

Panasonic
ideas for life

PT-AX100E
High Definition
Home Cinema Projector

Get Closer
To Your
Hero

HD
ready

HOLLYWOOD TUNING





*The awesome power of a large screen.
The stunning detail of high-definition.
The beauty of bright, vivid images.
Enjoy all of this, right in your living room...
with the PT-AX100E.*



A Big Screen Means More Fun, More Power, More Emotion

Who would you like to see up close? A Hollywood movie star? Your team's best football player? Your favourite guitarist? Imagine the thrill of sitting in a front row seat, seeing them perform live.

That's the kind of thrill you get with Panasonic's PT-AX100E home cinema projector.

The PT-AX100E lets you see the biggest stars in larger-than-life size, right in your living room, anytime you want. Fill a big screen (up to 200 inches diagonal) with Panasonic's remarkably clear, vivid, high-definition images, and you'll discover things you'd never see on a small screen.

Until you meet your favourite stars in real life, Panasonic PT-AX100E will get you closer to them than you've ever imagined.

PT-AX100E
High Definition Home Cinema Projector





Outstanding 2,000-lumen brightness and intelligent Light Harmoniser

Images are crisp, bright and easy to see—even in a well-lit room.

You want to watch a big match or concert DVD on a large screen, but you don't want to close the drapes or turn off the lights. Then the Panasonic PT-AX100E is right for you. With 2,000 lumens of brightness—brightest in its class*¹—plus Panasonic's Light Harmoniser, the PT-AX100E produces bright, beautiful, easy-to-see images even in a well-lit room.

2,000-Lumen Brightness—Brightest in its Class*¹

Panasonic specially developed an extremely powerful new lamp for the PT-AX100E. Combined with the high-performance optical system, it delivers 2,000-lumen brightness, brightest in its class.*¹



A 1,000-lumen class projector without Light Harmoniser



The PT-AX100E with Light Harmoniser



Front row centre seats.

The action is more thrilling than ever when you're watching bright, high-definition images on a big screen.

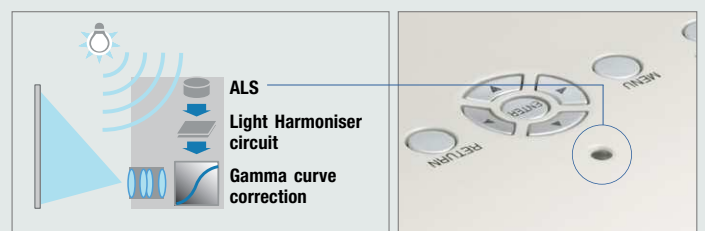
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Intelligent Light Harmoniser

With the PT-AX100E, images are crisp, vivid and easy to see even in the kind of bright lighting that makes images from other projectors look whitish, faded or lacking in detail. Panasonic's Light Harmoniser technology makes home cinema more fun than ever. Now you can get together with friends to watch movies, sports and concert performances in normal room lighting—and still enjoy clear, brilliant images with crisp detail.



A built-in ambient light sensor (ALS) measures the room brightness, and the Light Harmoniser circuit adjusts the gamma curve according to both the measured brightness and the input signal^{*2}. This maintains easy, comfortable viewing in all lighting conditions.

*1: For LCD projectors with native resolution of 720p, as of August 31, 2006.

*2: The Light Harmoniser is set to Auto at the factory. There's also Manual mode if you want to fine-tune the picture yourself.



Pure Colour Filter produces deep, rich blacks and bright, vivid colours

Hollywood Tuning—so you see movies with the colour nuances the director intended.

The PT-AX100E is a high-specifications model developed especially for home theatre use. It incorporates all of Panasonic's highly acclaimed home cinema projector technologies. No compromises were made in its development or production. The result is a projector that provides exceptional viewing with all kinds of content. You can spend the afternoon cheering for your favourite football team, then in the evening dim the lights and immerse yourself in a great movie.

Pure Colour Filter

The new Pure Colour Filter was born from Panasonic's tireless pursuit of optical technology that delivers true "Hollywood" pic-

ture quality. The lamp is adjusted to produce a level of light that maximises the performance of the LCD panels, which expands the colour range and produces truer blacks. You will see the improvement in movies especially—deeper, richer blacks, more vibrant colour, and a more dynamic overall viewing experience.



In developing the Pure Colour Filter, Panasonic carefully determined the type of materials, number of filter layers, and filter thicknesses that would attain optimal 'Hollywood tuning'—i.e., image characteristics best suited for movie viewing.



Best seat at the cinema.

Just dim the lights and enjoy your own private home theatre.

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PT-AX100E

High Definition Home Cinema Projector



Made by Panasonic, Tuned by Hollywood

Technology that captures the artistic sensibility of a top Hollywood colourist

Panasonic worked with leading Hollywood colourist David Bernstein to achieve one of the most accurate image reproduction possible. This led to our developing new integrated circuitry and core image optimisers that allow the PT-AX100E to deliver true 'Hollywood picture quality'—or images that faithfully express the director's artistic intent.



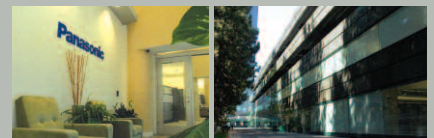
Del Part

David Bernstein is a top Hollywood colourist whose expertise is evident in the telecine* process for numerous successful films.

* Telecine process: How film is transferred to video.

Panasonic Hollywood Laboratory (PHL)—Where Hollywood picture quality begins

For the past decade, PHL has conducted research into digital cinema, DVD video compression, and digital conversion of film stock. Now it is working to create standards for next-generation optical media using Blu-ray Disc and projection technology based on HD image compression. PHL's close relations with leading Hollywood studio technicians, directors, cinematographers and colourists played a key role in our developing the PT-AX100E.



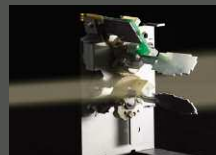


Packed with imaging technologies acclaimed by professionals

Dynamic Iris and Dynamic Gamma

The Dynamic Iris helps provide the deeper, richer blacks needed for true image reproduction. This technology adjusts the lamp power, iris and gamma curve according to data obtained from frame-by-frame histogram analysis of the image brightness level. The adjustments are made 60 times per second.

The wide iris range, combined with histogram analysis that detects as many as 3,000,000,000 brightness and darkness levels, provides brighter bright scenes and deeper, richer blacks. The Dynamic Gamma boosts the brightness level of image details that would otherwise be lost in dark areas. You see the kind of true, deep blacks you've seen before only at the cinema.



Dark scene:
with iris
closed



Bright scene:
with iris
opened



PT-AX100E



PT-AX100E



Without the Dynamic Iris



Without the Dynamic Iris

Advanced technologies in an elegant form.

Styling that harmonises with any interior decor.

Smooth Screen Technology

Smooth Screen technology, developed exclusively by Panasonic, effectively reduces the “chicken wire effect”—the black lines between pixels that mar picture quality. The high-definition picture of the PT-AX100E is remarkably smooth and film-like, while remaining amazingly sharp and detailed.



Dynamic Sharpness Control

Conventional projectors emphasise sharpness without regard for brightness differences. This can cause a halo or ring effect around object edges, reducing their three-dimensionality.



Dynamic Sharpness Control

sharpens only the pixels in the image areas where there is a small change in brightness level. This greatly reduces noise amplification and delivers clear, natural-looking images.

Cinema Colour Management (CCM)

CCM makes it possible to reproduce images that closely match the colourist’s intention. Before CCM was developed, correcting one colour affected certain others. This proven technology now allows individual correction of approximately 1,070,000,000 colours, and it also controls both contrast and brightness. With CCM, colour correction more closely approximates the process used for motion pictures.

Seven Picture Modes

They let you select the picture characteristics that best match the source material at the touch of a button.

Recommended for dark rooms

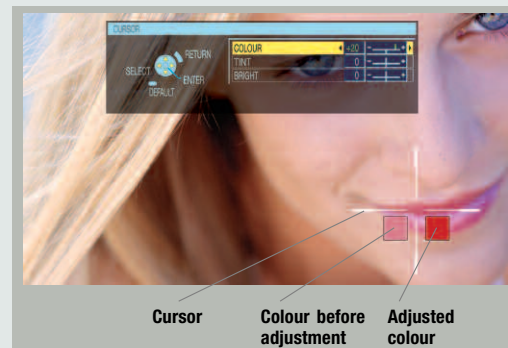
Cinema 1	A calm, gentle image setting for watching movies. Supervised by David Bernstein, a leading Hollywood colourist.
Cinema 2	An image setting emphasising deep, rich colour reproduction. Suitable for older film classics.
Natural	An image setting designed to faithfully reproduce the colours of the image source.
Video	Suitable for video sources, such as music video clips and concerts.

Recommended for bright rooms

Normal	A general image setting suitable for a variety of image sources, such as sports programs and video games.
Dynamic	An image setting designed for use in a brightly lit room.
Vivid Cinema	An image setting designed for watching movies in a brightly lit room.

User Equalising Function

The PT-AX100E lets you decide how images look on your screen. In each of seven preset picture modes, you can adjust the high, mid and low gamma levels. That’s a total of 34,391 possible setting combinations. Also, the control screens are more legible and easier to use than in previous models. This makes customising the picture easier and gives you better results. Up to three sets of adjustment settings can be stored in memory.



Scene-Adaptive Resizing LSI

A new image processing engine improves quality when resizing 480P images or those from other sources with resolution lower than the PT-AX100E’s native resolution. This lets you enjoy beautiful images from your existing video tape and DVD library.

Scene-Adaptive MPEG Noise Reduction

This new noise reduction system detects the amount of change in the input signal from one scene to the next, and calculates the amount of noise to remove accordingly. It effectively blocks regular noise and minimises mosquito noise.



PT-AX100E

MPEG Noise Reduction Off

10-Bit Full Digital Processing

This enables the PT-AX100E to display 1,070,000,000 colours (1,024 steps of gradation) from video sources. Also, gamma correction is applied separately to the red, green, and blue signals, allowing for ultra-fine image quality adjustment with a high precision of 0.01%.

Progressive Cinema Scan (3/2 Pulldown) and HD IP

This function detects when the input signal is derived from filmed material. HD IP then allows the PT-AX100E to convert the signals and attain higher image quality than was possible with conventional models.

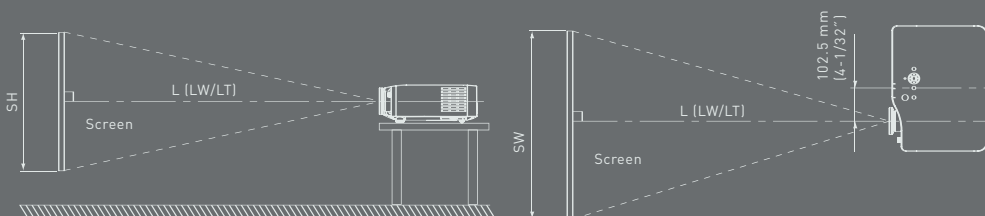
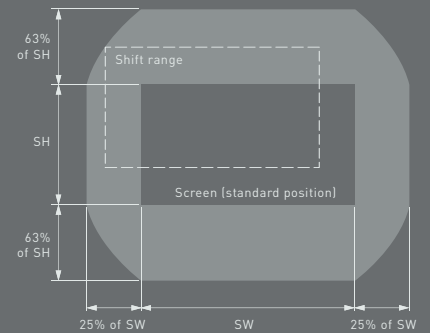
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Attractive styling, flexible installation

IMAGE SIZE / PROJECTION DISTANCE

Diagonal length	Projection size [16:9]		Projection distance [L]	
	Image height [SH]	Image width [SW]	Min. distance [LW]	Max. distance [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"	3.0 m / 9'10"
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"



Super-Easy Setup and Operation

An Elegant Addition to the Home Decor

Stylish Appearance

The PT-AX100E's simple, elegant design and attractive pearl white body make a good fit with virtually any interior décor. You get high-quality home cinema with a touch of style.



2x Optical Zoom Lens

The 2x optical zoom lens provides a wide throw range that gives you outstanding setup flexibility. You can project a 120-inch picture with the PT-AX100E as close as 12.1 feet to the screen or as far as 24.3 feet away. Position it on a table in front of you, suspend it from the ceiling, place it on a bookshelf behind you. With the PT-AX100E, you get the same superb large-screen viewing in rooms large or small.

Vertical and Horizontal Lens Shift

Adjust the positioning of the picture vertically and horizontally by simply operating a joystick. Unlike projectors with electronic correction, in the PT-AX100E the lens itself moves, so there is no loss of image quality. This advanced function adds to the PT-AX100's flexibility, making it an ideal fit in your home.



Quiet Operation and Front Exhaust

To minimise distractions, a quiet fan cuts noise to a mere whisper, while light leakage is reduced by using twin blades. Because the exhaust fan is at the front of the projector, the PT-AX100E is suitable for even narrow locations.

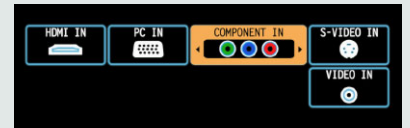
Simple, Convenient Remote Control

The newly redesigned remote control has fewer buttons and a more user-friendly layout. The picture mode select buttons have been divided into "theatre Room" and "Living Room" for easier use, and the functions you use most are now even simpler to operate.



On-Screen Input Guidance

A graphic display on the screen shows which terminals have been selected. If a terminal with no input signal has been selected, the graphic indicator blinks to inform you.



Other Features

- OSD colour/position selectable
- Blue/black screen function
- Auto input search
- HDMI signal level selectable
- Off-timer
- Normal/economy lamp power selection
- Built-in test pattern



A variety of terminals including HDMI input



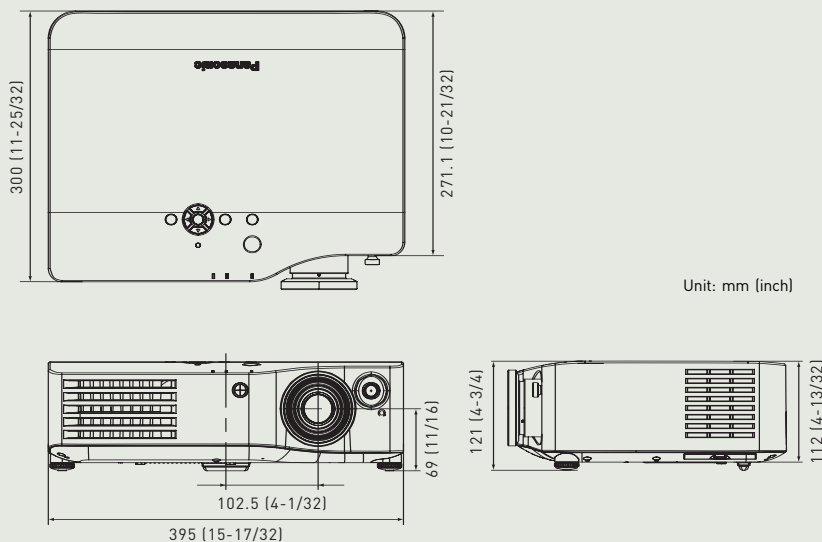
Specifications

Power supply	100–240 V AC, 50/60 Hz	YPbPr signal compatibility	525i (480i), 525p (480p), 625i (576i), 625p (576p), 750 (720)/50p, 750 (720)/60p, 1,125 (1,080)/24p, 1,125 (1,080)/50i, 1,125 (1,080)/50p, 1,125 (1,080)/60i, 1,125 (1,080)/60p	Power cord length	3 m (9'10")
Power consumption	290 W (Approx. 0.08 W in standby mode with fan stopped)	Colour system	PAL, PAL-M, PAL-N, PAL 60, SECAM, NTSC, NTSC 4.43,	Cabinet material	ABS/PC
Amps	2.2 A–1.0 A	Optical axis shift*4	Horizontal ±25% and vertical ±63%	Dimensions*5	ABS/PC
LCD panel*1		Keystone correction range	Vertical: approx. ±30°	(W x H x D)	395 x 112 x 300 mm
Panel size	0.7" (17.78 mm) diagonally	Installation	Ceiling/desk, front/rear (menu selection)		[15-17/32" x 4-13/32" x 11-25/32"]
Aspect ratio	16:9 aspect ratio	OSD languages	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Swedish, Danish, Norwegian, Polish, Czech, Hungarian, Portuguese, Thai	Weight	4.9 kg (10.8 lbs.)
Display method	Transparent LCD panel (x 3, R/G/B)	Terminals		Operating environment	Temperature: 0°–40°C (32°–104°F) Humidity: 20%–80% (no condensation)
Drive method	Active matrix	S-VIDEO IN	Mini DIN 4-pin x 1, Y: 1.0 Vp-p, C: 0.286 Vp-p, 75 ohms	Remote control unit	
Pixels	921,600 (1280 x 720) x 3, total of 2,764,800 pixels	VIDEO IN	RCA pin x 1, 1.0 Vp-p, 75 ohms	Power supply	3 V DC (UM-3 (AA) battery x 2)
Lens	Manual zoom (2x)/Manual focus, F 1.9 - 3.1, f 21.7 mm - 43.1 mm	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), 75 ohms HD/SYNC, VD: TTL, high impedance (positive/negative polarity)	Operation range	Approx. 7 m (23') when operated from directly in front of the signal receptor
Lamp*2	220 W UHM™ lamp	COMPONENT IN	RCA pin (Y, Pb/Cb, Pr/Cr) x 1, Y: 1.0 p-p, 75 ohms Pb/Pr (Cb/Cr): 0.7 Vp-p, 75 ohms	Dimensions	48 x 138 x 28 mm
Brightness	2,000 lumens*3	HDMI IN	19-pin HDMI connector x 1	(W x H x D)	[1-7/8" x 5-7/16" x 1-3/32"]
Contrast	6,000:1*3 (full on/full off)	SERIAL	Mini DIN 8-pin x 1 (RS-232C based)	Weight	125 g (4.4 oz.) (including batteries)
Centre-to-corner uniformity ratio	85%			Supplied accessories	Power cord, Wireless remote control unit, Batteries for remote control (UM-3 x 2)
Colours	Full colour (1,070,000,000 colours)			Optional accessories	
Projection size	1,016–5,080 mm (40–200 inches) diagonally, 16:9 aspect ratio			ET-LAX100	Replacement lamp unit
Throw distance	1.2 m–12.4 m (3'11"–40'8")			ET-PKX100	Ceiling mount bracket
Screen aspect ratio	16:9 (4:3 compatible)			ET-ADSER	Serial adaptor (DIN 8-pin/D-sub 9-pin)
Resolution	RGB: 1280 x 720 pixels (1920 x 1080 pixels with compression)				
Scanning frequency for RGB	Horizontal: 30–70 kHz, Vertical: 50–87 Hz				

- *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 designed to provide one of the finest possible images. 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: In AI mode, with dynamic iris on.
- *4: Shift range is limited during simultaneous horizontal and vertical shifting.
- *5: Excluding protrusions



Dimensions



Ecology-Conscious Design

Panasonic strives to minimise environmental impact caused by its products through careful consideration of design, production, delivery, process and product life cycle. The PT-AX100E reflects the following ecological considerations.

- Lead-free solder is used to mount components on the printed circuit boards.
- No halogenated flame retardants are used in the cabinet.
- No polystyrene foam is used in the packing materials.
- Lead-free glass is used for the lens.
- The packing case and operating manual are made from recycled paper.
- Lamp power switching further reduces power consumption.
- Standby power consumption is a mere 0.08 watts in the standby mode.

Panasonic ideas for life

Projector Global Web Site
<http://panasonic.co.jp/pavc/global/projector>

Please contact Panasonic or your dealer for a demonstration.



Weights and dimensions shown are approximate. Specifications are subject to change without notice. This product may be subject to export control regulations. UHM is a trademark of Matsushita Electric Industrial Co., Ltd. VGA and XGA are trademarks of International Business Machines Corporation. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC. All other trademarks are the property of their respective trademark owners. Projection images simulated.