: 1.0 Vp-p, C: 0.286 Vp-p, 75Ω TRIGGER (out): M3 jack, (stereo mini) When the power is turned on during projection: 12 V When the power is turned off: 0 V
Power cord length:	3 m
Cabinet material:	ABS/PC
Dimensions (W x H x D):	280 x 85 x 278.5 mm (11" x 3-11/32" x 10-9/16")
Weight:	2.9 kg (6.4 lbs.)
Operating environment:	Temperature: Humidity: 0°–40°C (32°–104°F) 20%–80% (no condensation)
Remote Control Unit:	Power supply: Operation range: Dimensions (W x H x D): 3 V DC (UM-4 (AAA) battery x 2) Approx. 7 m when operated from directly in front of the signal receptor) 43 x 135 x 22 mm (1-11/16" x 5-5/16" x 7/8") 73.5 g (2.6 oz.) (including batteries)
Supplied accessories:	Weight: Power cord, Wireless remote control unit, Batteries for remote control (UM-4 x 2), AV cable (3 m/9.9'), Carrying bag
Optional accessories:	Replacement lamp unit: Ceiling mount bracket: 80"–90" screen: 65"–70" screen: ET-LAE500 ET-PKE300 ET-SR90CT ET-SR70CT

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

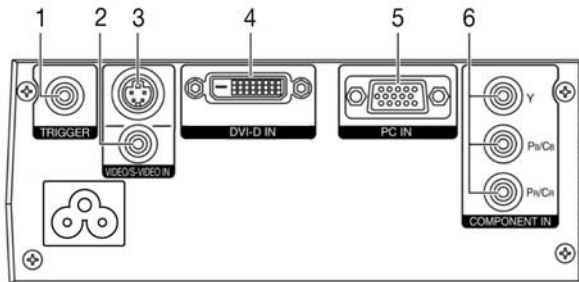
*1: The figures are averages of all products at the time of shipment, and are indicated in accordance with JIS X6911: 2003 Data Projector Specifications Format. The measurement method and conditions are described in Appendix 2.

*2: In AI mode

Dimensions

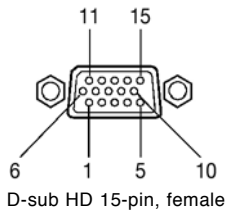


Terminals



- 1 Trigger output
- 2 Video input
- 3 S-Video input
- 4 DVI-D input
- 5 PC (RGB) input (D-sub HD 15-pin)
- 6 Component (YPbPr/YCbCr) input

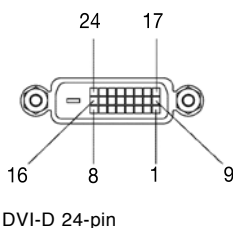
RGB IN connector pin assignment



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

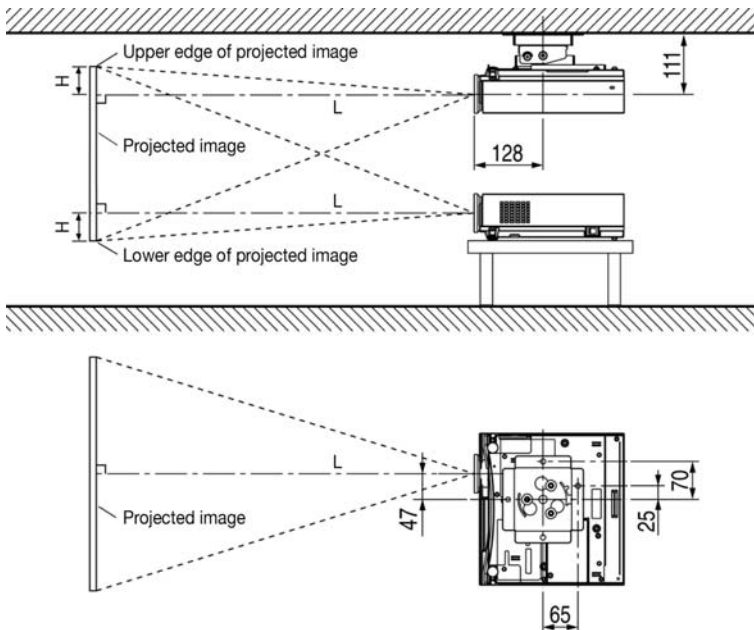
* Effective when connected to a PC having proper functions.

DVI-D connector pin assignment



no.	signal	no.	signal	no.	signal
1	T, M, D, S data 2-	9	T, M, D, S data 1-	17	T, M, D, S data 0-
2	T, M, D, S data 2+	10	T, M, D, S data 1+	18	T, M, D, S data 0+
3	T, M, D, S data 2/4 shield	11	T, M, D, S data 1/3 shield	19	T, M, D, S data 0/5 shield
4	T, M, D, S data 4-	12	T, M, D, S data 3-	20	T, M, D, S data 5-
5	T, M, D, S data 4+	13	T, M, D, S data 3+	21	T, M, D, S data 5+
6	DDC clock	14	+5 V	22	T, M, D, S clock shield
7	DDC clock	15	GND	23	T, M, D, S clock +
8	NC	16	Hot plug detection	24	T, M, D, S clock -

Standard setting-up positions



unit: mm

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

Aspect ratio	Diagonal image size	Distance to screen	
		min.	max.
16:9	40" / 1.0 m / 3.3'	1.2 m / 3.9'	1.4 m / 4.6'
	60" / 1.5 m / 4.9'	1.9 m / 6.2'	2.2 m / 7.2'
	80" / 2.0 m / 6.7'	2.5 m / 8.3'	2.9 m / 9.5'
	100" / 2.5 m / 8.3'	3.1 m / 10.2'	3.7 m / 12.1'
	150" / 3.8 m / 12.5'	4.7 m / 15.4'	5.6 m / 18.4'
	200" / 5.1 m / 16.7'	6.2 m / 20.3'	7.4 m / 24.3'
4:3	40" / 1.0 m / 3.3'	1.5 m / 4.9'	1.8 m / 5.9'
	60" / 1.5 m / 4.9'	2.3 m / 7.5'	2.7 m / 8.9'
	80" / 2.0 m / 6.7'	3.0 m / 9.8'	3.6 m / 11.8'
	100" / 2.5 m / 8.3'	3.8 m / 12.5'	4.6 m / 15.1'
	150" / 3.8 m / 12.5'	5.7 m / 18.7'	6.9 m / 22.6'
	200" / 5.1 m / 16.7'	7.6 m / 24.9'	9.2 m / 30.2'

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 : 9

minimum L (m) = (diagonal screen size in inches) x 0.0312 - 0.0381

maximum L (m) = (diagonal screen size in inches) x 0.0376 - 0.0381

Aspect ratio 4 : 3

minimum L (m) = (diagonal screen size in inches) x 0.0382 - 0.0381

maximum L (m) = (diagonal screen size in inches) x 0.0461 - 0.0381

Computer data compatibility

This projector accepts up to 70 kHz horizontal scanning frequency and 100 MHz dot clock.

NOTE: The display resolution of this projector is 1280 x 720 pixels. If the display resolution indicated in the above data does not match this resolution, the input signal will be converted to 1280 x 720 pixels (16:9 aspect ratio) or 960 x 720 pixels (4:3 aspect ratio).