Panasonic
ideas for life

50-inch class **TH-50PF30U**
1080P Full-HD Plasma Display

42-inch class **TH-42PF30U**
1080P Full-HD Plasma Display

Superb Image Performance Produces Intricate Details **3D Compatible***1 FULL HD Plasma Display

50

42

FULL HD 1920X1080p   3D FULL HD™*1   neo plasma   PJLink™   HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE   SLOT 2.0   NANODRIFT

Main Features

A new 3D-compatible*1 plasma panel produces bright, high-definition images.

A function slot (SLOT2.0) expands the range of applications.

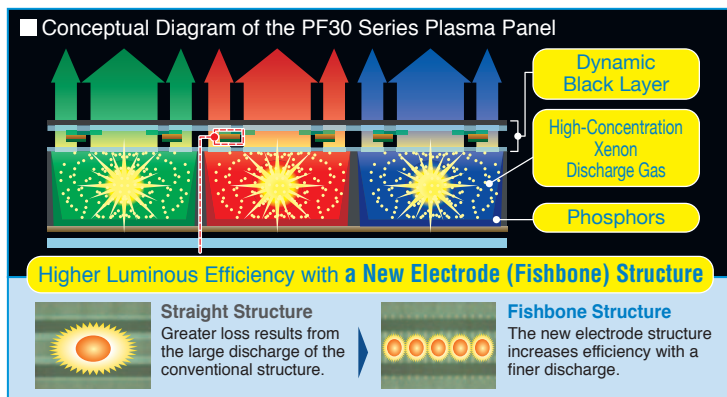A durable front glass is provided, and the plasma panel offers a service life of approximately 100,000 hours.*2

*1: An optional 3D IR Transmitter and 3D Eyewear are required for viewing 3D images.
*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.

A New Structure and Phosphors Boost Luminous Efficiency by About 15%*1 in This Innovative 3D Compatible*2 Plasma Panel
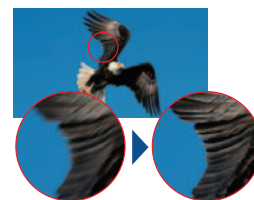
A Level of Contrast That's Among the Industry's Highest

A new plasma panel structure has achieved 5,000,000:1*3 native contrast. From robust blacks to dazzling whites, images are faithfully reproduced with rich gradation and remarkable depth.

Conceptual Diagram of the PF30 Series Plasma Panel

Dynamic Black Layer

High-Concentration Xenon Discharge Gas

Phosphors

Higher Luminous Efficiency with a New Electrode (Fishbone) Structure

Straight Structure
Greater loss results from the large discharge of the conventional structure.

Fishbone Structure
The new electrode structure increases efficiency with a finer discharge.

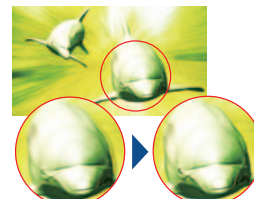## FULL HD Moving-Picture Resolution Speed of 1,200 Pixels/Second*4 (1,080 lines of Moving-Picture Resolution*5)

Fast-switching phosphors have increased motion image display performance to approximately 1.5 times*1 the speed of conventional Panasonic models. Afterglow has also been shortened to approximately 1/3*1 the previous level, so even fast-moving images are displayed with excellent stability and minimal blurring.

● Conventional Image   ● PF30 Series Image

Sharp, Clear 3D Images*2

When 3D images are shown on display devices that have a slow panel response, the left-eye and right-eye images often overlap to produce double images. In addition to incorporating fast-switching phosphors, the PF30 Series features original light emission control technology that reduces double images and displays crisp, clear 3D images.*2

● Conventional Image   ● PF30 Series Image

Expanding the Range of Applications

A Function Slot Expands the Display's Applications

The "SLOT2.0" function slot lets you add display functions to match your application. By simply mounting an optional function board (sold separately), you can add TV tuner functions and connectivity with a content distribution system.

New Function Boards Support Simultaneous 3D Image Input

3D-Compatible Dual HD-SDI Terminal Board:
TY-FB30DHD3D _NEW_

The HD-SDI simultaneous input system allows 3D images to be transmitted in broadcasting and image production workflows. Left-eye and right-eye image signals are sent through a single coaxial cable.

3D-Compatible Dual DVI-D Terminal Board:
TY-FB30DD3D _NEW_

The TY-FB30DD3D is compatible with the DVI simultaneous input system that is standard for CG applications. Left-eye and right-eye image signals output simultaneously from a PC are sent through DVI cables.

A Tough Display — Impact Resistant and Long Lasting

Highly Durable Glass Protects the Screen

The glass panel resists cracking when it is struck by an external impact, so it's ideal for public spaces such as passageways or halls where many people walk by. Also, because there's no need for a protective material on the front surface when it's used in a touch-panel configuration, there's no image quality degradation.

Long Life of Approximately 100,000 Hours*6

The long-life plasma panel displays bright, beautiful images for approximately 100,000 hours.*6

Versatile Image Display Functions

| Portrait Zoom | Multi Display | Digital Zoom | Vertical Mounting | 1:1 Pixel Mode | Monitor Mode |

A Host of Utilities

● Network Function ● Weekly Command Timer ● Remote System Monitoring ● Audio Input Select
● Tamper-Resistant Settings ● Energy-Saving Functions ● Screen Saver Functions

Specifications

		TH-50PF30U	TH-42PF30U
Screen Size (Diagonal)		49.9-inch (1,268 mm)	41.6-inch (1,057 mm)
Aspect Ratio		16:9	16:9
Effective Display Area (W x H)		43.5" x 24.5" (1,105 x 622 mm)	36.3" x 20.4" (921 x 518 mm)
Resolution (H x V)		1,920 x 1,080 pixels	1,920 x 1,080 pixels
Pixel Pitch (H x V)		0.576 x 0.576 mm	0.480 x 0.480 mm
Contrast Ratio		5,000,000:1*1	
Gradation		6,144 steps (equivalent)	
Panel Life*2		Approx. 100,000 hours	
FULL HD 3D		3D Full HD Ready*3	
Input	VIDEO IN	BNC x 1 [1.0 Vp-p, 75 ohms]	
	AUDIO IN (L/R)	RCA pin jack x 1 [0.5 Vrms]	
	COMPONENT IN	BNC x 3 [Y/G: with sync 1.0 Vp-p, 75 ohms; B/P$_B$/C$_B$, R/P$_R$/C$_R$: 0.7 Vp-p, 75 ohms]	
	AUDIO IN (L/R)	RCA pin jack x 1 [0.5 Vrms]	
	HDMI IN	HDMI TYPE A connector x 1	
	DVI-D IN	DVI-D 24-pin x 1; DVI Revision 1.0 compatible with HDCP 1.1	
	AUDIO IN (L/R)	M3 jack x 1 [0.5 Vrms]	
	PC IN/AUDIO IN (L/R)	Mini D-Sub 15 pin x 1 / M3 jack x 1	
Control	LAN	RJ45 10 BASE-T/100 BASE-TX, compatible with PJLink	
	SERIAL	D-Sub 9-pin x 1 (External control terminal), RS-232C compatible	
	3D Shutter Out	M3 jack x 1 (for 3D IR Transmitter)	
	DC 8V out for 3D IR Transmitter	Center Plus for EIAJ 4 mm Plug	
Function Slot		SLOT2.0 x 1 (Vacant)	
Power Requirements		110 - 127 V AC, 50/60 Hz	110 - 127 V AC, 50/60 Hz
Power Consumption		475 W	390 W
On Mode Average Power Consumption*4		220 W	165 W
Power off Condition		0.2 W	0.2 W
Stand-by Condition		Save ON 0.4 W, Save OFF 0.7 W	Save ON 0.4 W, Save OFF 0.7 W
Speaker Out		6Ω, 16W [8 W + 8 W] (10%THD)	6Ω, 16W [8 W + 8 W] (10 %THD)
Dimensions (W x H x D)		47.7" x 28.5" x 3.5" (1,210 x 724 x 89 mm)	40.2" x 24.1" x 3.5" (1,020 x 610 x 89 mm)
Weight		Approx. 72.8 lbs. (33 kg)	Approx. 56.3 lbs. (25.5 kg)

*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: Based on IEC 62087 Ed.2 measurement method.

Peripherals & Mounting Options

3D IR Transmitter
TY-3D30TRW

Pedestal
TY-ST20-K

Wall-hanging bracket
TY-WK42PV20
*Also usable for vertical mounting

Wall-hanging bracket (angled)
TY-WK42PR20

Ceiling-hanging bracket
TY-CE42PS20

Mobile stand
TY-ST58PF20

Detachable stereo speakers
TY-SP50P8W-K (for 50" model)
TY-SP42P8W-K (for 42" model)

Touch panel
TY-TP50P10S, TY-TP50P30K
TY-TP42P10S, TY-TP42P30K

Anti-glare filter
TY-AR50P12W (for 50" model)
TY-AR42P12W (for 42" model)

● A variety of terminal boards and 3D Eyewear are also available.

*1: Comparing previous models (PF20 Series) in the same-size.
*2: An optional 3D IR Transmitter and 3D Eyewear are required for viewing 3D images.
*3: 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.
*4: This is a new motion-image performance index that was announced by the Advanced PDP Display Development Center Corporation (APDC) on January 27, 2011, as an advanced version of the conventional moving-picture resolution index. It expresses the ability to display motion images in Full-HD resolution based on the speed at which an image moves (the number of pixels that move per second).
*5: According to the method for measuring moving-picture resolution to indicate motion-image display performance that was developed by the Advanced PDP Development Centre Corporation (APDC).
*6: 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.

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