# Panasonic ideas for life

PT-AX100U High Definition Home Cinema Projector

Get Closer To Your Hero

(

HOLLYWOOD TUNING





ENS SHIFT

FOCUS

# 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 favorite 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-AX100U home cinema projector.

The PT-AX100U 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 favorite stars in real life, Panasonic PT-AX100U will get you closer to them than you've ever imagined.

PT-**AX100**U High Definition Home Cinema Projector



# Outstanding 2,000-lumen brightness and intelligent Light Harmonizer 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-AX100U is right for you. With 2,000 lumens of brightness—brightest in its class\*1—plus Panasonic's Light Harmonizer, the PT-AX100U 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-AX100U. Combined with the high-performance optical system, it delivers 2,000-lumen brightness, brightest in its class.<sup>\*1</sup>



A 1,000-lumen class projector without Light Harmonizer

The PT-AX100U with Light Harmonizer



## Front row center seats.

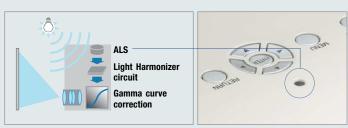
The action is more thrilling than ever when you're watching bright, high-definition images on a big screen.

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-AX100U.

 $\begin{array}{l} \mathsf{PT}\text{-}\textbf{AX100} \\ \mathsf{High Definition Home Cinema Projector} \end{array}$ 

#### Intelligent Light Harmonizer

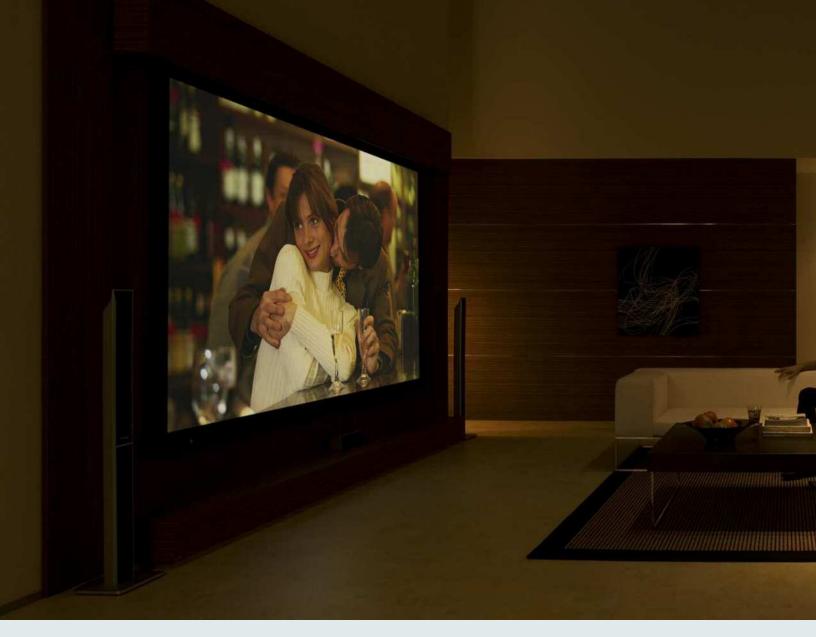
With the PT-AX100U, images are crisp, vivid and easy to see even in the kind of bright lighting that makes images from other projectors look whitish, faded or lacking in detail. Panasonic's Light Harmonizer technology makes home cinema more fun than ever. Now you can get together with friends to watch 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 Harmonizer circuit adjusts the gamma curve according to both the measured brightness and the input signal\*<sup>2</sup>. This maintains easy, comfortable viewing in all lighting conditions.

<sup>\*1:</sup> For LCD projectors with native resolution of 720p, as of August 31, 2006.

<sup>\*2:</sup> The Light Harmonizer is set to Auto at the factory. There's also Manual mode if you want to fine-tune the picture yourself.



# Pure Color Filter produces deep, rich blacks and bright, vivid colors Hollywood Tuning—so you see movies with the color nuances the director intended.

The PT-AX100U is a high-specifications model developed especially for home theater 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 favorite football team, then in the evening dim the lights and immerse yourself in a great movie.

#### **Pure Color Filter**

The new Pure Color Filter was born from Panasonic's tireless pursuit of optical technology that delivers true "Hollywood" picture quality. The lamp is adjusted to produce a level of light that maximizes the performance of the LCD panels, which expands the color range and produces truer blacks. You will see the improvement in movies especially—deeper, richer blacks, more vibrant color, and a more dynamic overall viewing experience.

In developing the Pure Color 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 theater.

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-AX100U.

### PT-AX100U

High Definition Home Cinema Projector

#### Made by Panasonic, Tuned by Hollywood

### Technology that captures the artistic sensibility of a top Hollywood colorist

Panasonic worked with leading Hollywood colorist David Bernstein to achieve one of the most accurate image reproduction possible. This led to our developing new integrated circuitry and core image optimizers that allow the PT-AX100U to deliver true 'Hollywood picture quality'—or images that faithfully express the director's artistic intent.



David Bernstein is a top Hollywood colorist 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 colorists played a key role in our developing the PT-AX100U.





### Packed with imaging technologies acclaimed by professionals

#### **Dynamic Iris and Dynamic Gamma**

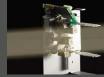
The Dynamic Iris helps provide the deeper, richer blacks needed for true image reproduction. This technology adjusts the lamp power, iris and gamma curve according to data obtained from frame-by-frame histogram analysis of the image brightness level. The adjustments are made 60 times per second. The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





Without the Dynamic Iris





Bright scene: with iris opened





# Advanced technologies in an elegant form.

Styling that harmonizes 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 highdefinition picture of the PT-AX100U is remarkably smooth and film-like, while remaining amazingly sharp and detailed.

#### **Dynamic Sharpness Control**

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



effect

PT-AX100U

PT-AX100U:

like images

Smooth, theater-

Without Dynamic Sharpness Control

Conventional

"chicken wire"

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 Color Management (CCM)

CCM makes it possible to reproduce images that closely match the colorist's intention. Before CCM was developed, correcting one color affected certain others. This proven technology now allows individual correction of approximately 1,070,000,000 colors, and it also controls both contrast and brightness. With CCM, color 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.

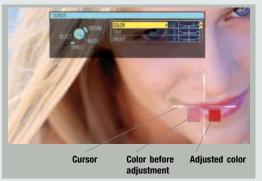
#### **Recommended for dark rooms**

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Cinema 1	A calm, gentle image setting for watching movies. Supervised by David Bernstein, a leading Hollywood colorist.			
Cinema 2	An image setting emphasizing deep, rich color reproduction. Suitable for older film classics.			
Natural	An image setting designed to faithfully reproduce the colors 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 Equalizing Function**

The PT-AX100U 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 customizing 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-AX100U'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 minimizes mosquito noise.





PT-AX100U

MPEG Noise Reduction Off

#### **10-Bit Full Digital Processing**

This enables the PT-AX100U to display 1,070,000,000 colors (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-AX100U to convert the signals and attain higher image quality than was possible with conventional models.

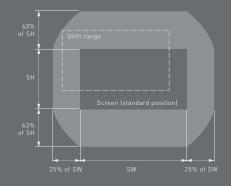
The awesome power of a large screen. The stunning detail of high-definition. The beauty of bright, vivid images. Enjoy all of this, right in your living room... with the PT-AX100U.

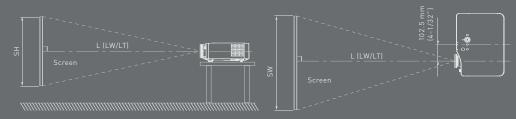


# Attractive styling, flexible installation

#### IMAGE SIZE / PROJECTION DISTANCE

Projection size (16:9)			Projection distance (L)	
Diagonal length	Image height (SH)		Min. distance (LW)	Max. distance (LT)
	0.50 m / 1′7″	0.89 m / 2´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″		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″		5.5 m / 18′
2.54 m / 100″		2.21 m / 7´3″		
3.05 m / 120″	1.49 m / 4´10″	2.66 m / 8´8″	3.7 m / 12´1″	
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-AX100U'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.

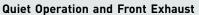
#### 2x Optical Zoom Lens

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-AX100U 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-AX100U, 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-AX100U 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.



To minimize 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-AX100U is suitable for even narrow locations.



#### Simple, Convenient Remote Control

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



#### 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.

**On-Screen Input Guidance** 



Normal/economy lamp

power selection

• Built-in test pattern

#### **Other Features**

- OSD color/position selectable Off-timer
- Blue/black screen function
- Auto input search
- HDMI signal level selectable



A variety of terminals including HDMI input





#### Specifications

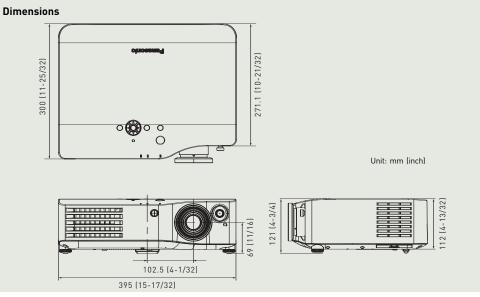
Power supply 100–240 V AC, 50/60 Hz		YPBPR signal compatibility			
Power consumption			525i (480i), 525p (480p), 625i (576i),		
	290 W (Approx. 0.08 W in standby		625p (576p), 750 (720)/50p,		
	mode with fan stopped)		750 (720)/60p, 1,125 (1,080)/24p,		
Amps	2.2 A-1.0 A		1,125 (1,080)/50i, 1,125 (1,080)/50p,		
LCD panel*1			1,125 (1,080)/60i, 1,125 (1,080)/60p		
Panel size	0.7″ (17.78 mm) diagonally	Color system	NTSC, NTSC 4.43, PAL, PAL-M,		
Aspect ratio	16:9 aspect ratio		PAL-N, PAL 60, SECAM		
Display method		Optical axis shi	Optical axis shift*4		
	Transparent LCD panel (x 3, R/G/B)	•	Horizontal ±25% and vertical ±63%		
Drive method Active matrix		Keystone corre	Keystone correction range		
Pixels	921,600 (1280 x 720) x 3, total of	-	Vertical: approx. ±30°		
	2,764,800 pixels	Installation	Ceiling/desk, front/rear		
Lens	Manual zoom (2x)/Manual focus,		(menu selection)		
	F 1.9 - 3.1, f 21.7 mm - 43.1 mm	OSD languages	English, French, German, Spanish,		
Lamp*2	220 W UHM™ lamp		Italian, Chinese, Korean, Russian,		
Brightness	2,000 lumens*1		Swedish, Danish, Norwegian, Polish,		
Contrast	6,000:1*3 (full on/full off)		Czech, Hungarian, Portuguese, Thai		
Center-to-corner uniformity ratio		Terminals			
	85%	S-VIDEO IN	Mini DIN 4-pin x 1, Y: 1.0 Vp-p,		
Colors	Full color (1,070,000,000 colors)		C: 0.286 Vp-p, 75 ohms		
Projection size	1,016-5,080 mm (40-200 inches) diag-	VIDEO IN	RCA pin x 1, 1.0 Vp-p, 75 ohms		
•	onally, 16:9 aspect ratio	PC (RGB) IN	D-sub HD 15-pin (female) x 1		
Throw distance	1.2 m-12.4 m (3´11″-40´8″)		R, G, B: 0.7 Vp-p (1.0 Vp-p for Sync o		
Screen aspect r	atio		G), 75 ohms		
•	16:9 (4:3 compatible)		HD/SYNC, VD: TTL, high impedance		
Resolution	RGB: 1280 x 720 pixels (1920 x 1080		(positive/negative polarity)		
	pixels with compression)	COMPONENT	IN		
Scanning frequency for RGB			RCA pin (Y, Pb/Cb, Pr/Cr) x 1,		
• •	Horizontal: 30–70 kHz,		Y: 1.0 p-p, 75 ohms		
	Vertical: 50–87 Hz		Pb/Pr (Cb/Cr): 0.7 Vp-p, 75 ohms		
		HDMI IN	19-pin HDMI connector x 1		
		SERIAL	Mini DIN 8-pin x 1 (RS-232C based)		
			·		

Power cord length 625i (576i), 3 m (9′10″) Cabinet material 0p, )80)/24p, (1,080)/50p, Dimensions\*5 ABS/PC 395 x 112 x 300 mm (15-17/32″ x 4-13/32″ x 11-25/32″)  $(W \times H \times D)$ 4.9 kg (10.8 lbs.) Weight Operating environment Temperature: 0°-40°C (32°-104°F) rtical ±63% Humidity: 20%-80% (no condensation) Remote control unit Power supply 3 V DC (UM-3 (AA) battery x 2) Operation range Approx. 7 m (23') when operated , Spanish, from directly in front of the signal receptor gian, Polish, Dimensions 48 x 138 x 28.35 mm guese, Thai  $(W \times H \times D)$ (1-7/8" x 7-27/32" x 1-3/32") Weight 125 g (4.4 oz.) (including batteries) Supplied accessories Power cord, Wireless remote control unit, Batteries for remote control (UM-3 x 2) p-p for Sync on **Optional accessories** ET-LAX100 Replacement lamp unit ET-PKX100 impedance Ceiling mount bracket ET-ADSER Serial adapter (DIN 8-pin/D-sub 9-pin)



\*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 The projector uses a high voltage mercury lamp that contains high internal pressure. This panet is built for product space for the contrast of the manufacturing technology that affects all products using LCD technology.
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 All mode, with dynamic intra on
\*4: Shift range is limited during simultaneous horizontal and vertical shifting.
\*5: Excluding protrusions



#### **Ecology-Conscious Design**

Panasonic strives to minimize environmental impact caused by its products through careful consideration of design, production, delivery, process and product life cycle. The PT-AX100U 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.

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

# **Panasonic ideas for life**

Please contact Panasonic or your dealer for a demonstration.

