

Panasonic
ideas for life

50-inch class **TH-50PF20U**
42-inch class **TH-42PF20U**
1080P FULL-HD Plasma Displays

Boost Your Presentation Power
with Superb Images and Fine Black Detail



TH-42PF20U

TH-50PF20U



Newly Developed Panel

Increases luminous efficiency by about 4x*¹, and achieves high contrast ratio.

Expandability

Versatile video inputs and the new "SLOT2.0" function slot expand display applications.

Network Function

LAN terminal lets you operate the display by remote control.

*1: Comparing full-HD models in existing sizes with the same-size 2007 Panasonic models.

Newly Developed Panel Further Improves Luminous Efficiency and Black Reproduction

New NeoPDP Technology Increases Luminous Efficiency by About 4x

Plasma displays illuminate their pixels with the following three steps.

1. An electric discharge is used to generate ultraviolet rays.
2. The ultraviolet rays illuminate phosphors.
3. The light from the phosphors is emitted from the panel.

The new NeoPDP technology further improves the efficiency of all of these steps to achieve about four times*1 the luminous efficiency of our 2007 models. This results in better image quality and saves more power.

*1: Comparing full-HD models in existing sizes with the same-size 2007 Panasonic models.

Contrast Ratio of 5,000,000:1*2 for Highly Detailed Blacks

To take maximum advantage of the inherently superior black expression of self-illuminating plasma displays, the newly developed panel allows the PF20 Series to emit light without the use of a pre-discharge. Its high contrast teams up with deeper black reproduction — which forms the basis of image expression — to render rich textures in images with subtle shading and color differences.



*2: 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.

Conventional panel

Blacks are grayish.



Newly developed panel

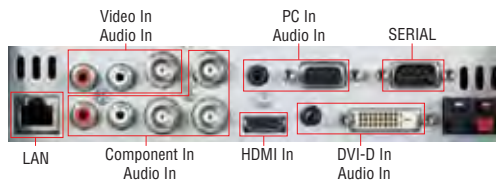
Blacks are rich and robust.



New "Slot 2.0" Function Slot Expands Display Applications

Versatile Video Inputs

You can input both analog (Component Video, Video, PC) and digital (DVI-D, HDMI) video signals to the display. These standard-equipped terminals handle most of the commonly used video signals.



New Function Slot Expands Display Applications

The new "Slot 2.0" function slot lets you add display functions to match the intended use. Mounting an optional function board allows the display to support a variety of applications.



Network Function Lets You Operate Displays by Remote Control

PJLink™*3-Compatible Network Function

This network function lets you operate displays by remote control and monitor their status through a LAN connection. Since it supports the "PJLink™*3" industry standard, existing infrastructure can be used for effective plasma display operation.

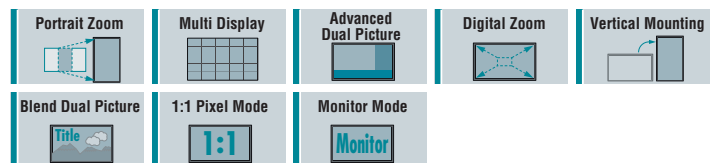
*3: Unified standards for a telecommunications protocol for operating and managing multiple projectors.



Specifications

	TH-50PF20U	TH-42PF20U
Screen Size (Diagonal)	49.9-inch	41.6-inch
Aspect Ratio	16:9	16:9
Effective Display Area (W x H)	43.5" x 24.4" (1,105 x 622 mm)	36.2" 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 / Gradation	5,000,000:1*2 / 6,144 steps (equivalent)	
Moving Picture Resolution	1,080 lines	
Input VIDEO IN	BNC x 1 [1.0 Vp-p, 75 ohms]	
AUDIO IN (L/R)	RCA pin jack x 2 [0.5 Vrms]	
COMPONENT IN	BNC x 3 [Y/G: with sync 1.0 Vp-p, 75 ohms; P/B, P/R: 0.7 Vp-p, 75 ohms]	
AUDIO IN (L/R)	RCA pin jack x 2 [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	
AUDIO IN (L/R)	M3 jack x 1	
PC IN	Mini D-sub 15pin x 1 [Y/G: with sync 1.0 Vp-p, 75 ohms; P/B, P/R: 0.7 Vp-p, 75 ohms; HD/VD: 1.0 - 5.0 Vp-p, high impedance], Plug & Play (VESA DDC 2B)	
AUDIO IN	M3 jack x 1	
SERIAL	D-sub 9-pin x 1 (External control terminal), RS-232C compatible	
LAN	RJ45 10BASE-T/100-BASE-TX, PJLink™ compatible	
Function Slot	SLOT2.0 x 1 (Vacant)	
Power Requirements	120 V AC, 50 Hz/60 Hz	120 V AC, 50 Hz/60 Hz
Power Consumption	475 W (Energy star 5.0, CEC)	400 W (Energy star 5.0, CEC)
Power off condition	0.2 W	0.2 W
Stand-by condition	Save Off: 0.9 W, Save On: 0.4 W	Save Off: 0.9 W, Save On: 0.4 W
Audio Output	16 W [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.)	68.4 lbs. (31.0 kg)	53.0 lbs. (24.0 kg)

Versatile Image Display Functions



A Host of Utilities

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

Peripherals & Mounting Options

Pedestal	Wall-hanging bracket (vertical)	Wall-hanging bracket (angled)
TY-ST20-K	TY-WK42PV20 * Also usable for vertical mounting	TY-WK42PR20
Ceiling-hanging bracket	Mobile stand	
TY-CE42PS20	TY-ST58PF20	
Detachable stereo speakers	Touch panel (Infrared Retroreflection-Detection System)	Anti-glare filter
TY-SP50P8W-K (for 50" model)	TY-TP50P10S (for 50" model)	TY-AR50P12W (for 50" model)
TY-SP42P8W-K (for 42" model)	TY-TP42P10S (for 42" model)	TY-AR42P12W (for 42" model)

- A variety of terminal boards are also available.