

Panasonic ideas for life

S P E C F I L E

PRODUCT NO.: PT-AE900U
PRODUCT NAME: Home Theater Projector



MAJOR FEATURES

- New Dynamic Iris for the world's first* 5,500:1 contrast ratio and 1,100 lumens brightness
- Cinema Color Management
- New Smooth Screen
- New Dynamic Sharpness Control
- User equalizing function and seven picture modes
- Easy to setup using 2x optical zoom lens and vertical/horizontal lens shift
- Learning remote control: One remote does it all!
- Numerous connection options including HDMI input and a serial terminal

* For a LCD projector offering 1,000 lumens or more, as of August 2005

Specifications

Power supply:	100–240 V AC, 50/60 Hz
Power consumption:	180 W (0.08 W in standby mode with fan stopped)
Optical system:	Dichroic mirror separation/prism synthesis system
LCD panel*1:	Panel size: 0.7" (diagonal) (16:9 aspect ratio)
	Display method: Transparent LCD panel (x 3, R/G/B)
	Drive method: Active matrix
	Pixels: 921,600 (1,280 x 720) x 3, total of 2,764,800 pixels
	Pixel configuration: Stripe
Lens:	Manual zoom/focus lens (1:1–1:2), F 1.9–3.1, f 21.7–43.1 mm
Lamp*2:	130 W UHM™ lamp
Screen size:	1,016–5,080 mm (40–200 inches) diagonally, 16:9 aspect ratio
Colors:	Full color (16,777,216 colors)
Color system:	NTSC/M-NTSC/PAL/PAL-M/PAL-N/SECAM
Screen aspect ratio:	16:9 (4:3 compatible)
Brightness:	1,100 lumens
Center-to-corner uniformity ratio:	85%
Contrast:	5,500:1*3 (full on/full off, dynamic iris on)
Resolution:	RGB: 1,280 x 720 pixels (1,920 x 1,080 pixels with compression)
Scanning frequency:	Horizontal: 30–70 kHz, Vertical: 50–87 Hz
	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
	720p (750p): fH 45 kHz; fV 50 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 15.625 kHz; fV 50 Hz (PAL, SECAM, PAL-N)
Optical axis shift*4:	Vertical and horizontal
Keystone correction range:	Vertical: approx. ±30°
Installation:	Ceiling/desk, front/rear (menu selection)
Language:	English, French, German, Spanish, Italian, Chinese, Japanese, Korean, Russian
Terminals:	HDMI IN: 19-pin x 1
	PC (RGB) IN: D-sub HD 15-pin (female) x 1
	R, G, B: 0.7 Vp-p (1.0 Vp-p for Sync on G), 75Ω
	HD/VD/SYNC: TTL, high impedance (positive/negative polarity)
	COMPONENT 1 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
	COMPONENT 2 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
Power cord length:	3 m/9.9'
Cabinet material:	ABS/PC
Dimensions (W x H x D)*5:	335 x 95 x 270 mm (13-3/16" x 3-23/32" x 10-5/8")
Weight:	3.6 kg (7.9 lbs.)
Operating environment:	Temperature: 0°–40°C (32°–104°F)
	Humidity: 20%–80% (no condensation)
Remote Control Unit:	Power supply: 3 V DC (UM-3 (AA) battery x 2)
	Operation range: Approx. 7 m when operated from directly in front of the signal receptor)
	Dimensions (W x H x D): 52 x 200 x 28.5 mm (2-2/16" x 7-7/8" x 1-1/8")
	Weight: 170 g (6 oz.) (including batteries)
Supplied accessories:	Power cord, Wireless remote control unit, Batteries for remote control (UM-3 x 2), AV cable (3 m/9.9')
Optional accessories:	Ceiling mount bracket: ET-PKE700

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

*1: The projector uses a type of liquid crystal panel that typically consists of millions of pixels. This panel is built with very high-precision technology to provide the finest possible image. Occasionally, a few pixels may remain turned on (bright) or turned off (dark). Please note that this is an intrinsic characteristic of the manufacturing technology that affects all products using LCD technology.

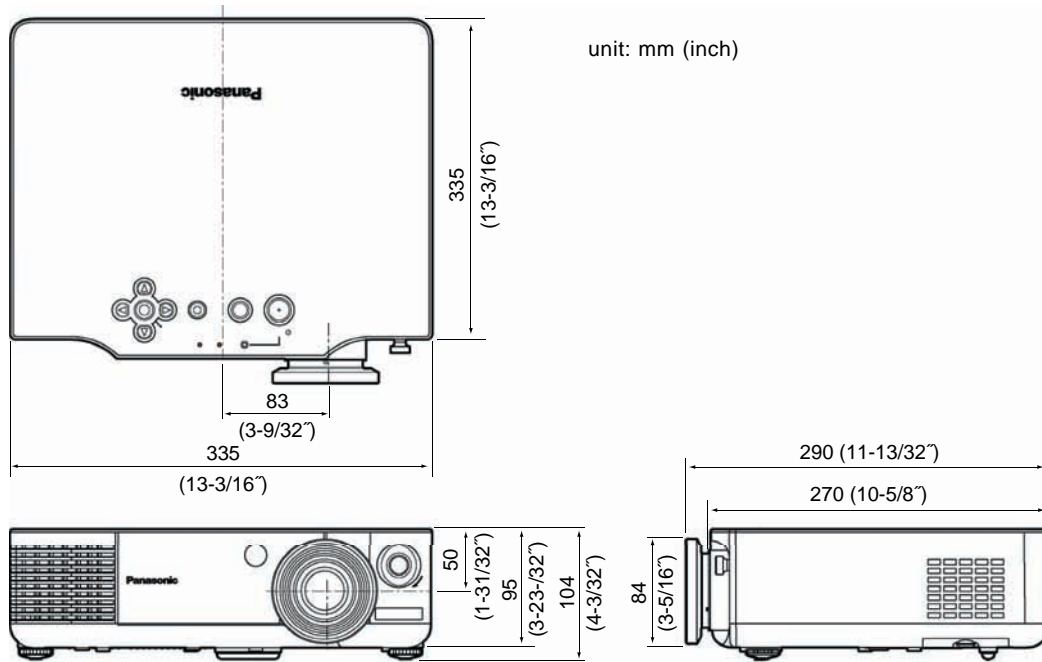
*2: The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fail to illuminate, due to impact or extended use. The length of time that it takes for the lamp to break or fail to illuminate varies greatly depending on individual lamp characteristics and usage conditions.

*3: With Dynamic Iris on.

*4: Shift range is limited during simultaneous horizontal and vertical shifting.

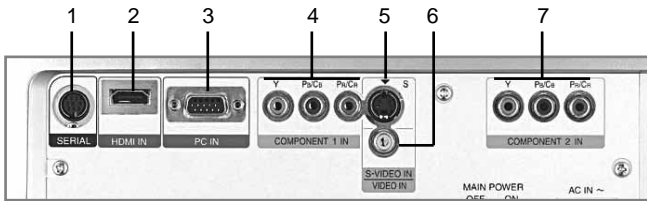
*5: Protruding parts not included.

Dimensions



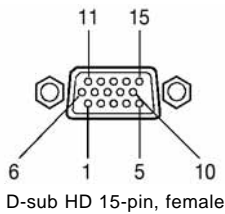
Note: This illustration is not drawn to scale.

Terminals



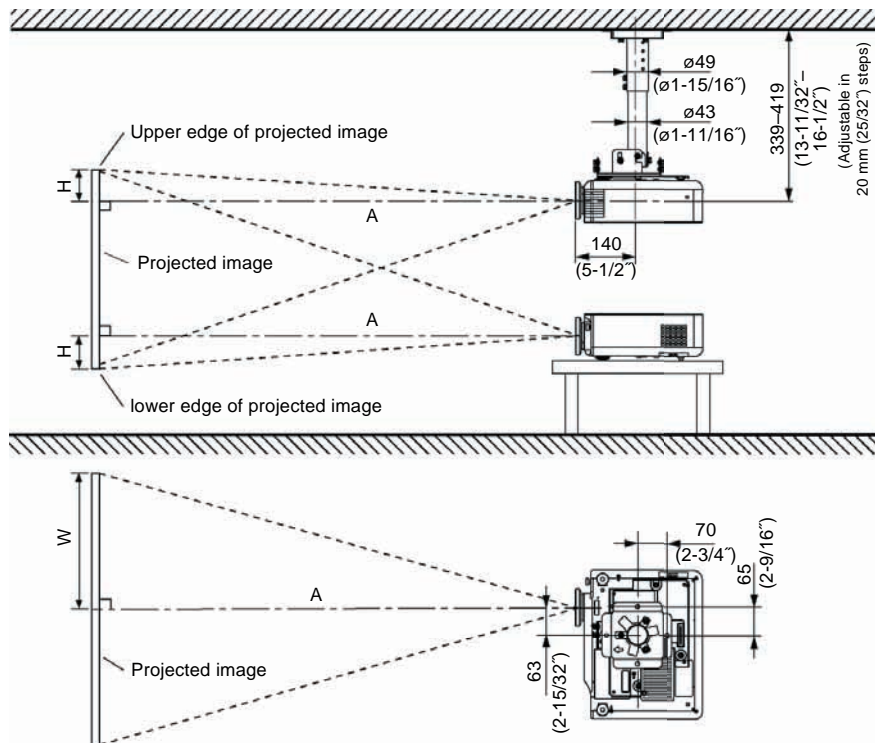
- 1 Serial input
- 2 HDMI input
- 3 PC (RGB) input (D-sub HD 15-pin)
- 4 Component 1 (YPbPr/YCbCr) input
- 5 S-Video input
- 6 Video input
- 7 Component 2 (YPbPr/YCbCr) input

RGB IN connector pin assignment



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

Standard setting-up positions



unit: mm (inch)

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

Screen size (16:9)	Projection distance (L)		Height from the edge of screen to center of lens (E)	Width from the right edge of screen to center of lens (W)
	Diagonal length	Wide (LW)		
1.01 m / 40"	1.2 m / 3'11"	2.4 m / 7'10"	-0.07-0.57 m / -0.2'-1.8'	0.22-0.67 m / 0.7'-2.2'
1.52 m / 60"	1.8 m / 5'10"	3.7 m / 12'1"	-0.10-0.85 m / -0.3'-2.8'	0.33-1.00 m / 1.4'-3.3'
2.03 m / 80"	2.4 m / 7'10"	4.9 m / 16'	-0.13-1.13 m / -0.4'-3.7'	0.44-1.33 m / 1.4'-4.4'
2.54 m / 100"	3.1 m / 10'2"	6.2 m / 20'4"	-0.16-1.40 m / -0.5'-4.6'	0.55-1.66 m / 1.8'-5.4'
3.05 m / 120"	3.7 m / 12'1"	7.4 m / 24'3"	-0.19-1.68 m / -0.6'-5.5'	0.67-2.00 m / 2.2'-6.6'
3.81 m / 150"	4.6 m / 15'1"	9.3 m / 30'6"	-0.24-2.11 m / -0.8'-6.9'	0.83-2.49 m / 2.7'-8.2'
5.08 m / 200"	6.2 m / 20'4"	12.4 m / 40'8"	-0.32-2.81 m / -1.0'-9.2'	1.11-3.32 m / 3.6'-10.9'

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 0.0311 - 0.056
 maximum L (m) = (diagonal screen size in inches) x 0.0621 - 0.056

Aspect ratio 4 : 3

minimum L (m) = (diagonal screen size in inches) x 0.0381 - 0.046
 maximum L (m) = (diagonal screen size in inches) x 0.0761 - 0.056

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).