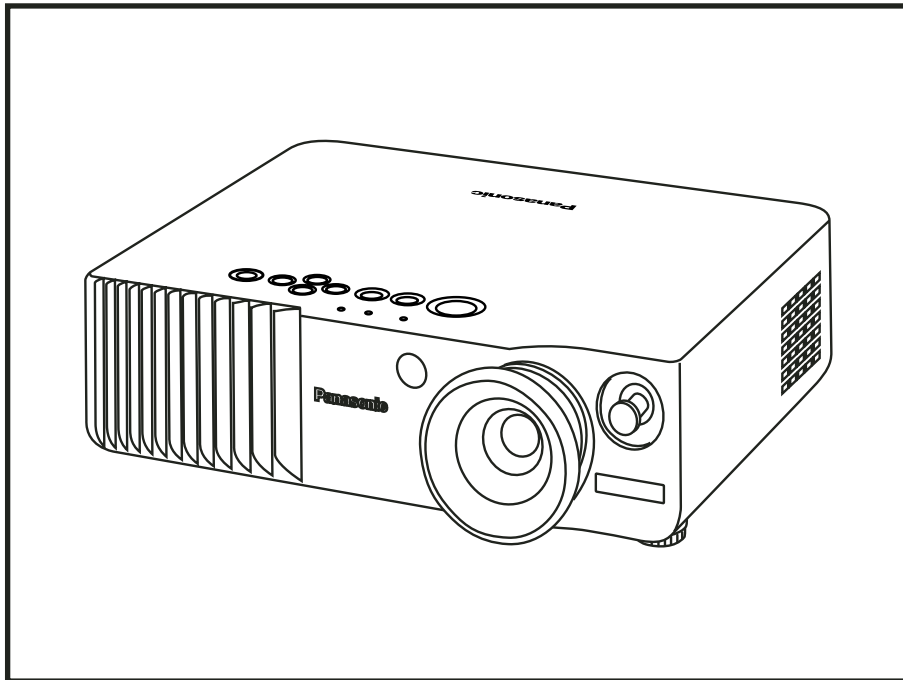


# Panasonic ideas for life

## S P E C F I L E

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PRODUCT NO.: PT-AE700U  
PRODUCT NAME: Home Cinema Projector



### MAJOR FEATURES

- Amazingly high contrast of 2000:1 and 1,000 lumens brightness
- Dynamic Iris and light-interlocked dynamic gamma
- Cinema Color Management with individual correction of approx. 1,070 million colors
- Smooth Screen technology effectively reduces the “chicken wire effect”
- User equalizing function 2,401 picture quality settings
- 10-bit digital processing and 10-bit gamma correction
- New dynamic sharpness control
- Progressive cinema scan (3/2 pulldown) and HD IP
- Wide, high-definition 1,280 x 720 LCD panels
- Vertical and horizontal lens shift
- 2x optical zoom lens
- A variety of terminals including HDMI input
- Quiet operation off 26 dB\* and front exhaust

\* In low lamp power mode

## Specifications

Power supply:	100–240 V AC, 50/60 Hz
Power consumption:	180 W (3.0 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 (1280 x 720) x 3, total of 2,764,800 pixels
	Pixel configuration: Stripe
Lens:	Manual zoom/focus lens (1:1–1:1.2), 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:	1,000 lumens
Center-to-corner uniformity ratio:	85%
Contrast:	2,000:1*3 (full on/full off)
Resolution:	RGB: 1280 x 720 pixels (1920 x 1080 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: ±63%, horizontal: ±25%
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 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)*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-4 (AAA) battery x 2)
	Operation range: Approx. 7 m when operated from directly in front of the signal receptor)
	Dimensions (W x H x D): 43 x 135 x 22 mm (1-11/16" x 5-5/16" x 7/8")
	Weight: 70 g (2.5 oz.) (including batteries)
Supplied accessories:	Power cord, Wireless remote control unit, Batteries for remote control (UM-4 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.

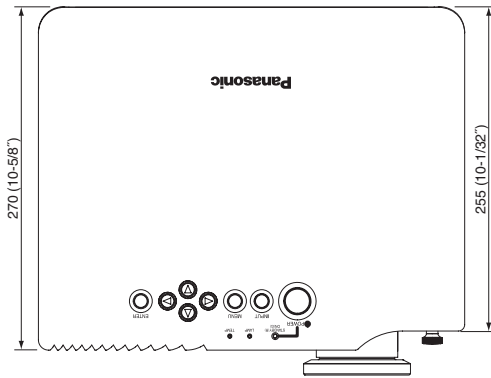
\*2: The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fail to illuminate, due to impact or extended use. The length of time that it takes for the lamp to break or fail to illuminate varies greatly depending on individual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

\*3: With Dynamic Iris on.

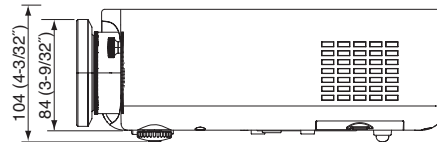
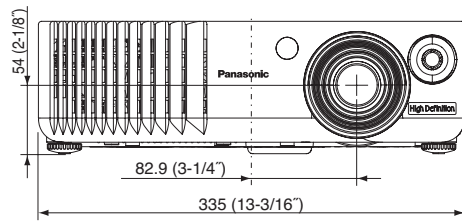
\*4: Shift range is limited during simultaneous horizontal and vertical shifting.

\*5: Protruding parts not included.

Dimensions

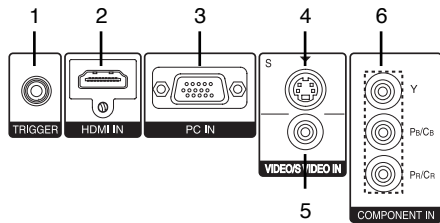


unit: mm (inch)



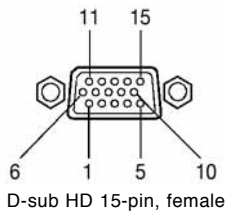
Note: This illustration is not drawn to scale.

Terminals



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

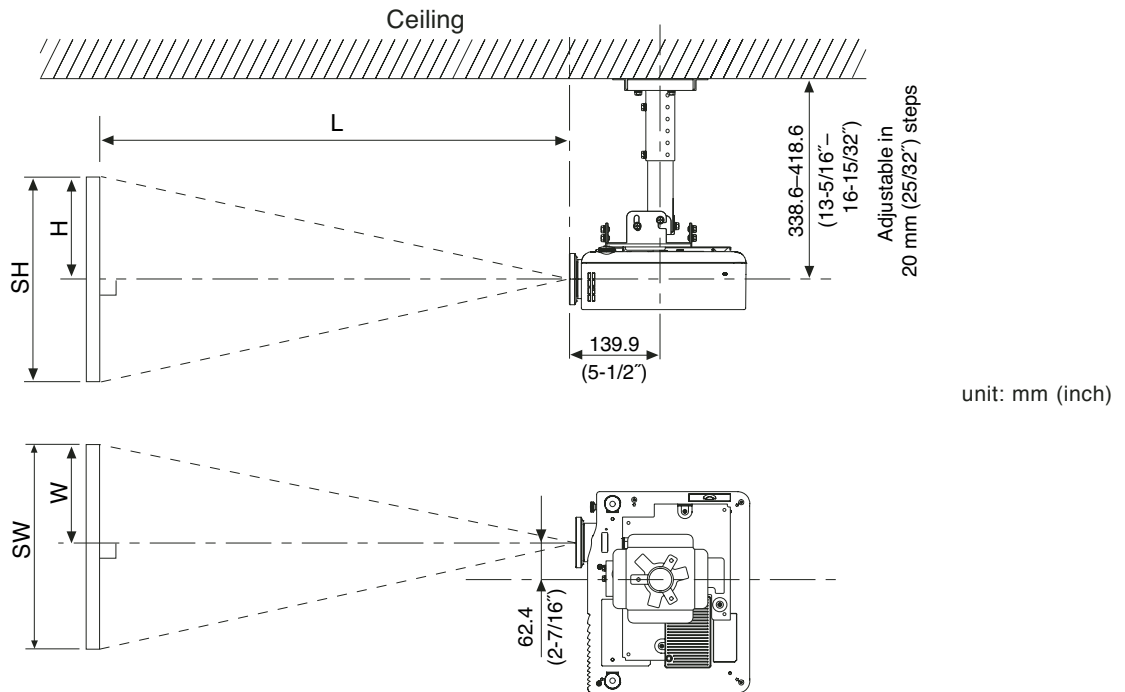
RGB IN connector pin assignment



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.

Standard setting-up positions



unit: mm (inch)

Screen size (16:9)			Projection distance (L)	
Diagonal length	Height (SH)	Width (SW)	Wide (LW)	Telephoto (LT)
1.01 m (40")	0.50 m (1'7")	0.89 m (2'11")	1.2 m (3'11")	2.4 m (7'10")
1.27 m (50")	0.62 m (2')	1.11 m (3'7")	1.5 m (4'11")	3.1 m (10'2")
1.52 m (60")	0.75 m (2'5")	1.33 m (4'4")	1.8 m (5'10")	3.7 m (12'1")
1.77 m (70")	0.87 m (2'10")	1.55 m (5'1")	2.1 m (6'10")	4.3 m (14'1")
2.03 m (80")	1.00 m (3'3")	1.77 m (5'9")	2.4 m (7'10")	4.9 m (16')
2.28 m (90")	1.12 m (3'8")	1.99 m (6'6")	2.7 m (8'10")	5.5 m (18')
2.54 m (100")	1.24 m (4')	2.21 m (7'3")	3.1 m (10'2")	6.2 m (20'4")
3.05 m (120")	1.49 m (4'10")	2.66 m (8'8")	3.7 m (12'1")	7.4 m (24'3")
3.81 m (150")	1.87 m (6'1")	3.32 m (10'10")	4.6 m (15'1")	9.3 m (30'6")
5.08 m (200")	2.49 m (8'2")	4.43 m (14'6")	6.2 m (20'4")	12.4 m (40'8")

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

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 - 0.056  
 maximum L (m) = (diagonal screen size in inches) x 0.075 - 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).