Preset Input Signals

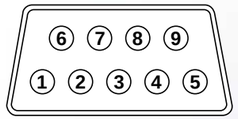
AV input

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
NTSC	15.734	59.95
PAL	15.625	50
PAL60	15.734	59.95
SECAM	15.625	50
Modified NTSC	15.734	59.95

PC/Component/RGB input & DVI input (Option)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	PC	Component	RGB	DVI (Option)
525 (480)/60i	15.734	59.94	√	√	√	
625 (575)/50i	15.625	50	√	√	√	
525 (480)/60p	31.468	59.94		√	√	
625 (575)/50p	31.25	50	√	√	√	
750 (720)/60p	45	60	√	√	√	
1125 (1080)/60i	33.75	60	√	√	√	
1125 (1080)/50i	28.125	50	√	√	√	
1125 (1080)/24p	27	24	√	√	√	
1125 (1080)/24sF	27	48	√	√	√	
640 x 400 @70	31.5	70	√		√	
640 x 480 @60	31.5	59.94	√		√	√
Mac 13″ (640 x 480)	35	67	√		√	
640 x 480 @75	37.5	75	√		√	
852 x 480 @60	31.7	60	√		√	√
800 x 600 @60	37.9	60	√		√	√
800 x 600 @75	46.9	75	√		√	
800 x 600 @85	53.7	85	√		√	
Mac 16″ (832 x 624)	49.7	75	√		√	
1024 x 768 @60	48.4	60	√		√	√
1024 x 768 @70	56.5	70	√		√	
1024 x 768 @75	60	75	√		√	
1024 x 768 @85	68.7	85	√		√	
Mac 21″ (1152 x 870)	68.7	75	√		√	
1280 x 1024 @60	64	60	√		√	
1280 x 1024 @75	80	75	√		√	
1280 x 1024 @85	91.1	85	√		√	
1600 x 1200 @60	75	60	√		√	

Serial RS232C: D-Sub 9-Pin (Female)



Pin Assignment and Signal Name

Pin No.	Signal name	Descriptions
1	CD	NC
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	Not used
5	GND	Ground
6	DSR	Not used
7	RTS	Short Circuit
8	CTS	
9	RI	NC

Transmitting Conditions

Signal Level	Complied with RS232C
Synchronous System	Start/Stop Synchronous Communication
Baud Rate	9600 bps
Parity	Nil
Character Length	8 bits
Stop Bit	1 bit
X Parameter	Nil

Supplied Remote Control

(Comes with every Panasonic Plasma Display model.)

Remote Control Functions

Stand-by (On/Off)
Input Selection
Status
Surround On/Off
Sound Mute On/Off
Volume Up/Down
Normalization (N)
Exit (R)
Position/Action
Picture
Sound
Set Up
Picture Position/Size
Aspect
PC Mode Selection
Off Timer

Panasonic

Plasma Display

Panasonic Broadcast & Television Systems Company
Division of Matsushita Electric Corporation of America

Executive Office: One Panasonic Way 4E-7 Secaucus, NJ 07094 (201) 348-7000
EASTERN ZONE: One Panasonic Way 4E-7 Secaucus, NJ 07094 (201) 348-7621
Mid-Atlantic/New England: One Panasonic Way 4E-7 Secaucus, NJ 07094 (201) 348-7621
Southeast Region: 1225 Northbrook Parkway, Ste 1-160 Suwanee, GA 30024 (770) 338-6835
Central Region: 1707 N Randall Road E1-C-1, Elgin, IL 60123 (847) 468-5200
WESTERN ZONE: 3330 Cahuenga Blvd W., Los Angeles, CA 90068 (323) 436-3500

Government Marketing Department: 52 West Gude Drive, Rockville, MD 20850 (301) 738-3840

Panasonic Sales Company
Division of Matsushita Electric of Puerto Rico, Inc.
San Gabriel Industrial Park, 65th Infantry Ave., K.M.9.5, Carolina, PR 00630 (787) 750-4300

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario L4W 2T3 (905) 624-5010

Have assembly and installation done by a qualified installer.
Specifications are subject to change without notice. Printed in Japan

Panasonic Plasma Display:
More Beauty for More Applications

There are several good reasons why Panasonic plasma displays have become the preferred choice for business, communications, entertainment, and public display applications. Panasonic's deep experience with industrial displays, leading-edge design, and advanced manufacturing are all reflected in our new models. Our newly developed Plasma Reality technology raises image quality to an entirely new level, with unmatched brightness, contrast, and gradation. And Panasonic means superior reliability, operating ease, and versatility. No matter what your application, the sheer beauty of a Panasonic plasma display makes good business sense.

Storefront Windows

Transportation Facilities

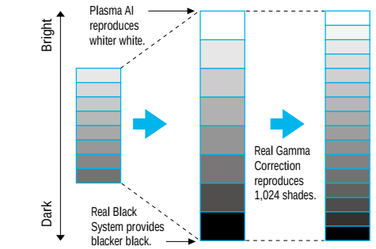
Commercial Facilities

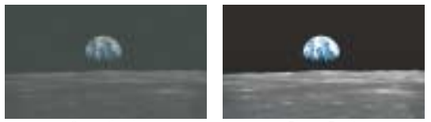
Amusement Facilities

Unprecedented Picture Brilliance

Plasma Reality Technology

Panasonic's ongoing development of "Plasma Reality Technology" is part of our pursuit of ultimate reality in image reproduction. Plasma Reality Technology is a synergetic group of picture-enhancing technologies — including the Real Black Drive System, Advanced Plasma AI, and Real Gamma Correction — that lift plasma display image quality to an entirely new level by dramatically boosting brightness, contrast and gradation.





Conventional | Plasma Reality

• Real Gamma Correction

The Real Gamma Correction technology in Panasonic plasma displays has enabled the industry-first reproduction of 1,024 shades of gradation in a high-definition display. By optimizing the gradation in each scene, this technology results in far better reproduction of the low-light portions of the image, a weakness in many conventional plasma displays. Up to 2,048 shades can be reproduced by using the optional TY-42TM4D DVI Terminal Board for a DVI digital RGB connection.

• Real Black Drive System

The Real Black Drive System delivers a significant improvement in black reproduction. Conventional plasma displays tend to illuminate blacks, which lowers the contrast. In Panasonic plasma displays, however, the pre-discharge emission intensity is greatly reduced, and the number of emissions per field is cut from the usual 12 to 1. This dramatically reduces black levels and provides deeper, richer blacks. It also achieves the industry's highest contrast, with a 3000 : 1 contrast ratio.

• Advanced Plasma AI (Adaptive Brightness Intensifier)

The Advanced Plasma AI increases the discharge cycles for dark scenes, and produces extremely precise control of the brightness level. The result is extremely vivid whites with unprecedented brightness.

Advanced 3-Dimensional Progressive Scan

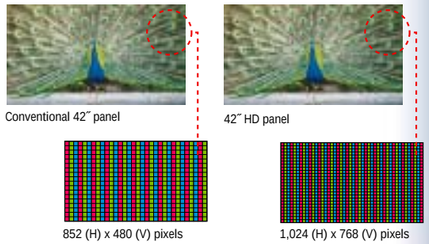
The 3-Dimensional Progressive Scan greatly boosts the precision of the progressive scan conversion. This eliminates flicker in still images and minimizes jagged diagonal edges in moving pictures, resulting in crisp, natural edges and greatly improved resolution. Panasonic plasma displays reproduce all input signals in the progressive format, virtually eliminating the line flicker that can occur when displaying in the interlace scan format.

Interlace scan | Progressive scan

HD (High-Definition) Panel *(TH-50PHD5UY/42PHD5UY)*

•True High-Definition Images

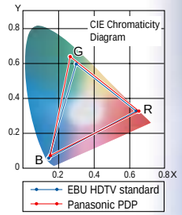
Panasonic plasma displays set the standard for high-definition viewing. HD panels with approximately 1,050,000 (1,366 x 768) pixels in the TH-50PHD5UY and 790,000 (1,024 x 768) pixels in the TH-42PHD5UY capture all the beauty of HDTV broadcasts and other HD image sources. They support all major HDTV and EDTV standards, including 1080i, 720p and 480p, and fully reproduce high-definition pictures from 720p HDTV signals.



• New Asymmetrical Cell Structure Panel

The use of a new front protection glass filter and new phosphors greatly improves the color purity of blues and reds, a weakness in previous plasma displays. This helps achieve pure, rich, natural coloration that exceeds CRT displays and approaches European EBU standards for high-definition TV.

The asymmetrical arrangement of the red, blue and green cells results in a dramatically improved light-emitting balance of the three primary colors. This reproduces purer whites while maintaining a high level of brightness.



Plasma C.A.T.S. (Contrast Automatic Tracking System) *(TH-42PWD5UY/37PWD5UZ)*

Plasma C.A.T.S. automatically senses the ambient light conditions and adjusts the brightness and gradation accordingly, to provide the best possible picture contrast for each operating environment. This feature helps reduce power consumption and minimize phosphor aging.

In a dark room, the contrast is reduced for easy-to-see viewing.

A very bright room benefits from greater contrast for the optimum picture quality.

3:2 Pulldown

The 3:2 Pulldown technology automatically detects a 3:2 film-based source, then uses still-image processing for each individual image to achieve clear, smooth-flowing images with a level of detail that closely approaches that of the original film.

* Works with 480i and NTSC format signals.

XGA Resolution *(TH-50PHD5UY/42PHD5UY)*

The TH-50PHD5UY and 42PHD5UY feature high XGA resolution and can display VGA, SVGA and XGA as well as down-converted SXGA and UXGA modes, while the TH-42PWD5UY and 37PWD5UZ display all modes in the VGA format.

User-Friendly Features, Easy Operation

Screen Savers

Select from a total of three screen savers to minimize the risk of uneven phosphor aging. The White Bar Scroll is designed for ordinary still-image displays, Screen Reversal is for text-screen displays, and Side Panel Adjustment is for 4:3 format images. All three can be started up in manual mode, or they can be set to automatically start/stop at preset times in timer mode or for preset periods in interval mode. To provide phosphor protection for 4:3 format images, all units are factory set with the Side Panel Adjustment turned ON and the Aspect Control set to JUST mode.

Screen Reversal

Ideal Solutions for Multi-Screen Applications *(TH-42PWD5UY/37PWD5UZ)*

• Enlarged Images for Multi-Screen Viewing

The built-in image-enlarging function simplifies 4 (2 x 2) or 9 (3 x 3) multi-screen displays.

* The image-enlarging function operates on video signal and on PC signal up to XGA mode. However, a normal display may not be obtained with some PC signals.

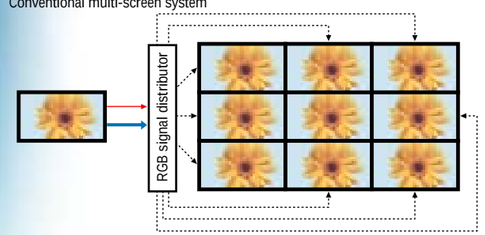
• Remote ID Number Assignment

Each screen in a multi-screen system must have its own ID control. With Panasonic plasma displays, ID numbers can be assigned using the supplied remote control. This makes it easier to use multiple display units together under a single centralised special remote control.

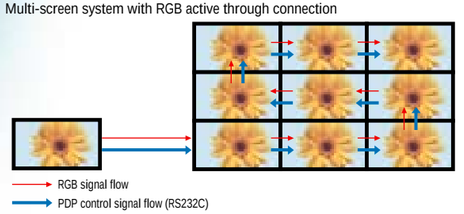
• RGB Active Through Connection

An optional RGB Active-Through Terminal Board is available for the TH-42PWD5UY and TH-37PWD5UZ. This type of signal connection eliminates the need for an additional RGB signal distributor, making it easier to set up a multi-screen system.

Conventional multi-screen system



Multi-screen system with RGB active through connection



Quiet Fan-Less Operation *(TH-42PWD5UY/37PWD5UZ)*

We increased the panel's heat radiation efficiency, eliminating the need for a fan — and eliminating fan noise. This "silence engineering" gives you the kind of quiet operation that makes for a more pleasant viewing experience.

DVI Connection *(Optional for 50˝ & 42˝ models)*

Panasonic plasma display can be equipped with an optional DVI (Digital Visual Interface) terminal board for direct digital input of RGB signals. DVI connection minimizes the data transfer distortion and sync problems that are common in conventional analog transfers. It also enables the reproduction of 2,048 shades.

Carrying Handle

Panasonic plasma display is equipped with functional carrying handles on the rear side. You can move and install the display unit with the minimum of effort.

RS232C Control

Operation can be controlled by a personal computer via the plasma display's built-in RS232C interface. This serial interface makes it possible to control a variety of sources as a single system.

Set-Up Functions for Easier Professional Use

A host of functions makes the Panasonic plasma display easy to set up and use in different locations and for different applications. Please consult your local sales company for details.

- **On-Screen Display Off:** Cancels the on-screen display when you are switching input sources or there is no signal being input.
- **Initial Input Set:** Sets the input source (video, component video,RGB, PC) for when the power is turned on.
- **Initial Volume Set:** Sets the volume level for when the power is turned on.
- **Maximum Volume Set:** Prevents the volume from exceeding the set level.
- **Fixed Input Selection:** "Locks" the input setting (video, component video, RGB, PC) so it cannot be inadvertently switched.
- **Restricted Button Operation:** Disables the front panel buttons (volume, input). Either button, or both, can be disabled.
- **Studio W/B:** Sets the color temperature for camera reshooting (3200K).
- **On/Off Timer:** Automatically turns the power on or off at preset times.
- **Remote Control User Level Set:** Restricts the operation of the remote control. You can select User 1, which allows only basic operations, User 2, which allows only power on/off, or User 3, which prevents all operation (TH-42PWD5UY/37PWD5UZ).
- **Wobbling On:** Shifts the image's position by several pixels at fixed time intervals, to minimise phosphor aging.
- **Off-Timer Set:** Enables or disables the off-timer function.

High Definition Models

TH-50PHD5UY

50-inch (127 cm) diagonal High Definition Plasma Display

TH-42PHD5UY

42-inch (106 cm) diagonal High Definition Plasma Display

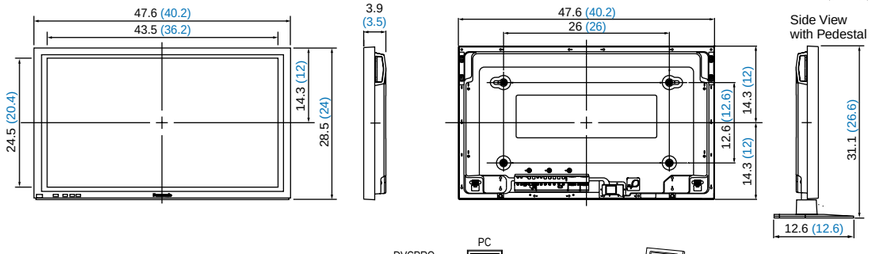
Specifications

	TH-50PHD5UY	TH-42PHD5UY
DISPLAY		
Screen Size Diagonal	50″ (1,269 mm)	42″ (1,056 mm)
(Effective) W x H	43.5″ x 24.5″ (1,106 x 622 mm)	36.2″ x 20.4″ (920 x 518 mm)
Screen Aspect	16 : 9 Wide	16 : 9 Wide
Number of Pixels	1,049,088 (1366 x 768) pixels	786,432 (1024 x 768) pixels
Pixel Pitch (H x V)	0.81 x 0.81 mm	0.90 x 0.67 mm
Displayable Colors	16.77 million colors	16.77 million colors
Contrast Ratio	3000 : 1	3000 : 1
Viewing Angle	Horizontal: More than 160°; Vertical: More than 160°	
Color System	NTSC/PAL/SECAM/PAL 60Hz/M-NTSC	
Audio Output	16 W (8 W x 2)	16 W (8 W x 2)
On-Screen Display	US English/UK English/Spanish/French/German/Italian/Chinese	
Screen Coating	AR (Anti-Reflection) Coating	AR (Anti-Reflection) Coating
GENERAL		
Power Supply	AC 120 V, 50/60Hz	AC 120 V, 50/60Hz
Power Consumption	495 W	375 W
Stand-by	3.0 W	3.0 W
Dimensions (W x H x D)	47.6″ x 28.5″ x 3.9″ (1210 x 724 x 98 mm)	40.2″ x 24″ x 3.5″ (1020 x 610 x 89 mm)
Weight	94.8 lbs. (43.0 kg)	66.1 lbs. (30.0 kg)
Operating Temperature	34°F — 104°F (0°C — 40°C)	34°F — 104°F (0°C — 40°C)
Operating Humidity	20% — 80% (Non condensation)	20% — 80% (Non condensation)
EMI Regulations	FCC Part 15 Class A Digital Equipment	
Safety Standards	UL6500/C-UL (CAN/CSA-E65-94)	

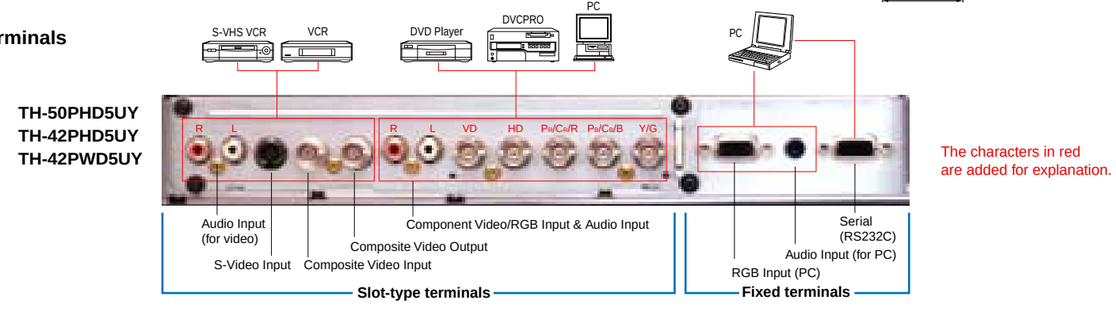
	TH-50PHD5UY	TH-42PHD5UY
TERMINALS		
Composite Video Input	BNC coaxial x 1, 1Vp-p/75 ohms	
Composite Video Output	BNC coaxial x 1 (loop-through)	
S-Video Input	S terminal x 1, Y: 1Vp-p/75 ohms, C: 0.286Vp-p/75 ohms	
Audio Input (for Video)	RCA phono type connectors (L, R) (1 set)	
RGB Input (PC)	Mini D-sub 15-pin x 1 (VGA, SVGA, XGA display & SXGA, UXGA compressed display) fH: 15.6 — 110 kHz; fV: 48 — 120 Hz	
Audio Input (for PC)	M3 stereo plug	M3 stereo plug
Component/R,G,B Input	BNC coaxial x 5	BNC coaxial x 5
RGB, HD, VD	Video: 0.7Vp-p/75 ohms; Sync: TTL level/0.3Vp-p (75 ohms); H, V Separate Sync/Composite Sync; fH: 15.6 — 110 kHz; fV: 48 — 120 Hz	
Y , P_B (C_B), P_R (C_R)	Y: 1Vp-p/75 ohms; P_B (C_B), P_R (C_R): 0.7Vp-p/75 ohms; fH: 15.75/31.5/33.7/45 kHz	
Audio Input (for Component/R,G,B)	RCA phono type connectors (L, R) (1 set)	
Serial (RS232C)	D-Sub 9-pin (Female)	D-Sub 9-pin (Female)

Dimensions

Figures in parentheses ( ) are for the TH-42PHD5UY.



Terminals



TH-50PHD5UY
TH-42PHD5UY
TH-42PWD5UY

The characters in red are added for explanation.

Standard Definition Models

TH-42PWD5UY

42-inch (106 cm) diagonal Wide Plasma Display

TH-37PWD5UZ

37-inch (94 cm) diagonal Wide Plasma Display

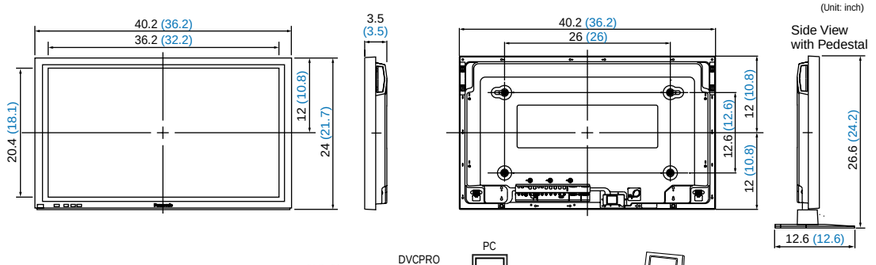
Specifications

	TH-42PWD5UY	TH-37PWD5UZ
DISPLAY		
Screen Size Diagonal	42″ (1,056 mm)	37″ (939 mm)
(Effective) W x H	36.2″ x 20.4″ (920 x 518 mm)	32.2″ x 18.1″ (818 x 461 mm)
Screen Aspect	16 : 9 Wide	16 : 9 Wide
Number of Pixels	408,960 (852 x 480) pixels	408,960 (852 x 480) pixels
Pixel Pitch (H x V)	1.08 x 1.08 mm	0.96 x 0.96 mm
Displayable Colors	16.77 million colors	16.77 million colors
Contrast Ratio	3000 : 1	3000 : 1
Viewing Angle	Horizontal: More than 160° ; Vertical: More than 160°	
Color System	NTSC/PAL/SECAM/PAL 60Hz/M-NTSC	
Audio Output	16 W (8 W x 2)	16 W (8 W x 2)
On-Screen Display	US English/UK English/Spanish/French/German/Italian/Chinese	
Screen Coating	AR (Anti-Reflection) Coating	AR (Anti-Reflection) Coating
GENERAL		
Power Supply	AC 120 V, 50/60Hz	AC 120 V, 50/60Hz
Power Consumption	295 W	225 W
Stand-by	2.8 W	2.8 W
Dimensions (W x H x D)	40.2″ x 24″ x 3.5″ (1020 x 610 x 89 mm)	36.2″ x 21.7″ x 3.5″ (920 x 550 x 89 mm)
Weight	62.8 lbs. (28.5 kg)	54.0 lbs. (24.5 kg)
Operating Temperature	34°F — 104°F (0°C — 40°C)	34°F — 104°F (0°C — 40°C)
Operating Humidity	20% — 80% (Non condensation)	20% — 80% (Non condensation)
EMI Regulations	FCC Part 15 Class A Digital Equipment	
Safety Standards	UL6500/C-UL (CAN/CSA-E65-94)	

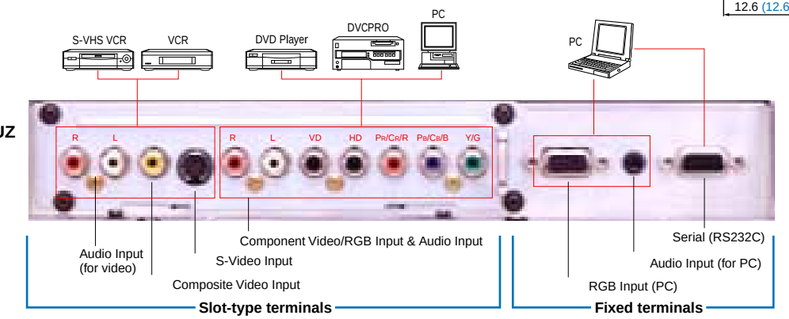
	TH-42PWD5UY	TH-37PWD5UZ
TERMINALS		
Composite Video Input	BNC coaxial x 1, 1Vp-p/75 ohms	RCA phono x 5, 1Vp-p/75 ohms
Composite Video Output	BNC coaxial x 1 (loop-through)	—
S-Video Input	S terminal x 1, Y: 1Vp-p/75 ohms, C: 0.286Vp-p/75 ohms	
Audio Input (for Video)	RCA phono type connectors (L, R) (1 set)	
RGB Input (PC)	Mini D-sub 15-pin x 1 (VGA display & SVGA, XGA, SXGA, UXGA compressed display) fH: 15.6 — 110 kHz; fV: 48 — 120 Hz	
Audio Input (for PC)	M3 stereo plug	M3 stereo plug
Component/R,G,B Input	BNC coaxial x 5	RCA phono type x 5
RGB, HD, VD	Video: 0.7Vp-p/75 ohms; Sync: TTL level/0.3Vp-p (75 ohms); H, V Separate Sync/Composite Sync; fH: 15.6 — 110 kHz; fV: 48 — 120 Hz	
Y , P_B (C_B), P_R (C_R)	Y: 1Vp-p/75 ohms; P_B (C_B), P_R (C_R): 0.7Vp-p/75 ohms; fH: 15.75/31.5/33.7/45 kHz	
Audio Input (for Component/R,G,B)	RCA phono type connectors (L, R) (1 set)	
Serial (RS232C)	D-Sub 9-pin (Female)	D-Sub 9-pin (Female)

Dimensions

Figures in parentheses ( ) are for the TH-37PWD5UZ.



Terminals



TH-37PWD5UZ

The characters in red are added for explanation.

Vertical Display Model Also Available

TH-50PHD5VUY
50-inch (127 cm) diagonal High Definition Plasma Display

TH-42PWD5VUY
42-inch (106 cm) diagonal Wide Plasma Display

Models offering the same basic performance and functions as our ordinary horizontal display models plus a cooling fan that enables a vertical display configuration are also available. They are ideal as electronic signboards for storefronts or public places. Please consult your local sales company for details.

* Use the TY-WK42PV1 mounting bracket for these models.

Optional Accessories

Detachable Stereo Speakers

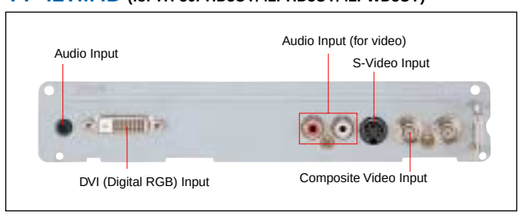
TY-SP50P5W-K
(for TH-50PHD5UY)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D):
4.1˝ x 28.5˝ x 3.5˝ (104 x 724 x 89 mm)
Weight: 5.1 lbs. (2.3 kg)/each

TY-SP42P5W-K
(for TH-42PHD5UY/42PWD5UY)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D):
4.1˝ x 24˝ x 3.5˝ (104 x 610 x 89 mm)
Weight: 5.1 lbs. (2.1 kg)/each

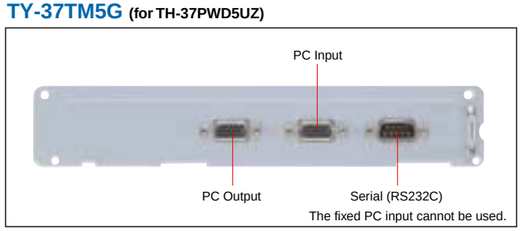
TY-SP37P5W-K
(for TH-37PWD5UZ)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D):
4.1˝ x 21.7˝ x 3.5˝ (104 x 550 x 89 mm)
Weight: 5.1 lbs. (2.1 kg)/each

Terminal Boards

DVI Terminal Board
TY-42TM4D (for TH-50PHD5UY/42PHD5UY/42PWD5UY)



RGB Active Through Terminal Board
TY-42TM5G (for TH-42PWD5UY)
TY-37TM5G (for TH-37PWD5UZ)

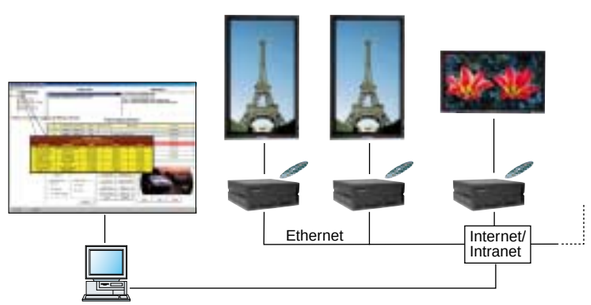


The fixed PC input cannot be used.

* Terminal boards must be installed by professional service personnel.

HD Digital Signage Solution

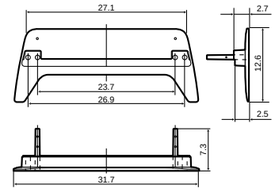
DVD-Ram/R HD Player iDVR100
The iDVR100 Digital Video Replay server can be teamed with Panasonic plasma displays to deliver high definition video for cost-effective presentation systems. The iDVR100 plays stunning 720p and 1080i HD images plus surround sound. The iDVR100 is networkable via Ethernet, allowing video content to be distributed to a specific iDVR, or a group of iDVRs, over an IP network (either public internet or corporate intranet).



Optional Mounting Components

Pedestal TY-ST05-K

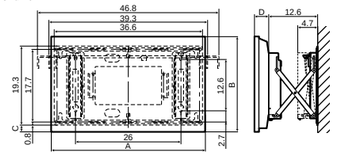
Unit: inch



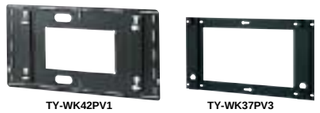
Wall-hanging bracket (drawer type) TY-WK42DR1
(for TH-50PHD5/42PHD5/42PWD5)

	50˝ model	42˝ model
A	47.6	40.2
B	28.5	24.0
C	4.4	2.2
D	3.9	3.5

Unit: inch

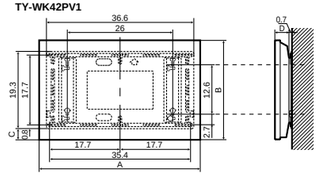


Wall-hanging bracket TY-WK42PV1
(for TH-50PHD5UY/42PHD5UY/42PWD5UY)
TY-WK37PV3 (for TH-37PWD5UZ)



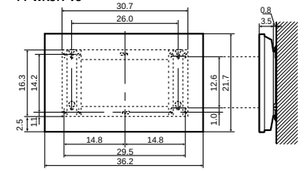
Unit: inch

TY-WK42PV1



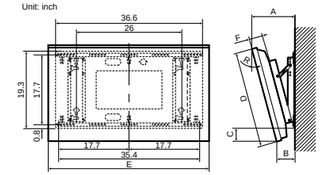
	50˝ model	42˝ model
A	47.6	40.2
B	28.5	24.0
C	4.4	2.2
D	3.9	3.5

TY-WK37PV3



Wall-hanging bracket (angled) TY-WK42PR1
(for TH-50PHD5UY/42PHD5UY/42PWD5UY)

Unit: inch



50˝ model

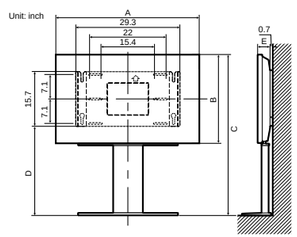
R	0°	5°	10°	15°	20°
A	6.0	7.9	9.8	11.5	13.2
B	6.0	5.4	4.8	4.2	3.5
C	4.4	4.8	5.1	5.4	5.7
D	28.5				
E	47.6				
F	3.9				

42˝ model

R	0°	5°	10°	15°	20°
A	5.7	7.4	9.0	10.6	12.1
B	5.7	5.3	4.9	4.4	4.0
C	2.2	2.5	2.9	3.2	3.5
D	24.0				
E	40.2				
F	3.5				

Wall stand TY-ST42PW1

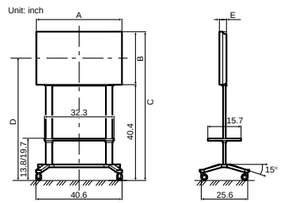
Unit: inch



	50˝ model	42˝ model	37˝ model
A	47.6	40.2	36.2
B	28.5	24.0	21.7
C	48.4	44.0	41.6
D	26.3	24.1	22.9
E	3.9	3.5	3.5

Mobile stand TY-ST42PF3
(for TH-50PHD5UY/42PHD5UY/42PWD5UY)

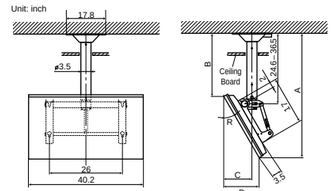
Unit: inch



	50˝ model	42˝ model
A	47.6	40.2
B	28.5	24.0
C	68.9	64.4
D	54.7	52.4
E	3.9	3.5

Ceiling-hanging bracket TY-CE42PS1

Unit: inch



50˝ model

R	0°			15°			30°		
A	44.8	48.7	52.7	56.6	45.4	49.4	53.3	57.2	44.7	48.6	52.6	56.5
B	16.3	20.2	24.2	28.1	18.1	22.0	25.9	30.0	20.2	24.1	28.0	32.0
C	8.0				9.9				11.3			
D	0				7.3				14.2			

42˝ model

R	0°			15°			30°		
A	42.5	46.4	50.4	54.3	43.2	47.1	51.1	55.0	42.6	46.5	50.5	54.4
B	18.7	22.6	26.5	30.5	20.2	24.1	28.0	32.0	21.9	25.9	29.8	33.7
C	7.6				9.0				10.0			
D	0				6.2				11.9			

37˝ model

R	0°			15°			30°		
A	41.4	45.4	49.3	53.2	42.0	46.0	49.9	53.9	41.6	45.5	49.4	53.4
B	19.8	23.7	27.6	31.6	21.3	25.2	29.2	33.1	23.0	26.9	30.9	34.8
C	7.6				8.7				9.4			
D	0				5.6				10.7			