

Panasonic
ideas for life

Panasonic

**Professional
Plasma Displays**
with 3D Technology

Simulated pictures on screen.
Specifications are subject to change without notice.

As of November 1, 2010.
Printed in Japan
CT10VX200-01W

3D
FULL HD

An all-new viewing experience

Full-HD Plasma Display
TH-85VX200



4K2K Plasma Display
TH-152UX1



Full-HD Plasma Display
TH-103VX200



An all-new viewing experience

with large-screen 3D images.

Full-HD Plasma Display
TH-85VX200

85"

4K2K Plasma Display
TH-152UX1

152"

Full-HD Plasma Display
TH-103VX200

103"



with large-screen 3D images.

Images take on
new dimensions of
depth and texture.



Step into the 3D World.

Large-screen, FULL HD 3D realism brings some exciting new possibilities to business.

FULL HD signals for each eye —Frame Sequential technology

The technology in which the left-eye and right-eye 3D images are sent to the viewer is the key to 3D image quality. For this, FULL HD 3D uses something called the Frame Sequential technology. The left and right images are alternately displayed at high speed (60 frames per second for each eye x 2 = 120 frames per second*). When viewed with special glasses that open and close shutters in sync with the displayed frames, the brain creates the sensation of depth from the visual disparity to form 3D images.

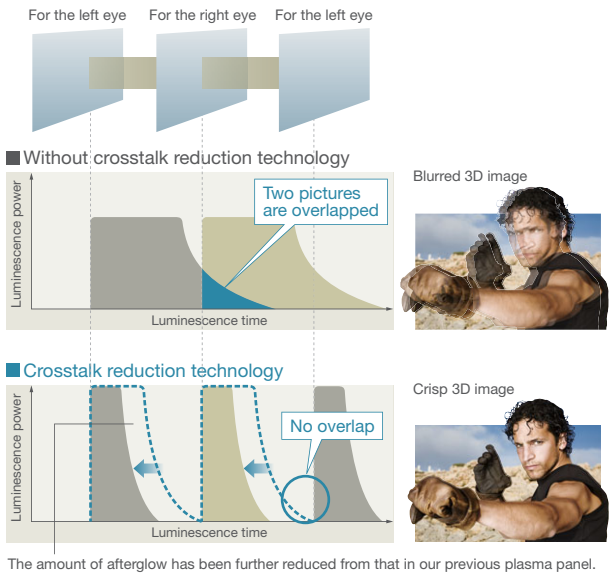
*The frame rate varies depending on the 3D image signal being reproduced. For example, 3D images are reproduced at 120 fps (frames per second) for a 60 Hz input signal, and 100 fps for a 50 Hz input signal.

- Included with each VX200 Series is one pair of 3D Eyewear necessary to view the 3D content. To share this experience with others, additional 3D Eyewear may be purchased separately.
- Someone in authority should responsibly convey the precautions for use of the 3D Eyewear to the user.
- In the event that you experience dizziness, nausea, or other discomfort while viewing 3D images discontinue use and rest your eyes.
- Parents/guardians should monitor children's viewing habits to avoid their prolonged use without rest periods.
- Use only the 3D Eyewear recommended for the VX200 Series.



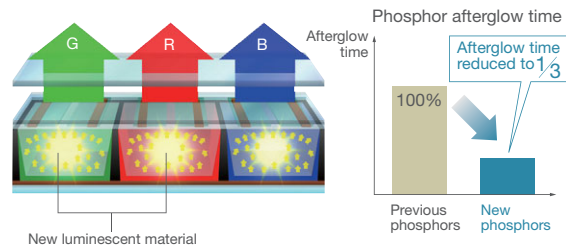
Ultra-high-speed drive technology achieves clear 3D with minimal double image

3D images require a display speed of 120 frames per second (fps), which is twice the ordinary speed. A panel with slow response simply cannot keep up with the necessary image processing. As a result, a double image will appear when the images for the left and right eyes overlap on the screen (also called crosstalk). In addition to new short-decay-time phosphors that reduce the afterglow time to 1/3, and a new luminous control, high-precision Motion Vector Prediction function on the VX200 Series helps to achieve highly precise illumination. Ultra-high speed drive technology, which shortens the luminous time to 1/4 compared to previous models, also minimizes double image even on large screens to produce clear and detailed 3D images.



Newly developed Fast-Decay Phosphors are used for the red and green phosphors

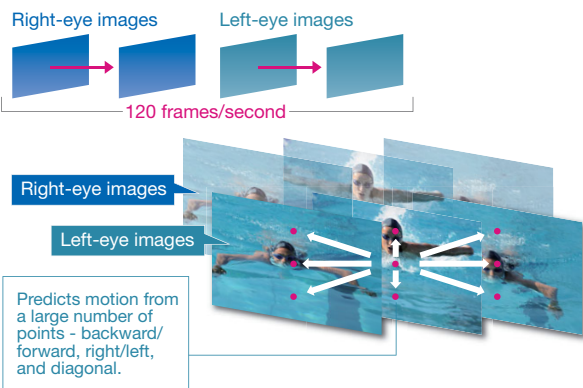
This reduces the afterimage time to 1/3 that of conventional phosphors while simultaneously expanding the scope of color reproduction. As a result, brighter, sharper images are produced for 3D content.



High-speed illumination achieved with high-precision Motion Vector Prediction

The VX200 Series features the world's first* high-precision Motion Vector Prediction function. Its precise luminous control predicts front/back movement as well as left/right and diagonal movement to increase the drive speed and produce clear 3D images even on a large screen.

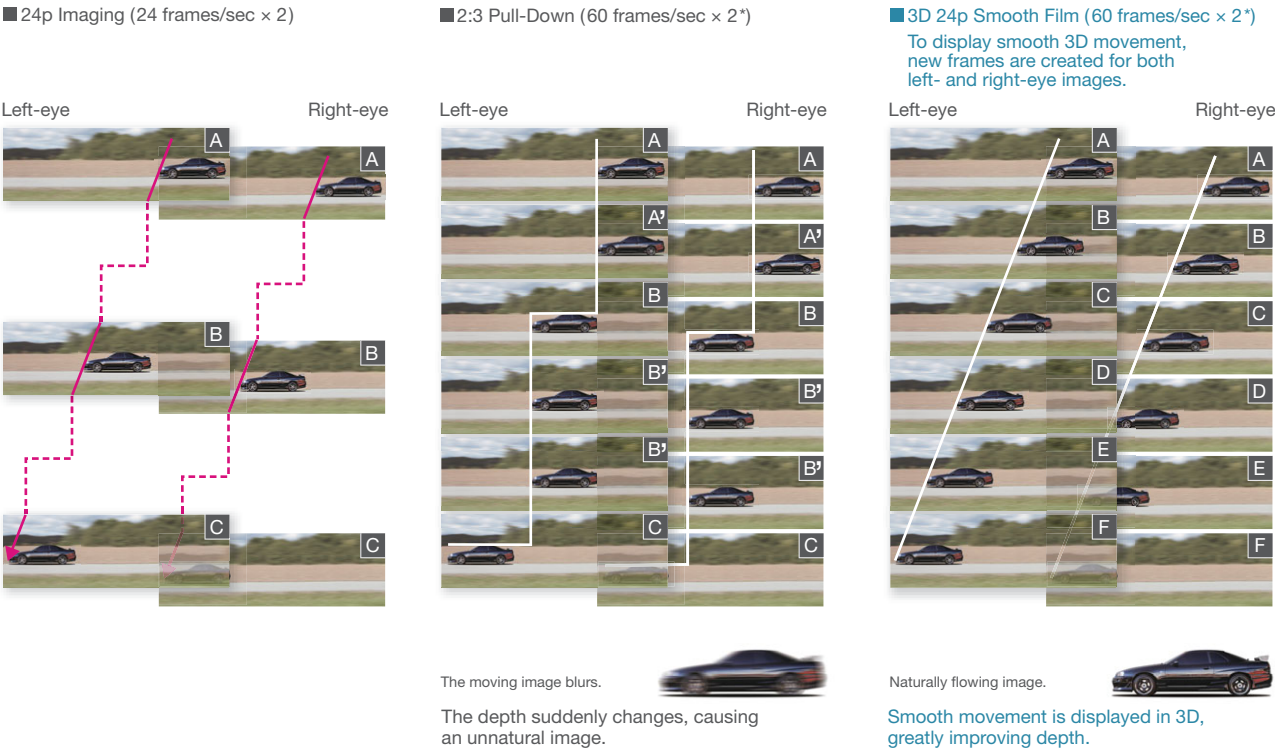
*According to a Panasonic survey, as of June 9, 2010, for a FULL HD 3D-compatible flat-panel display.



3D 24p Smooth Film enhances 3D image depth

In order to show smooth 24-fps images, like those in film-based movies, the same images must be repeatedly alternated two or three times. However, because this sequence differs from natural vision, it was previously impossible to achieve complete smoothness. This is enhanced by the 24p Smooth Film function, which

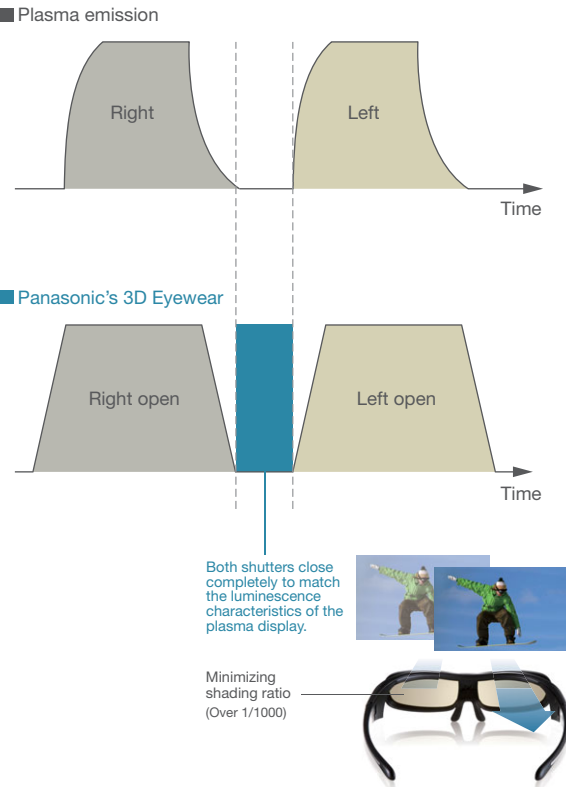
predicts movements and creates new frames between the original frames to achieve smoother 2D image reproduction. The technology is also applied to 3D images. New frames are created between the original frames for both left and right eyes, to produce exceptional three-dimensional depth.



*The frame rate varies depending on the 3D image signal being reproduced. For example, 3D images are reproduced at 120 fps (frames per second) for a 60 Hz input signal, and 100 fps for a 50 Hz input signal.

High-precision 3D Eyewear control technology

Highly precise timing control for the opening and closing of the shutters minimizes unwanted light leakage to enable clear 3D viewing. The remarkable beauty of the FULL HD 3D images is further ensured by employing only Panasonic components — both 3D plasma display and 3D Eyewear — to achieve precisely linked operation.





3D movies with the newest Hollywood technologies — in all their natural beauty.

Panasonic Hollywood Laboratory (PHL) has pursued a wide range of cutting-edge imaging technologies for over 15 years non-stop, in collaboration with major film companies. Many of these same technologies now drive the Panasonic FULL HD 3D-ready display, which invites your family to gather around for 3D movie enjoyment with the same levels of detail and lifelike ambience as you get in a theatre.





Immerse yourself in games with large-screen 3D power.

At 152 inches, this is the world's largest* plasma display, and it's packed with Panasonic 3D technology. Breathtaking 3-dimensional effects allow images to leap off the screen, and draw viewers into each scene for a totally immersive experience that takes gaming to a whole new level.

* As of June 9, 2010. According to a Panasonic survey.



High-resolution images on a large, 152-inch display.

Precise 4K2K Images

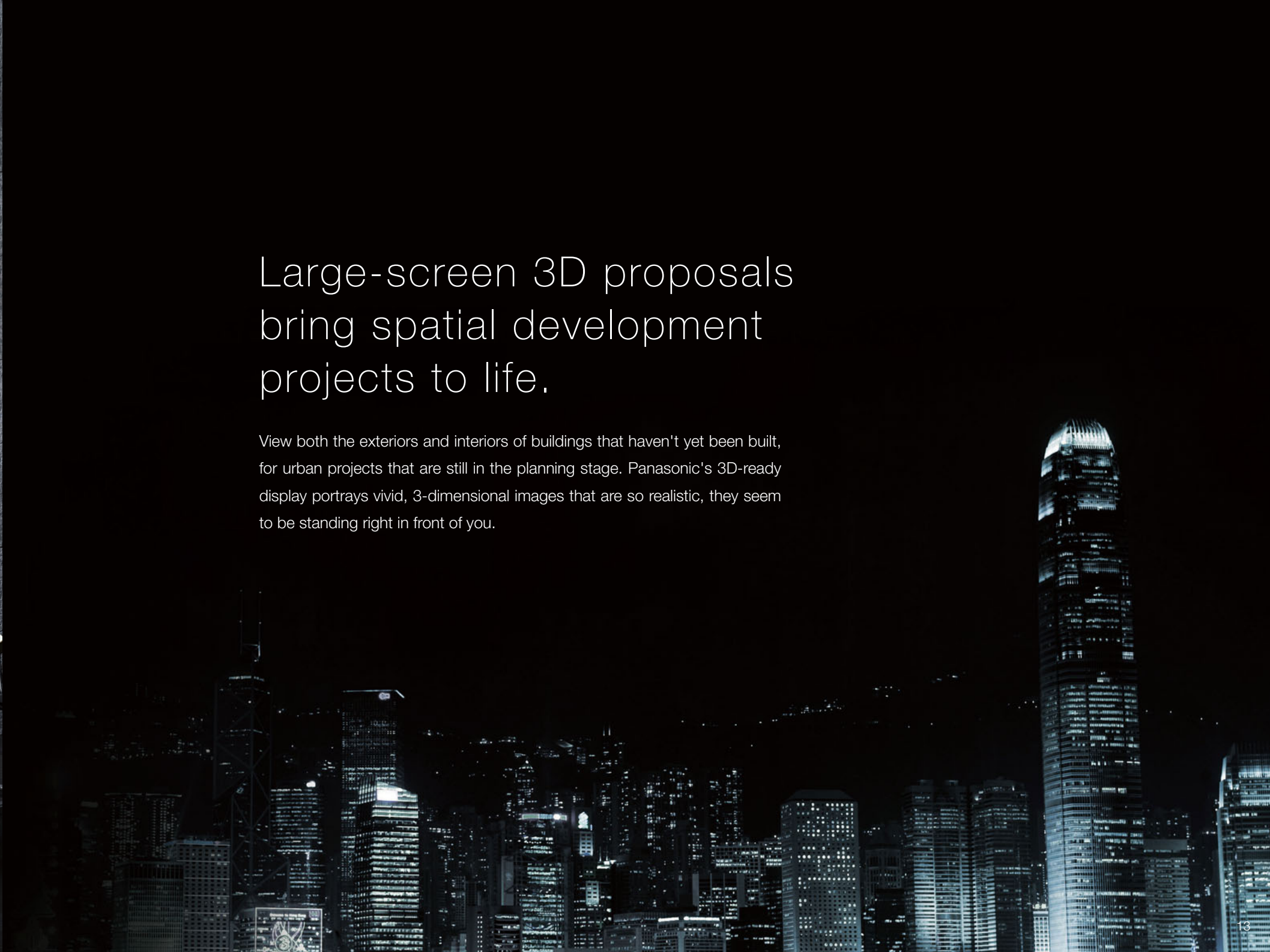


This is a world's first development for a self-illuminating display. Ultrahigh-speed drive technology featuring super-high efficiency technology, which was made possible by the self-illuminating plasma display, produces approximately 4 times the amount of information (4,096 x 2,160 pixels) of a full-HD panel (1,920 x 1,080 pixels). Even with its large screen size, the 4K2K display faithfully expresses bright, highly detailed content that fills the entire screen with lifelike images.



Large-screen 3D proposals bring spatial development projects to life.

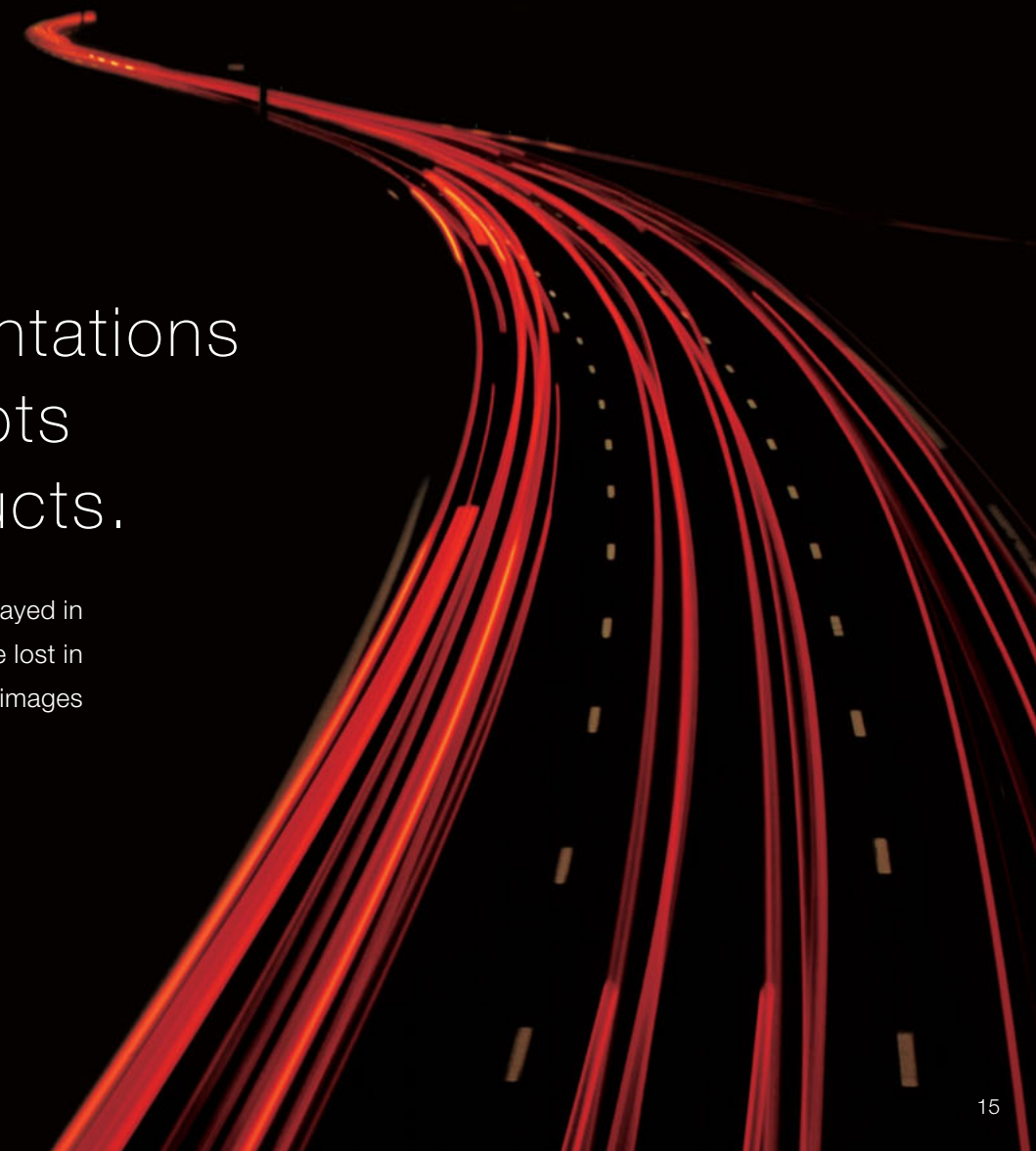
View both the exteriors and interiors of buildings that haven't yet been built, for urban projects that are still in the planning stage. Panasonic's 3D-ready display portrays vivid, 3-dimensional images that are so realistic, they seem to be standing right in front of you.





Large screen, 3D presentations
convey powerful concepts
— even for large products.

With views that approach life-size, product details are clearly displayed in crisp 3D images. Customers see even the tiniest details, which are lost in drawings alone. And even with this large screen, FULL HD 3D images maintain the kind of quality that makes presentations convincing.



Panasonic brings a total solution to 3D imaging

Panasonic is capable of providing an end-to-end solution for 3D – from producing images to authoring 3D Blu-ray Disc™ movie titles, and then to manufacturing home theatre systems.



Panasonic provides Hollywood with a wide range of technical support for creating 3D movies. And Panasonic has developed a twin-lens 3D camera recorder for high-efficiency FULL HD 3D video production.

3D content production

FULL HD 3D home theatre system

Panasonic developed the FULL HD 3D home theatre system to bring movie theatre quality right into your home.



Panasonic is rapidly advancing the development of new 3D authoring systems, beginning with the 3D image compression technology of our MPEG-4 AVC High Profile Video Encoder.

3D Blu-ray Disc™ title production

Panasonic Hollywood Laboratory (PHL)

The Panasonic Hollywood Laboratory (PHL) is a video research lab located in Hollywood. It builds on the more than 15 years of experience that Panasonic has worked to meet the lofty demands of Hollywood film professionals, by conducting on-site research into technologies such as MPEG-4 AVC image compression, standardization of Blu-ray Disc™/DVD/digital cinema and disc authoring production work. And Blu-ray titles produced using Panasonic's high-quality authoring technology have received numerous Hollywood awards.



Large plasma displays line-up

4K2K Plasma Display



TH-152UX1



Full-HD Plasma Display



TH-103VX200



Full-HD Plasma Display



TH-85VX200



Specifications

		4K2K Plasma Display	Full-HD Plasma Display	Full-HD Plasma Display
		TH-152UX1	TH-103VX200	TH-85VX200
DISPLAY PANEL	Screen Size (Diagonal)	152-inch (3,861 mm)	103-inch (2,603 mm)	85-inch (2,167 mm)
	Aspect Ratio	17:9	16:9	16:9
	Effective Display Area (W x H)	3,416 x 1,801 mm	2,269 x 1,276 mm	1,889 x 1,062 mm
	Resolution (H x V)	4,096 x 2,160 pixels	1,920 x 1,080 pixels	1,920 x 1,080 pixels
	Pixel Pitch (H x V)	0.834 x 0.834 mm	1.182 x 1.182 mm	0.984 x 0.984 mm
	Native Contrast*1	5,000,000:1	5,000,000:1	5,000,000:1
	Gradation	8,192 steps (equivalent)	8,192 steps (equivalent)	8,192 steps (equivalent)
	Panel Life*2	Approx. 100,000 hours	Approx. 100,000 hours	Approx. 100,000 hours
	Full HD 3D	Yes*3	Yes	Yes
	Dual Link HD-SDI	Dual Link HD-SDI x 4*4	—	—
CONNECTION TERMINAL	DVI In	DVI-D 24-pin x 4*4 (Compliance with DVI Revision 1.0)	—	—
	HDMI In	HDMI x 2 : Ver. 1.4a (Compatible with Deep Colour)	HDMI x 4 : Ver. 1.4a (Compatible with Deep Colour)	HDMI x 4 : Ver. 1.4a (Compatible with Deep Colour)
	Component In	—	RCA x 3	RCA x 3
	Audio In (L/R)	—	RCA x 1 set	RCA x 1 set
	PC In	Mini D-sub 15-pin x 1 (Female) Plug & Play (VESA DDC 2B)	Mini D-sub 15-pin x 1 (Female) Plug & Play (VESA DDC 2B)	Mini D-sub 15-pin x 1 (Female) Plug & Play (VESA DDC 2B)
	Audio In (L/R)	—	M3 jack x 1	M3 jack x 1
	Audio Line Out (L/R)	—	RCA x 1 set, variable (-∞ to 0 dB)	RCA x 1 set, variable (-∞ to 0 dB)
	Function Slot: SLOT 2.0	DVI-D x 1 (Audio input is not available.)	1 (Vacant)	1 (Vacant)
	Serial	D-sub 9-pin x 1 (External Control Terminal), RS-232C Compatible		
	LAN	—	RJ45 10 BASE-T / 100 BASE-TX, Compatible with PjLINK™	
ELECTRICAL	3D Shutter Out	M3 Jack x 1 (for Optional 3D IR Transmitter)	M3 Jack x 1 (for Optional 3D IR Transmitter)	
	Power Requirements	200 - 240 V AC, 50 Hz/60 Hz	200 - 240 V AC, 50 Hz/60 Hz	200 - 240 V AC, 50 Hz/60 Hz
	Power Consumption	3,700 W	1,450 W	1,200 W
	Power off Condition	0.3 W	0.3 W	0.3 W
	Stand-by Condition	0.5 W	0.5 W	0.5 W
MECHANICAL	Dimensions (W x H x D)	3,600 x 1,980 x 147*5 mm	2,412 x 1,419 x 129*6 mm	2,015 x 1,195 x 99 mm
	Weight	Approx. 577 kg	Approx. 199 kg	Approx. 117 kg
	Temperatures	0°C to 35°C		
OPERATING ENVIRONMENTAL	Humidity	20% to 80% (Non condensation)		
	Altitude	0 to 1,500 m		
	0 to 2,400 m			
OPTIONAL ACCESSORIES	Pedestal	TY-ST152UX1	TY-ST103PF9	TY-ST85P12
	Wall-Hanging Bracket	TY-WK152UX1	TY-WK103PV9	TY-WK85PV12
	Floor Stand	N/A	N/A	TY-ST85PF12
	Terminal Board	HD-SDI w/Audio Terminal Board (TY-FB10HD*), Dual HD-SDI Terminal Board (TY-FB11DHD), BNC Dual Video Terminal Board (TY-FB9BD*), DVI-D Terminal Board (TY-FB11DD), 3D IR Transmitter (TY-3DTRW*), 3D Eyewear		

*1: The dark-room contrast ratio of the panel unit that can be displayed simultaneously on the same screen. Measured in "Dynamic" picture mode using a white signal in a 4% window. *2: Guideline operating hours before the panel brightness is reduced to half when the panel is used to display motion pictures in the Standard mode. Afterimages (burned-in images) and malfunctions are not taken into consideration. *3: An optional 3D IR Transmitter and 3D Eyewear are required for viewing 3D images. *4: 4 inputs is set and only for one 4K signal. You can not input 4 different signal to each inputs. *5: Exclusive of portion (260 mm when including the protruding portion of the slot) *6: Exclusive of portion (141 mm when including the protruding portion of the slot) *7: Audio input is not functional with TH-152UX1. *8: For TH-103VX200, TH-85VX200. *9: Will be available early in CY2011.