

PRELIMINARY

**Panasonic**  
ideas for life

50-inch class **TH-50PH20U**  
42-inch class **TH-42PH20U**  
High Definition Plasma Displays

# Faithful Image Reproduction Raises the Quality of Digital Signage



TH-42PH20U

TH-50PH20U



## Expandability

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

## NANODRIFT SAVER

New screen saver reduces image retention five times\*<sup>1</sup> more effectively than previous systems.

## Tough Display with Long Service Life

Durable front glass panel and long service life of 100,000 hours\*<sup>2</sup>.

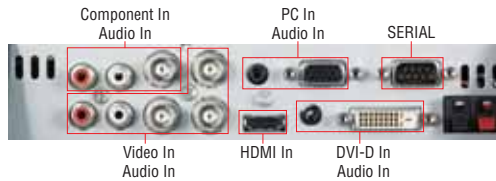
\*1: Compared to our previous "wobbling" screen saver.

\*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.

# 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.



# Tough Display with Significantly Improved Image Retention

## New Screen Saver NANODRIFT SAVER

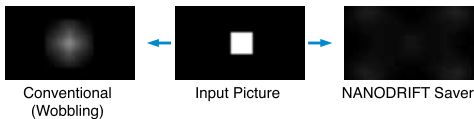
The NANODRIFT Saver reduces image retention five times\*1 more effectively than previous systems. It uses smooth, fine image movement to minimize the possibility of image retention without blocking the view.

\*1: Compared to our previous "wobbling" screen saver.

Simulated image to show accumulated brightness

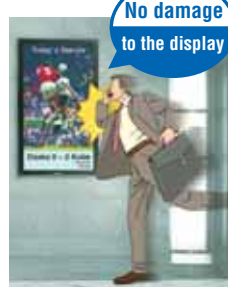


**NANODRIFT**



## Tough Body Withstands Use in Public Spaces

Plasma displays feature a hard glass panel on the front. This front glass does not break easily even when an external impact is applied.



## Long Life\*2 of approx. 100,000 Hours

Panasonic plasma displays provide sharp, beautiful images for many years.

\*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.

## The World's First\*3 Lead-Free Plasma Display Panels

Panasonic proclaimed a "lead-free" design in all plasma display panels from 2006 onward. It also eliminated the use of polyvinyl chloride in internal wiring, all as a part of its active promotion of environmentally friendly manufacturing.

\*3: Announced on November 2, 2006. Achieved lead-free designs in all 140 models for worldwide markets.



# Deep Blacks, Rich Gradation and a Wide Color Gamut Produce Truly Eye-Catching Images

## Crisp Images with a High Contrast Ratio of 2,000,000:1\*\*

Original image-processing technologies have enabled a high contrast ratio of 2,000,000:1\*\*. This produces robust blacks that give images greater realism and depth.

\*\*4: Dark-area contrast that can be displayed simultaneously on the same screen.



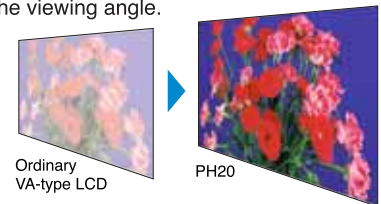
## Colors that are Faithful to the Original

This wide color gamut exceeds even the color reproduction range of the HDTV standard (ITU-R, BT.709). The colors that it produces are more faithful to the original and more natural.



## Images are Beautiful even When Viewed from an Angle

These self-illuminating plasma displays provide large-screen images in all their natural beauty. The images are also sharp and crisp regardless of the viewing angle.



## Specifications

	TH-50PH20U	TH-42PH20U
Screen Size (Diagonal)	49.9-inch	41.6-inch
Aspect Ratio	16:9	16:9
Effective Display Area (W x H)	43.5" x 24.5" (1,105 x 622 mm)	36.3" x 20.4" (921 x 518 mm)
Resolution (H x V)	1,024 x 768 pixels	1,024 x 768 pixels
Pixel Pitch (H x V)		0.900 x 0.675 mm
Contrast Ratio / Gradation	2,000,000:1 / 6,144 steps (equivalent)	
Moving Picture Resolution	720 lines	
Input VIDEO IN	BNC x 1 [1.0 Vp-p, 75 ohms]	
	RCA pin jack x 2 [0.5 Vrms]	
AUDIO IN (L/R)	BNC x 3 [Y/G: with sync 1.0 Vp-p, 75 ohms; Pa/B, Pn/R: 0.7 Vp-p, 75 ohms]	
COMPONENT IN	BNC x 3 [Y/G: with sync 1.0 Vp-p, 75 ohms; Pa/B, Pn/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 2	
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; Pa/B, Pn/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	
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	TBD	TBD
Power off condition	TBD	TBD
Stand-by condition	TBD	TBD
Audio Output	16 W [8 W + 8 W] (10 % THD)	
Dimensions (W x H x D)	47.7" x 28.5" x 3.5"	40.2" x 24.1" x 3.5"
	(1,210 x 724 x 89 mm)	(1,020 x 610 x 89 mm)
Weight (approx.)	72.8 lbs. (32.0 kg)	55.2 lbs. (25.0 kg)

## Versatile Image Display Functions



## A Host of Utilities

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

## Peripherals & Mounting Options

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

• A variety of terminal boards are also available.