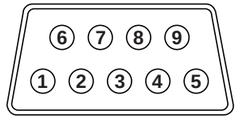
Preset Input Signals

	Signal name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Standard-Equipped Boards	Optional Board								
					TY-42TM6Y	TY-42TM6B/V	TY-42TM6A/Z	TY-42TM6P	TY-42TM6D	TY-42TM6G	TY-FB7SD	TY-FB7HD	TY-FB7HM
Composite	NTSC	15.73	59.94	Y	Y	Y							
	PAL	15.63	50.00	Y	Y	Y							
	PAL60	15.73	59.94	Y	Y	Y							
	SECAM	15.63	50.00	Y	Y	Y							
	Modified NTSC	15.73	59.94	Y	Y	Y							
Component	525 (480)/60i	15.73	59.94	Y	Y		Y	Y		Y	Y	Y	
	525 (480)/60p	31.47	59.94	Y	Y		Y	Y	Y	Y			Y
	625 (575)/50i	15.63	50.00	Y	Y		Y	Y		Y	Y	Y	
	625 (575)/50p	31.25	50.00	Y	Y		Y	Y	Y	Y			Y
	750 (720)/60p	45.00	60.00	Y	Y		Y	Y	Y	Y		Y	Y
	750 (720)/50p	37.50	50.00	Y	Y		Y	Y		Y			
	1125 (1080)/60i	33.75	60.00	Y	Y		Y	Y	Y	Y		Y	Y
	1125 (1080)/50i	28.13	50.00	Y	Y		Y	Y		Y		Y	
	1125 (1080)/24sF	27.00	47.92	Y	Y		Y	Y		Y		Y	
	1125 (1080)/30p	33.75	30.00	Y	Y		Y	Y		Y		Y	
	1125 (1080)/25p	28.13	25.00	Y	Y		Y	Y		Y		Y	
	1125 (1080)/24p	27.00	24.00	Y	Y		Y	Y		Y		Y	
	1250 (1080)/50i	31.25	50.00	Y	Y		Y	Y		Y			
RGB	640 x 400 @70Hz	31.46	70.07	Y	Y		Y	Y		Y			
	640 x 480 @60Hz	31.47	59.94	Y	Y		Y	Y	Y	Y			Y
	640 x 480 @72Hz	37.86	72.81	Y	Y		Y	Y		Y			
	640 x 480 @75Hz	37.50	75.00	Y	Y		Y	Y		Y			
	640 x 480 @85Hz	43.27	85.01	Y	Y		Y	Y		Y			
	852 x 480 @60Hz	31.47	59.94	Y	Y		Y	Y	Y	Y			
	800 x 600 @56Hz	35.16	56.25	Y	Y		Y	Y		Y			
	800 x 600 @60Hz	37.88	60.32	Y	Y		Y	Y	Y	Y			
	800 x 600 @72Hz	48.08	72.19	Y	Y		Y	Y		Y			
	800 x 600 @75Hz	46.88	75.00	Y	Y		Y	Y		Y			
	800 x 600 @85Hz	53.67	85.06	Y	Y		Y	Y		Y			
	1024 x 768 @60Hz	48.36	60.00	Y	Y		Y	Y	Y	Y			
	1024 x 768 @70Hz	56.48	70.07	Y	Y		Y	Y		Y			
	1024 x 768 @75Hz	60.02	75.03	Y	Y		Y	Y		Y			
	1024 x 768 @85Hz	68.68	85.00	Y	Y		Y	Y		Y			
	1152 x 864 @75Hz	67.50	75.00	Y	Y		Y	Y		Y			
	1280 x 960 @60Hz	60.00	60.00	Y	Y		Y	Y		Y			
	1280 x 960 @85Hz	85.94	85.00	Y	Y		Y	Y		Y			
	1280 x 1024 @60Hz	63.98	60.02	Y	Y		Y	Y		Y			
	1280 x 1024 @75Hz	79.98	75.03	Y	Y		Y	Y		Y			
	1280 x 1024 @85Hz	91.15	85.02	Y	Y		Y	Y		Y			
	1600 x 1200 @60Hz	75.00	60.00	Y	Y		Y	Y		Y			
	1600 x 1200 @65Hz	81.25	65.00	Y	Y		Y	Y		Y			
	1066 x 600 @60Hz	37.88	60.32	Y	Y		Y	Y	Y	Y			
	1366 x 768 @60Hz	48.36	60.00	Y	Y		Y	Y	Y	Y			
	Mac 13″ (640 x 480)	35.00	66.67	Y	Y		Y	Y		Y			
	Mac 16″ (832 x 624)	49.72	74.54	Y	Y		Y	Y		Y			
	Mac 21″ (1152 x 870)	68.68	75.06	Y	Y		Y	Y		Y			

* When a signal having a resolution that exceeds the panel resolution is input, a simplified display will be produced.

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
Digital Zoom
Picture
Sound
Set Up
Picture Position/Size
Aspect
PC Mode Selection
Off Timer

Panasonic

Have assembly and installation done by a qualified electrician.
Simulated pictures on screen.
Specifications are subject to change without notice. Printed in Japan
ASIA04S-01

Panasonic
ideas for life

Plasma Display

TH-65PHD7WK
65-inch (165 cm) diagonal
High-Definiiton Plasma Display

TH-50PHD7WK/WS
50-inch (127 cm) diagonal
High-Definiiton Plasma Display

TH-42PHD7WK/WS
42-inch (106 cm) diagonal
High-Definiiton Plasma Display

TH-42PWD7WK/WS
42-inch (106 cm) diagonal
Wide Plasma Display

Above and Beyond: The Panasonic Commitment to Customer Satisfaction

The Image Quality and Versatility You Need Today, the System Expandability You'll Want Tomorrow

New 65-inch plasma model for use in larger-than-conventional displays

Demand is rising for extra-large display screens, and Panasonic has the solution. Our new lineup of displays for professional applications includes a 65-inch plasma model that offers the superior image quality, extensive functions, and extendibility that make Panasonic an industry leader. The new unit suits any application calling for a super-size display. Use it in a directory in a building lobby, an information board for an airport, train station or other large public facility, or a monitor at event sites.

The ultimate in image quality — Expressivity that goes above and beyond previous limits

A host of Panasonic imaging technologies combine to achieve both the industry's highest gradation and outstanding 4,000:1* contrast. The accuracy and detail our displays provide cannot be adequately expressed by specifications alone. Their overall image quality goes far beyond conventional standards. They provide pictures with the kind of breathtaking beauty that stirs emotion.

* SD models

Functions and expandability to meet a variety of applications

Dual Picture, Digital Zoom, multi-screen capability and other advanced functions enhance the usability of our displays. Our popular Multi-Function Slots are also provided. And we've expanded our lineup of optional terminal boards, making our displays solutions to an even wider range of customer needs.

Connection with analogue equipment

Lets you connect an S-VHS VCR or video camera. This board has a video output terminal too, so you can also connect a sub-monitor device for image monitoring.

BNC Composite Video Terminal Board TY-42TM6B

Connection with digital equipment

Allows full-digital transmission of video signals, with no degradation. Allows reproduction of high-quality images from a DVD player, PC or other compatible digital equipment.

RGB (Digital) Terminal Board (DVI-D with HDCP) TY-42TM6D

Connection with PC

Lets you connect multiple PCs. Use it in conference rooms, class rooms, lecture halls and other sites where PCs are often used.

PC Input Terminal Board TY-42TM6P

Connection with broadcast equipment

Compatible with the SDI or HD-SDI (for HDTV) systems used by broadcasting stations. This board lets the plasma display reproduce crisp, clear images in a studio or control room.

SDI Terminal Board TY-FB7SD
HD-SDI Terminal Board TY-FB7HD

Fully digital connection

Enables the transfer of high-definition video and audio via a single cable. When the HDMI-compatible DVD video player is connected to this board, DVD images can be upconverted to 750p or 1125i for output.

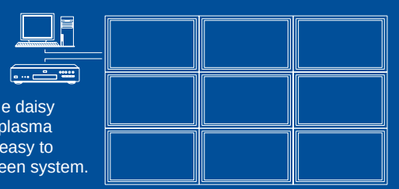
HDMI Terminal Board TY-FB7HM

Remote video distribution

For distant distribution of video images. Images can be sent to the plasma display in real time from distant equipment connected to the transmitter.

Twisted-Pair-Cable Receiver Board (Video, Audio and PDP Control) KE0101CRBW

Multi-screen system configuration



This board allows the daisy chaining of multiple plasma displays, making it easy to configure a multi-screen system.

RGB Active-Through Terminal Board TY-42TM6G

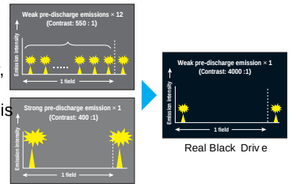
The Industry's Best Overall Picture Quality

Technologies for Increasing Contrast and Gradation

Stunning 4000: 1 Dark-Area Contrast* — New Real Black Drive System

By reducing the pre-discharge emission when reproducing black, the New Real Black Drive System provides deeper, richer blacks and a stunning 4000: 1 contrast* . The result is dramatically enhanced image clarity and realism.

* For the SD models.



Conventional

Real Black Drive

Even Higher Bright-Area Contrast — Deep Black Filter

The front protective glass of the plasma display panel incorporates a Deep Black Filter that suppresses light transmittance and slashes the amount of external light reflected. This helps our displays achieve the industry's highest level of contrast when viewed in bright surroundings.

1, 536 Shades of Gradation in Dark Scenes — New Super Real Gamma System

In scenes with low brightness levels, the New Super Real Gamma System reproduces gradation in steps equivalent to 1, 536 shades. In other words, this original, non-linear signal processing system provides superior performance at brightness levels where the human eye sees best. As a result, it adds subtle nuances to darker scenes and gives images greater depth.

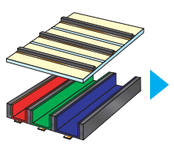
Conventional

New Super Real Gamma System

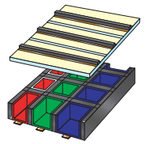
Technologies for Increasing Brightness

10% Brighter Images — New MACH Panel with Bounded Cell Structure

The New MACH (Multi-facet Asymmetrical Configuration Hyper-pixel) Panel features a bounded cell structure in which wall-like ribs are used to wrap each individual cell. By increasing the area in which the phosphor can be applied, this dramatically improves both light-emitting efficiency and intensity. Furthermore, improvements to the drive circuit and plasma gas inside the panel have enabled Panasonic to boost peak brightness while actually lowering power consumption compared with our previous models. As a result, peak brightness is boosted by 10% compared with a previous Panasonic model.



Conventional stripe rib structure



New bounded cell structure

The new panel structure boasts a long service life of 60, 000 hours* . A newly developed phosphor also raises the plasma displays' resistance to static-image screen burning to the same level as CRT displays.

* The time until panel brightness is reduced to half its initial level. The service life given above is intended as a guideline when displaying standard moving images. However, this time varies depending on the content of the images displayed and the usage environment.

High-Contrast Images with a High S/N Ratio — Adaptive AGC

Our previous automatic gain control (AGC) detected the brightness level of the entire image, then boosted it as necessary. This had a drawback, in that it tended to increase noise and black-out parts of the image where the video signal did not require boosting. Adaptive AGC raises contrast while suppressing noise by detecting and boosting only the image edges.

Note: The default setting for the Adaptive AGC is OFF.

Conventional

Adaptive AGC

Technologies for Improving Picture Clarity and Colours

Cleaner Moving Images — High-Precision MPD Noise Reduction

This newly developed technology dramatically reduces MPD (Motion Picture Disturbance) noise to deliver crisp, clean moving images. Using a Panasonic original algorithm, it detects motion patterns that tend to generate noise and makes the necessary adjustments to maximize image quality. And it does this with out diminishing the quality of stationary objects, such as those in the background.

Conventional

MPD Noise Reduction

Vibrant Colours and Natural Skin Tones — 3D Colour Management System

3D Colour Management System is a new correction process that works in a three-dimensional colour matrix (hue, saturation, and brightness) rather than the conventional two-dimensional colour difference plane. By correcting hue and brightness independently and providing finer control, this process delivers vibrant colours and natural skin tones.

Note: The default setting for the 3D Colour Management System is OFF.

Technologies for Enhancing Resolution and Sharpness

Better Vertical Resolution — Active I/P Conversion

The Active I/P (Interlace/Progressive) Conversion system detects slow movements more precisely by increasing the range for detecting moving-picture and still-picture pixels. This reduces I/P conversion noise that often occurs when reproducing tiny movements, thereby producing crisper images while raising the vertical resolution in interlaced images.

Conventional

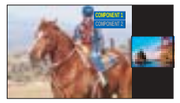
Active I/P Conversion

Functions that Improve Usability

Two Different Images on One Screen — Dual Picture Mode

You can simultaneously display images from any two different kinds of AV sources connected. Or, adding one of the optional terminal boards lets you display images from two of the same type of image source, such as two PCs or two DVD players. This function allows you to take full advantage of the plasma display's large screen.

Picture-And-Picture mode splits the screen in half and shows different pictures on each half.



Picture-Out-Picture mode displays a small picture on the right side of the screen.

Picture-In-Picture mode superimposes a small sub-screen picture over a full-screen picture.

Up to 4x Enlargement of Image Zones — Digital Zoom

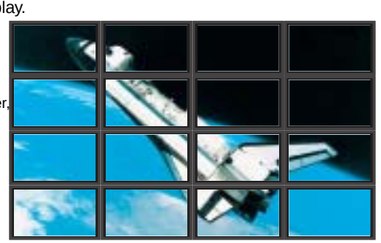
This function lets you enlarge a portion of an image by up to four times normal size and display it on the full screen. Use this function to give your presentations greater impact.

* Digital Zoom does not work in Dual Picture mode. Images of SXGA resolution or higher from a PC or RGB source may not enlarge correctly. Some degradation occurs when images are enlarged.

Huge Display Equivalent to 260-inches — Multi-Screen Applications

The built-in image-enlarging function makes it easier to set up multi-screen displays featuring four (2 x 2), nine (3 x 3), or sixteen (4 x 4) units. For example, with sixteen 65-inch displays you can configure a huge display equivalent to 260 inches by simply connecting ordinary cables. That's the kind of display that catches eyes at shopping malls and event sites. This function works with component video signals, so you can use enlarged images from DVD and other high-quality sources in your display.

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



Note: The ambient temperature varies depending on the installation location. Provide sufficient air conditioning for surrounding conditions.

Enhanced Screen Saver Functions

A variety of screen saver functions help minimise the risk of uneven phosphor aging. You can also use the timer to set the screen saver operating cycles, operating time, and start and stop times. This lets you make settings that match your application.

- **White Bar Scroll:** White bars move across the screen from left to right at regular intervals. Good for ordinary still-image displays.
- **Screen Reversal:** Displays images with the black and white reversed. Good for text displays.

- **Side Panel Adjustment:** Brightens the black bands on the sides of the screen when displaying images in the 4: 3 format.

- **Wobbling:** Shifts the image's position by several pixels at fixed time intervals.
- **Peak Limit Mode:** Lowers the peak brightness level (image contrast) by 30%

Energy-Saving Functions

A broad range of environment-friendly functions help minimise energy consumption.

- **DPMS (Display Power Management Signaling)** Power is automatically turned on or off in response to a sync signal from the PC connected to the built-in PC input terminal.
- **Auto Power Off** When you're using a device connected to the multi-function slots, the display panel goes into standby mode after about 10 minutes if no sync signal is received.
- **Power Save Mode** Reduces the display's brightness.
- **Standby Power Save Mode** Reduces power consumption when on standby. (Start-up may take a few moments once the display is in this mode.)

Front Button Control

The five buttons on the front bezel give you instant access to all major functions via an easy-to-read on-screen menu display.

Fan-Less Quiet Operation

Our "silence engineering" has eliminated the need for a fan — and fan noise — giving you the kind of quiet operation that makes for a more pleasant viewing experience.

(TH-65PHD7 and TH-50PHD7 feature a noise-suppressing silence design.)

Vertical Mounting

Panasonic plasma display can be positioned vertically to display portrait images and can serve as an effective storefront electronic signboard.

- **Optional Fan Kit for Vertical Mounting Applications**

TY-UPK50HV7 (for TH-50PHD7)
TY-UPK42HV7 (for TH-42PHD7)

* Operating temperature: 0 to 35°C

Multi-Function Slots Accommodate a Host of Uses

Multi-Function Slots

In addition to the fixed input interface, the Panasonic plasma display has three interchangeable slots that let you add different combinations of optional terminal boards. This gives you the flexibility to add digital or analogue capabilities, as necessary, and to customise your system for specific needs.

• **Multi-Function Slots on 65˝, 50˝ and 42˝ Models**
Panasonic plasma display models come equipped with the standard terminal boards mounted in slots 2 and 3. You can mount an optional terminal board in slot 1. Or, you can remove the standard terminal boards and mount up to three optional boards.

Optional Terminal Boards

RGB Active Through Terminal Board
(mounts in slots 1 & 2)

This board sends the signal that's input via the PC1 IN terminal to a second plasma display connected to the PC1 OUT terminal. Up to nine plasma displays can be connected together. This connectability adds convenience when configuring a multi-screen system.

TY-42TM6G

* The characters in red are added for explanation.

RGB (Digital) Terminal Board (DVI-D w/HDCP)
(mounts in slot 1 or 2)

Lets you connect a PC that outputs digital RGB signals (DVI compliant). Adding this board permits you to display images with the equivalent of 4,096 gradation levels.

TY-42TM6D

PC Input Terminal Board (mounts in any slot)

Lets you display images from two or more PCs.

* Does not support the DPMS function.

TY-42TM6P

Component/Composite Video Terminal Board (mounts in slots 1 & 2, or slots 2 & 3)

Lets you connect a wide range of input sources, from composite video, S-video, and component video signals to RGB signals.

TY-42TM6Y

Component Video Terminal Board (mounts in any slot)

Lets you connect devices that output component video signals, such as DVD players or set-top boxes, or devices that output RGB signals.

* Accepts only RGB signals with "SYNC ON G".

BNC Component Video Terminal Board

TY-42TM6A

RCA Component Video Terminal Board

TY-42TM6Z

Composite Video Terminal Board (mounts in slot 1 or 2)

Lets you connect a VCR, video camera or other video equipment. (Supports through-out configurations.)

BNC Composite Video Terminal Board

TY-42TM6B

RCA Composite Video Terminal Board

TY-42TM6V

SDI /HD-SDI Terminal Board

- Support the same serial digital interface (SDI) that is used in broadcasting.
- Provide fully digital transmission for clear, clean image displays.
- The TY-FB7HD supports HDTV.

SDI Terminal Board

TY-FB7SD (mounts in slot 1 or 2)

* Not compatible with the 6-series plasma display models.

HD-SDI Terminal Board

TY-FB7HD (mounts in slot 1 or 2)

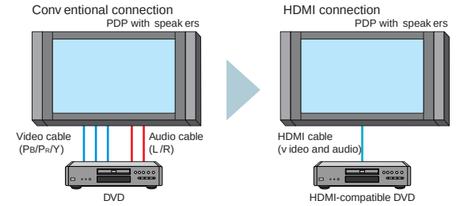
* Not compatible with the 6-series plasma display models.

Specifications

	TY-FB7SD	TY-FB7HD
Standards compliance	SMPTE259M-C	SMPTE292M, SMPTE259M-C
Compatible video format	525/59.94i 625/50i	525/59.94i, 625/50i, 750/60p: 59.94p, 1125/30p, 1125/24p, 1125/60i: 59.94i, 1125/50i, 1125/24sF: 23.98sF

HDMI Terminal Board

- Supports HDMI, the next-generation digital broadcast standard.
- Enables fully digital connection of signals from HDMI-compatible DVD players and other digital equipment for blur-free images with no colour bleeding.
- Transmits both video and audio signals over a single cable.



TY-FB7HM (mounts in slot 1 or 2)

* Not compatible with the 6-series plasma display models.

Specifications

Standards compliance	HDMI ver.1.1
Compatible video format	525/60p, 625/50p, 750/60p, 1125/60i VGA60

* High-Definition Multimedia Interface and HDMI are trademarks of HDMI Licensing, LLC.

Plasma System Solutions

Digital Signage/Narrowcasting System Complete with Touch Panel

Easy, interactive content distribution system for retail chains and public spaces such as shopping malls, office buildings and hotels

- **Constructing a Multi-Language Environment**

In contrast with conventional methods, in which several information panels are prepared in different languages, this digital system allows visitors to simply touch the panel itself to switch to the language they want. It is a highly effective and efficient way to offer people the content that they want to see.

- **Flexible Content Control**

Each Controller fits inside the Plasma and has a unique IP address, allowing content to be streamed to the Plasma on any LAN, modem, Internet or Satellite network. It speeds up the process of updating information, and any combination of Plasmas can be controlled locally or from a central location.

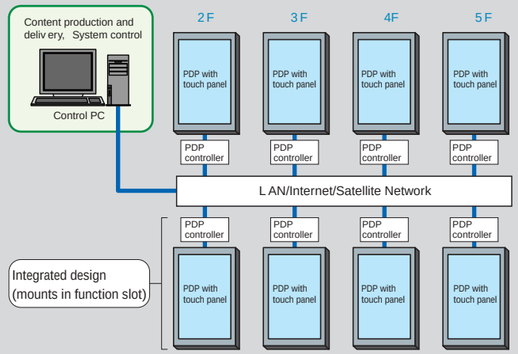
- **Space-Saving and Easy to install**

We have slimmed down the display system by incorporating the optional PDP Controller (see page 17) right inside the plasma display. It requires only two connections, power and network.

- **Universal System Design**

Since the entire system is configured in a Windows environment, the Controller is compatible with a wide variety of off-the-shelf software applications.

System Configuration



* You can configure a 50-inch display and control system with a slim 4.6-inch profile by simply combining the TH-50PHD7 Plasma Display and TY-TP50P6-S Touch Panel, then mounting the VC250 PDP Controller in the function slot of the plasma display.

* Content is distributed by a centralized control PC in an office and stored in the hard disk of each PDP controller, ready to be displayed by touch panel operation.

Information System Using the Twisted-Pair-Cable Receiver Board

Displaying up-to-date information such as transportation schedule changes, stock market conditions, and countless other possible subjects.

- **Real-Time Information Bulletins**

The use of the CAT5e twisted-pair cable allows content to be sent from the server in real-time, for instant response to events such as sudden changes in transportation schedules or accident information as it becomes available.

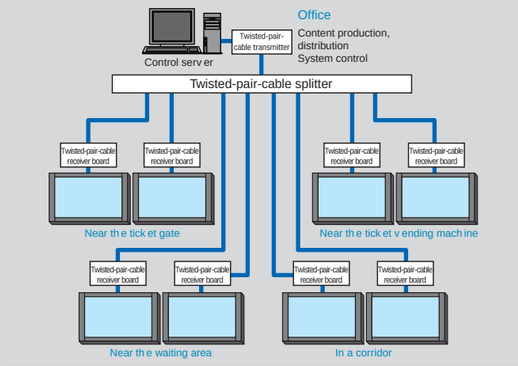
- **Long-Distance Transmission of High-Quality Video Signals**

High-resolution XGA images, sound and RS232C control signal are transmitted approximately 150 m over a single cable. PDP control signals can also be sent over the same cable to allow remote operation of power ON/OFF and other functions.

- **Higher Signal Quality, Lower Costs, and Easier Installation**

Thin, lightweight CAT5e twisted-pair cables do a better job of preventing signal degradation than coaxial cables. They also reduce costs and shorten the time needed for installation.

System Configuration



* By mounting the KE0101CRBWTwisted-Pair-Cable Receiver Board (video, audio and control) in the plasma display, images can be sent to the display from an office up to 150 meters away.

* Using the KE0108CHDWTwisted-Pair-Cable Splitter, several plasma displays can be connected in a cascade configuration.

HD-SDI /SD-SDI System for Broadcast Use

Displays crisp, clear images in a studio or control room.

- **Adapts Easily to HD-SDI /SD-SDI Systems**

The PDP adapts easily to HD-SDI and SD-SDI, the digital interfaces used in broadcasting and video production. Simply plug the SDI or HD-SDI terminal board into the function slot.

- **Larger Screen with Wider Viewing Angle**

Large PDP screens range from 42 to 50 inches — a big advantage over the maximum 32-inch screen available with conventional HD-CRT monitor displays for broadcast use. PDP screens also offer a wider viewing angle and easier, more comfortable monitoring.

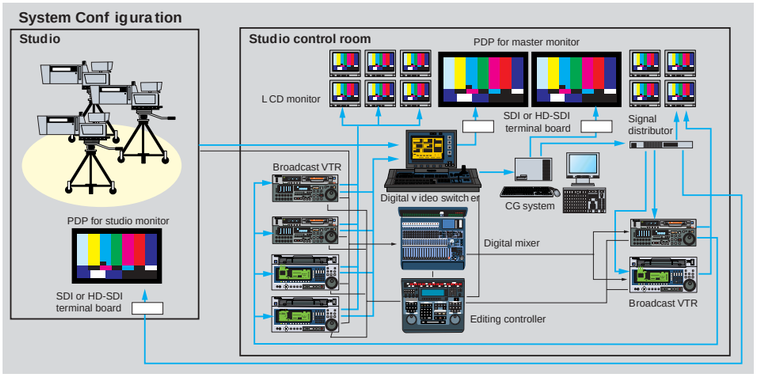
- **Saves Rack Space**

With its thin profile, a PDP takes up less rack space than a CRT monitor.

- **Ideal as a Studio Monitor**

When the PDP is used as a studio monitor display, its large screen and wide viewing angle provide superior viewing for performers and production crew. The PDP also requires little installation space and is easy to move. When a 65-inch PDP is used for recording a programme with a live audience, it helps create a livelier, upbeat atmosphere.

System Configuration



Multi-Screen System Using RGB Active Through Terminal Board

Eye-catching huge display system at shopping malls and event sites

- **Easy-to-Configure Multi-Screen System at a Low Cost**

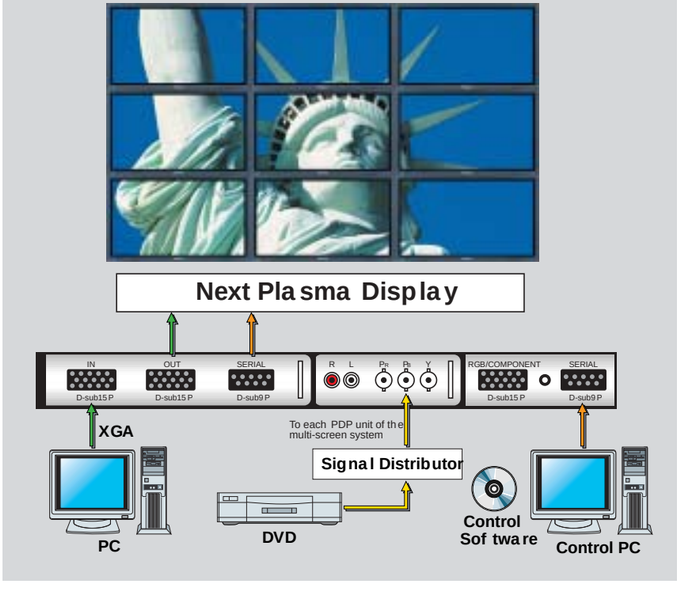
This system shows DVD video and PC data on a giant 9-screen (3 x 3) display. This system, which requires no image enlargement device, makes it possible to have a multi-screen system at a low cost.

- **Easy-to-See Information**

The system displays enlarged XGA images with excellent quality.

- **Various Display Patterns and Powerful Impact**

A "control PC" connected through a serial interface lets you switch the input sources and control various display patterns.



An Unlimited Range of Professional Applications

In-Store Display

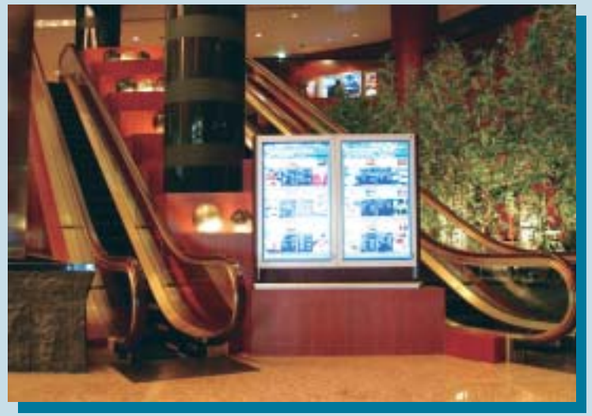
TESCO, London, UK

Education

KONAMI SCHOOL, Tokyo, Japan

School, Addis Ababa, Ethiopia

Information



ANA HOTEL TOKYO, Tokyo, Japan

Cosmos Bank, Taipei, Taiwan

SOGO Department Store, HongKong, China

Amusement

Les Mills Gym, Dunedin, New Zealand

Smooths, Los Angeles, USA

High Definition Models

TH-65PHD7WK
65-inch (165 cm) diagonal
High Definition Plasma Display

TH-50PHD7WK/WS
50-inch (127 cm) diagonal
High Definition Plasma Display

TH-42PHD7WK/WS
42-inch (106 cm) diagonal
High Definition Plasma Display

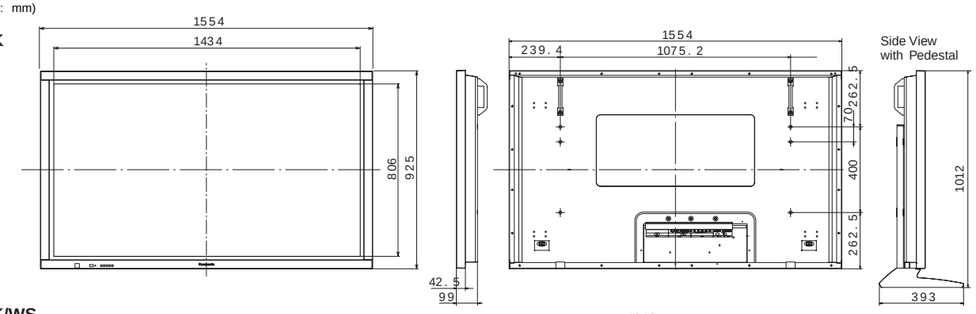
Specifications

	TH-65PHD7WK	TH-50PHD7WK/WS	TH-42PHD7WK/WS
DISPLAY			
Screen Size Diagonal (Effective) W x H	65″ (1,645 mm) 1,434 x 806 mm	50″ (1,269 mm) 1,106 x 622 mm	42″ (1,056 mm) 920 x 518 mm
Screen Aspect	16 : 9 Wide	16 : 9 Wide	16 : 9 Wide
Number of Pixels	1,049,088 (1366 x 768)		786,432 (1024 x 768)
Pixel Pitch (H x V)	1.05 x 1.05 mm	0.81 x 0.81 mm	0.90 x 0.675 mm
Displayable Colours	3,620 million colours	3,620 million colours	3,620 million colours
Contrast Ratio	3000 : 1	3000 : 1	3000 : 1
Viewing Angle	Horizontal: More than 160°; Vertical: More than 160°		
Colour System	NTSC/PAL/SECAM/PAL 60Hz/M-NTSC		
Audio Output	20 W (10 W x 2)	16 W (8 W x 2)	16 W (8 W x 2)
On-Screen Display	US English/UK English/Spanish/French/German/Italian/Chinese/Japanese		
Screen Coating	AR (Anti-Reflection) Coating		
GENERAL			
Power Supply	AC 220 - 240 V, 50/60Hz	AC 220 - 240 V, 50/60Hz	AC 220 - 240 V, 50/60Hz
Power Consumption	635 W	435 W	315 W
Stand-by	Save On: 1.2 W, Off: 1.5 W	Save On: 0.7 W, Off: 1 W	Save On: 0.7 W, Off: 1 W
Dimensions (W x H x D)	1554 x 925 x 99 mm	1210 x 724 x 95 mm	1020 x 610 x 89 mm
Weight	81.5 kg	43.0 kg	30.0 kg
Operating Temperature	0°C — 40°C		
Operating Humidity	20% — 80% (Non condensation)		
EMC	EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3		
Safety Standards	BEAB, CE, EN60065 (IEC65)		

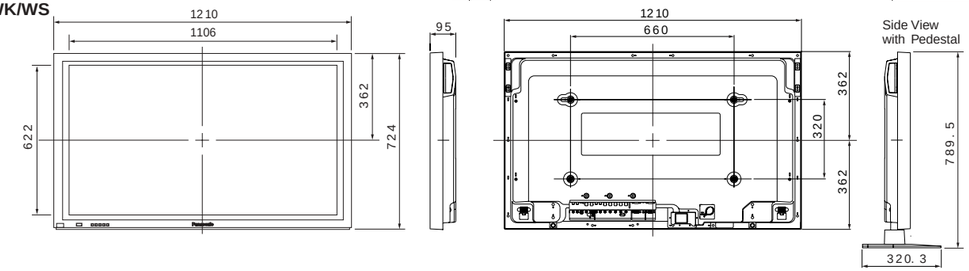
	TH-65PHD7WK/WS	TH-50PHD7WK/WS	TH-42PHD7WK/WS
TERMINALS			
Composite Video Input	BNC coaxial x 1, 1.0 Vp-p (75 ohms or high impedance)		
Composite Video Output	BNC coaxial x 1, 1.0 Vp-p (75 ohms or high impedance)		
S-Video Input	S terminal x 1, Y: 1 Vp-p (75 ohms), C: 0.286 Vp-p (75 ohms)		
Audio Input (for Video)	RCA phono type connectors (L, R) (1 set)		
PC Input (RGB/Component)	Mini D-sub 15-pin x 1 (VGA, SVGA, XGA display & SXGA, UXGA compressed display) fH: 15 — 110 kHz; fV: 48 — 120 Hz		
Audio Input (for PC)	M3 stereo plug		
Component/R,G,B Input	BNC coaxial x 3 (Y, PB, PR or R, G, B [SYNC ON G]) Y/G: 1.0 Vp-p/composite (75 ohms); 0.7 Vp-p/non-composite (75 ohms) PB/B, PR/R: 0.7 Vp-p (75 ohms)		
Audio Input (for Component/R,G,B)	RCA phono type connectors (L, R) (1 set)		
Serial (RS232C)	D-Sub 9-pin (Female)		

Dimensions (Unit: mm)

TH-65PHD7WK



TH-50PHD7WK/WS



Standard Definition Models

TH-42PWD7WK/WS
42-inch (106 cm) diagonal
Wide Plasma Display

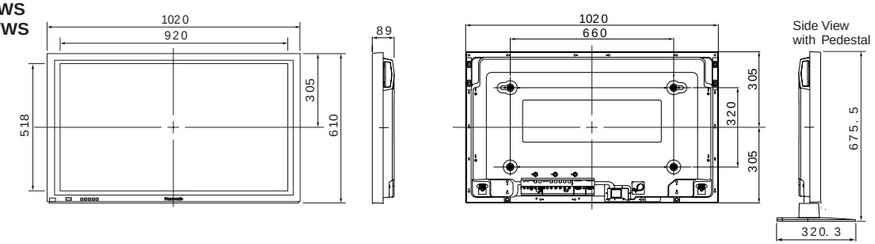
Specifications

	TH-42PWD7WK/WS
DISPLAY	
Screen Size Diagonal (Effective) W x H	42″ (1,056 mm) 920 x 518 mm
Screen Aspect	16 : 9 Wide
Number of Pixels	408,960 (852 x 480) pixels
Pixel Pitch (H x V)	1.08 x 1.08 mm
Displayable Colours	3,620 million colours
Contrast Ratio	4000 : 1
Viewing Angle	Horizontal: More than 160° ; Vertical: More than 160°
Colour System	NTSC/PAL/SECAM/PAL 60Hz/M-NTSC
Audio Output	16 W (8 W x 2)
On-Screen Display	US English/UK English/Spanish/French/German/Italian/Chinese/Japanese
Screen Coating	AR (Anti-Reflection) Coating
GENERAL	
Power Supply	AC 220 - 240 V, 50/60Hz
Power Consumption	250 W
Stand-by	Save On: 0.7 W, Off: 1 W
Dimensions (W x H x D)	1020 x 610 x 89 mm
Weight	29.0 kg
Operating Temperature	0°C — 40°C
Operating Humidity	20% — 80% (Non condensation)
EMC	EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3
Safety Standards	BEAB, CE, EN60065 (IEC65)

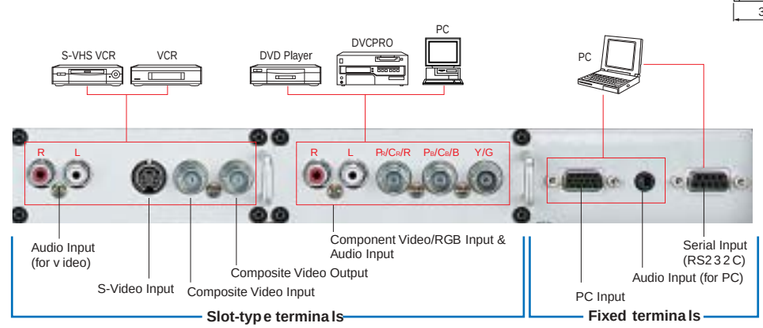
	TH-42PWD7WK/WS
TERMINALS	
Composite Video Input	BNC coaxial x 1, 1.0 Vp-p (75 ohms or high impedance)
Composite Video Output	BNC coaxial x 1, 1.0 Vp-p (75 ohms or high impedance)
S-Video Input	S terminal x 1, Y: 1 Vp-p (75 ohms), C: 0.286 Vp-p (75 ohms)
Audio Input (for Video)	RCA phono type connectors (L, R) (1 set)
PC Input (RGB/Component)	Mini D-sub 15-pin x 1 (VGA display & SVGA, XGA, SXGA, UXGA compressed display) fH: 15 — 110 kHz; fV: 48 — 120 Hz
Audio Input (for PC)	M3 stereo plug
Component/R,G,B Input	BNC coaxial x 3 (Y, PB, PR or R, G, B [SYNC ON G]) Y/G: 1.0 Vp-p/composite (75 ohms); 0.7 Vp-p/non-composite (75 ohms) PB/B, PR/R: 0.7 Vp-p (75 ohms)
Audio Input (for Component/R,G,B)	RCA phono type connectors (L, R) (1 set)
Serial (RS232C)	D-Sub 9-pin (Female)

Dimensions (Unit: mm)

TH-42PHD7WK/WS
TH-42PWD7WK/WS



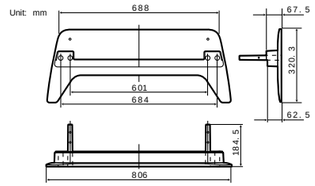
Terminals



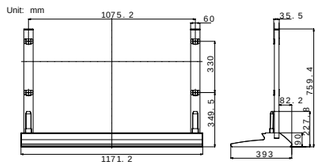
The characters in red are added for explanation.

Options

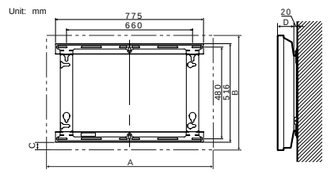
Pedestal
TY-ST07-K
TY-ST42PA20



TY-ST65-K

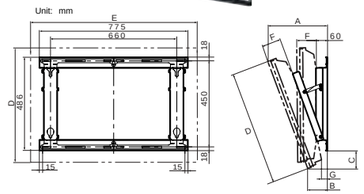


Wall-hanging bracket
TY-WK42PV7



	50" model	42" model
A	1210	1020
B	724	610
C	91.5	34.5
D	95	89

Wall-hanging bracket (angled)
TY-WK42PR7



50" model

R	0°	5°	10°	15°	20°
A	155	200	243	285	325
B	155	137	119	99	80
C	130	137	145	152	156
D	724				
E	1210				
F	95				
G	60	57	42	26	11

42" model

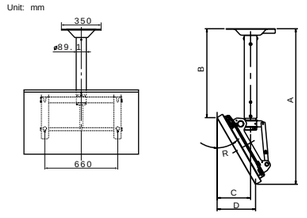
R	0°	5°	10°	15°	20°
A	149	188	226	264	299
B	149	135	121	107	92
C	73	80	88	95	101
D	610				
E	1020				
F	89				
G	60	50	40	29	19

TY-WK65PV7

Wall-hanging bracket (drawer type)
TY-WK42DR1

	50" model	42" model
A	1210	1020
B	724	610
C	112.5	55.5
D	95	89

Ceiling-hanging bracket
TY-CE42PS7



50" model

R	0°				15°				30°			
A	1187	1287	1387	1487	1201	1301	1401	1501	1181	1281	1381	1481
B	466	566	666	766	506	606	706	806	558	658	758	858
C	199				249				286			
D	0				186				360			

42" model

R	0°				15°				30°			
A	1130	1230	1330	1430	1144	1244	1344	1444	1129	1229	1329	1429
B	523	623	723	823	561	661	761	861	604	704	804	904
C	193				228				252			
D	0				157				303			

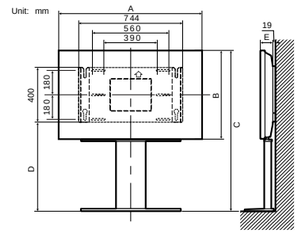
Compatible Models at a Glance

●: Compatible; —: Not compatible

	TY-ST65-K	TY-ST07-K	TY-ST42PA20	TY-WK42DR1	TY-WK65PV7	TY-WK42PV7	TY-WK42PR7	TY-ST42PW1	TY-ST42PF3	TY-CE42PS7
TH-65PHD7WK	●	—	—	—	●	—	—	—	—	—
TH-50PHD7WK/WS	—	● (WK)	● (WS)	●	—	●	●	●	●	●
TH-42PHD7WK/WS	—	● (WK)	● (WS)	●	—	●	●	●	●	●
TH-42PWD7WK/WS	—	● (WK)	● (WS)	●	—	●	●	●	●	●

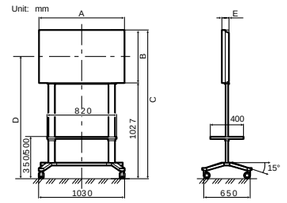
Wall stand
TY-ST42PW1

	50" model	42" model
A	1210	1020
B	724	610
C	1230.5	1116.5
D	668.5	611.5
E	95	89



Mobile stand
TY-ST42PF3

	50" model	42" model
A	1210	1020
B	724	610
C	1751	1637
D	1389	1332
E	95	89



Touch panel

TY-TP50P6-S (for TH-50PHD7)
TY-TP42P6-S (for TH-42PHD7/42PWD7)

This add-on touch panel lets you write directly onto the screen with a light touch. Ideal for adding written comments during a presentation or meeting.

- Highly reliable optical sensor system
- Outstanding resolution, easy operation
- Thin design makes a precise fit with display screen
- Lets you use display as a "whiteboard"

TY-TPEN6 Touch Pen also available.

Note: Use the optional mounting bracket, when you mount both a touch panel and the optional speakers at the same time.

Specifications

	TY-TP50P6-S	TY-TP42P6-S
Applicable display devices	Panasonic 50" plasma display	Panasonic 42" plasma display
Power supply (voltage)	DC + 5V ±10% (Through USB)	
Electric current	DC + 5V, Max 400mA	
Detection system	Infrared ray interruption	
Panel aperture (W x H)	1118 x 632 mm	928.5 x 526.5 mm
Detection range (W x H)	1100 x 620 mm	916 x 516 mm
Effective detection range	Above detection range + 1.0 mm top, bottom, right, and left	
Operating modes	Input point, Continuous, Moving, End point detection*1	
Resolution (W x H)	2201 x 1241*1	1833 x 1033*1
Detection pitch	2.0 x 2.0 mm	
Output system	Coordinate output	
Optical elements	276 (H) x 156 (V)	230 (H) x 130 (V)
Optical element pitch	4.0 x 4.0 mm	
Minimum stylus	6.0 x 6.0 mm	
Scan speed	First touch: 30 msec/frame max., Moving: 5 msec/frame max.	
Interface	USB1.1 compliant; Signal: +DATA, -DATA, VCC, GND; I/F connector: TYPE B	
Panel shape	Integrated flat panel controller	
Dimensions (W x H x D)	1256 x 748 x 69 mm	1066 x 634 x 69 mm
Depth when mounted	118 mm	110 mm
Weight (excluding brackets)	4.2 kg	3.5 kg
Escutcheon (frame)	Aluminum	
USB driver/Applicable OS	Windows® 98SE/2000/ME/XP	

*1 When using the specific driver software.

Detachable stereo speakers

TY-SP65P7W-K (for TH-65PHD7WK)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 100 x 925 x 90 mm
Weight: 2.2 kg/each

TY-SP50P5W-K (for TH-50PHD7WK)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 104 x 724 x 89 mm
Weight: 2.3 kg/each

TY-SP42P5W-K (for TH-42PHD7WK, 42PWD7WK)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 104 x 610 x 89 mm
Weight: 2.1 kg/each

TY-SP50P6W-S (for TH-50PHD7WS)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 104 x 724 x 89 mm
Weight: 2.3 kg/each

TY-SP42P6W-S (for TH-42PHD7WS, 42PWD7WS)
Configuration: 2-way, 3-speaker
Dimensions (W x H x D): 104 x 610 x 89 mm
Weight: 2.1 kg/each

Peripherals

* Some peripherals are not available in some countries. Consult your local sales company for details.

Twisted-Pair-Cable Receiver Board

- The Twisted-Pair-Cable Receiver Board makes it possible, using a single CAT5e cable, to simultaneously send video signal (RGB, component, or composite), audio signal and the PDP control signal.

* To send a composite video signal, the Composite Video Terminal Board (TY-42TM6Y, 42TM6B or 42TM6V) must be mounted in the slot of PDP.

- This reduces both costs and setup time compared with a conventional BNC cable connection.
- XGA signals (1024 x 768 pixels) can be sent up to 150 m.
- Because the Twisted-Pair-Cable Receiver Board mounts in a multi-function slot, it runs on power supplied by the PDP and takes up no additional equipment space.

For the latest information on the Twisted-Pair-Cable Receiver Board, please visit the following website:

http://www.kowa.co.jp/i-master/cat5-eng

KE0101CRBW

(Video, audio and PDP control signals) (Mounts in any slot*)

* Should be mounted in slot 1 to send the PDP control signal. PDP control signal transmission is one-way.

Specifications (KE0101CRBW)

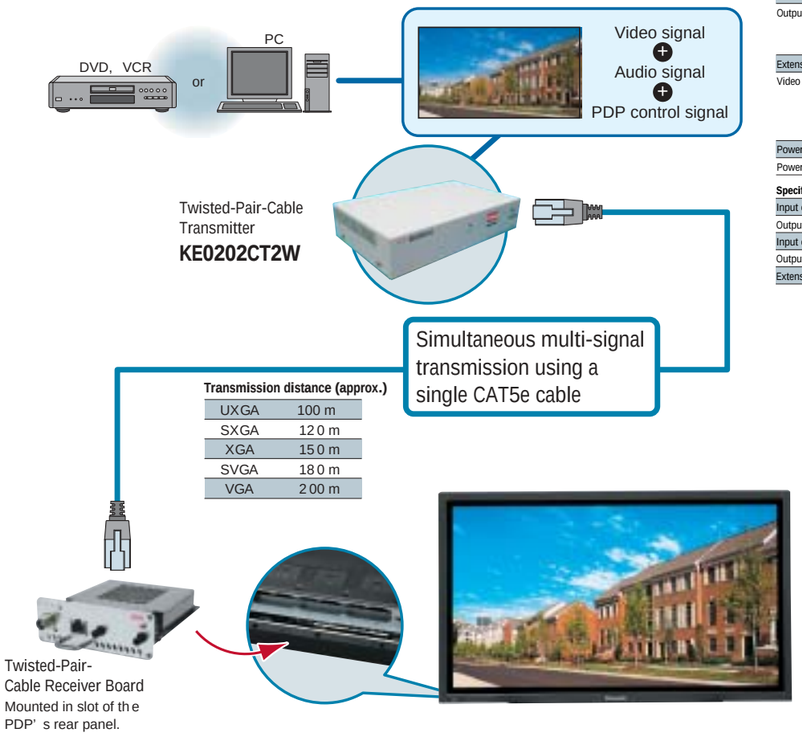
Applicable displays	Panasonic Plasma Displays
Input channel	1 input system for extension
Output channel	1 system (internal connector) for RGB or 1 system (extrenal connector) for Video, 1 system for sound and 1 system for RS232C
Extension cable	CAT5/CAT5e/CAT6
Video output signal	Analog RGB: 0.7Vp-p (75 ohms); HD, VD: TTL Component: Y: 1.0Vp-p (75 ohms) sync signal included P_B, P_R: ± 0.35Vp-p (75 ohms) Video: 1.0Vp-p (75 ohms)
Power supply	Supplied from the plasma display
Power consumption	Approx. 6 W

Specifications (KE0202CT2W)

Input channel	1 each for video (RGB and video) 1 each for audio and 1 for RS-232C
Output channel	1 each for monitor output (RGB, video, and audio) 1 for extension output (2 division) 1 for extension output (2 division)
Extension cable	CAT5/CAT5e/CAT6
Video output signal	Analog RGB: 0.7Vp-p (75 ohms); HD, VD: TTL Component: Y: 1.0Vp-p (75 ohms) sync signal included P_B, P_R: ± 0.35Vp-p (75 ohms) Video: 1.0Vp-p (75 ohms)
Power supply	AC 100 — 240 V, 50/60 hz
Power consumption	Approx. 10 W

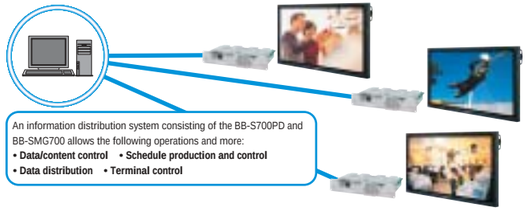
Specifications (KE0108CHDW)

Input channel	1 input for CAT5e
Output channel	8 outputs for CAT5e
Input connector	RJ-45 connector
Output connector	RJ-45 connector
Extension cable	CAT5e



Networked MPEG2 Player

- Mounts in the function slot to reduce wiring and save space. The local remote control allows playback control without the need for a mouse and keyboard.
- Video signals are transmitted digitally to ensure crisp, clear images.
- The hardware decoder produces DVD-level image quality by supporting MPEG2 MP@ML (Main Profile@Main Level) transport. High-bit-rate data also streams smoothly because all playback data is first stored in the built-in hard disk.
- Combination with the BB-SMG700 Streaming Box Manager makes it possible to schedule the distribution of motion video, still images and other content, and deliver over a LAN or Internet.



An information distribution system consisting of the BB-S700PD and BB-SMG700 allows the following operations and more:
- **Data/content control**
- **Schedule production and control**
- **Data distribution**
- **Terminal control**

Direct playback is also possible using the included remote control.

BB-S700PD Streaming Box

(Mounts in slots 1 & 2)

Terminals

Specifications

Hardware	Applicable displays	Panasonic Plasma Displays
	HDD capacity	Approx. 20 GB*1
	External jacks	10BASE-T/100BASE-TX (RJ-45), Audio output (Stereo mini jack*2)
	Power supply	Supplied from plasma display (DC 14V)
	Power consumption	Approx. 14V/0.7A max.
Software	Web browser	HTML4.01 subset, partial CSS1 and CSS2 ECMA Script 262 3rd edition (JavaScript 1.5 equivalent) Partial DOM Level 1, Level 2 and Dynamic HTML
	Applicable servers	Streaming Box Manager BB-SMG700*3
	Data distribution protocol	Proprietary method (block data distribution with error-triggered retransmission function and encoding process)
MPEG	Image	MPEG2 PS, MPEG2 TS, MP@ML
	Audio	Linear PCM*4, MPEG Audio Layer 1, Layer 2
	Maximum bit rate	10 Mbps (in storage and playback)

*1: Part of this capacity is used by the system. *2: Exclusive use with internal connection.
*3: Some functions are performed jointly with the BB-SMG700. *4: At sampling frequency of 48kHz.

BB-SMG700 Streaming Box Manager

Controls up to 100 plasma display panels.
This application contains all of the functions necessary for video distribution.

BB-SMG700 Operating Environment

CPU	Pentium® IV 1GHz or faster, Recommended: Pentium® IV 2.4GHz or faster
Main storage memory	512MB or more, Recommended: 1 GB or more
HDD capacity	Required capacity: 10 GB or more
Network interface	1000BASE-T/100BASE-TX/10BASE-T
Applicable OS	Windows® XP Professional (SP1)

PDP Controller

- Function board design reduces wiring and saves space.
- Clear images made possible by digital connection using the function slot of the plasma display.
- Customised to maximise the performance of Panasonic plasma displays.
  - Realistic display images achieved by a 1:1 pixel correspondence with Panasonic plasma displays.
  - Can also be used in vertical display applications.
- Models with a pre-installed, digital signage system are also available.
- Easy to install, it requires only a network and power connection. The mouse/keyboard connections can be wireless, through the PCMCIA slots.

VC250 series

(Mounts in slots 1, 2 & 3)

Terminals

Specifications

Applicable displays	Panasonic Plasma Displays
CPU	ULV Pentium® M 900MHz
Main storage memory	Standard 256MB DDR SO-DIMM
Internal HDD	2.5" HDD 30GB x 1
Network	100BASE-TX/10BASE-T x 1, Wake On LAN supported
Interfaces	Serial x 2*1, USB2.0/1.1 x 2*2, Line In x 1, Line Out x 1, MIC x 1
PCMCIA slot	2*3
Preinstalled OS	Windows® XP Embedded
Dimensions	315 (W) x 29 (H) x 211 (D) mm (including cooling fan)
Weight	1.2 kg
Power supply	Supplied from the plasma display
Power consumption	20 W max.
Standard	FCC Class A

*1: One serial interface is connected internally.
*2: USB 1.1 is for HID (human interface devices) only. Maximum power supply for the two ports is 3.5 W.
*3: Maximum power supply for the two slots is 2.0 W when using 5.0 V, and 3.6 W when using 3.3 V.