

# High Definition Plasma Display

# TH-50PH9UK

## Product summary

- 50" High Definition Plasma Display for professional use.
- Equipped with three interchangeable slots-provide flexible and powerful system solution by adding/exchanging wide variety of optional slot-in boards.
- Available with various unique professional features-Dual picture mode, Digital zoom, Built-in video wall image enlarger, etc..
- Various Energy-saving functions-DPMS, Auto power off, Power save mode, etc..

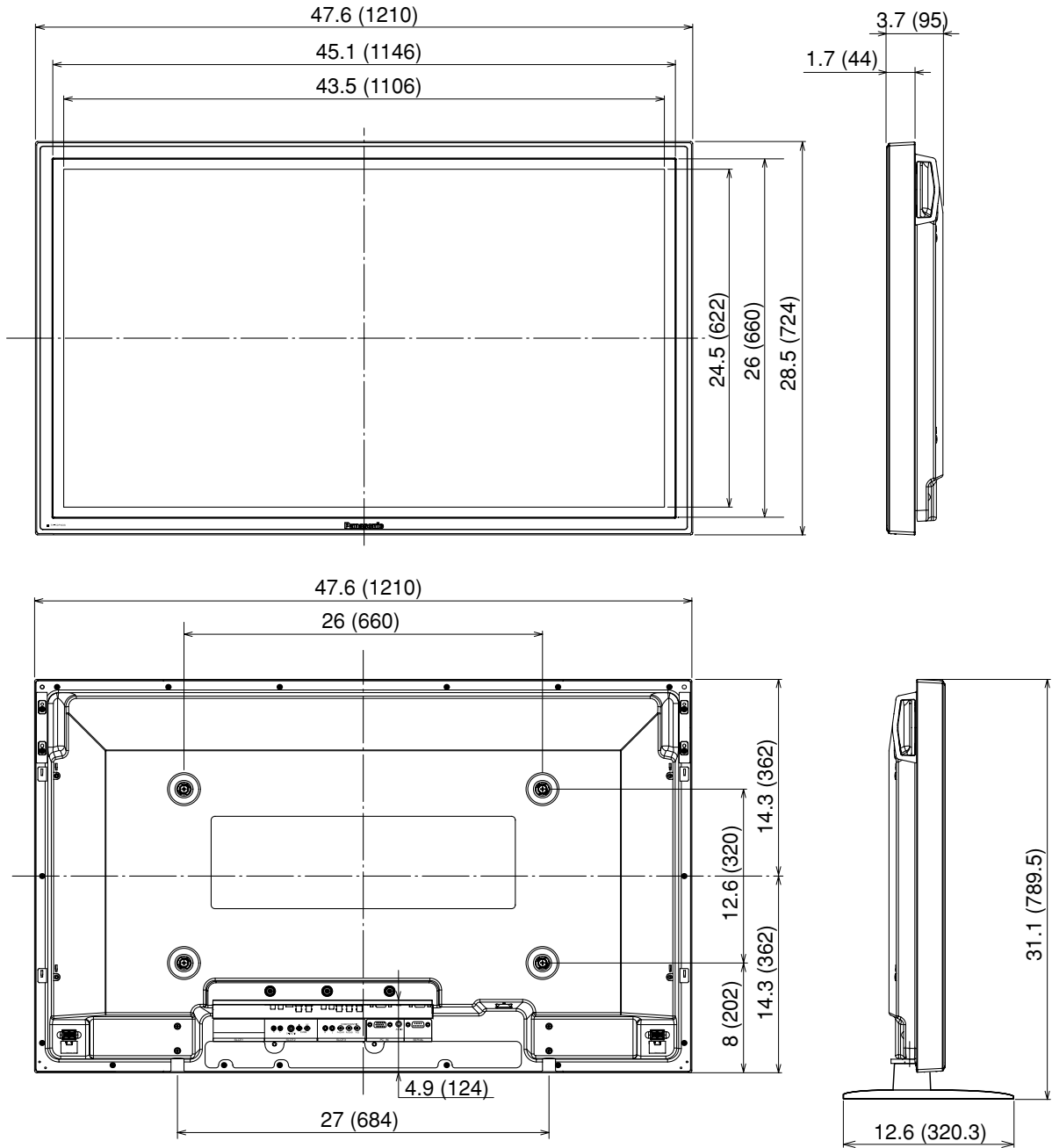
Note: Dual picture mode cannot handle the following combinations of two analog signals Component - Component, Component - PC(RGB), PC(RGB) - Component, PC(RGB) - PC(RGB)

## Product specification (Design and specifications subject to change without notice)

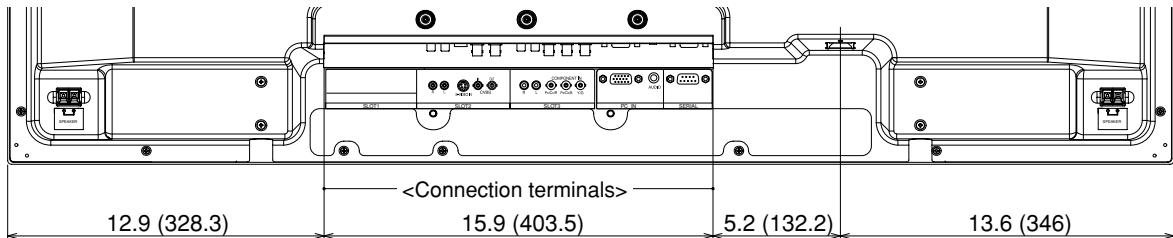
Display		
Screen Size (Diagonal)	50-inch	
Aspect ratio	16:9	
Effective Display Area (W x H)	43.5" x 24.5" (1106 x 622 mm)	
Resolution (H x V)	1,366 x 768 pixels (1pixel=3cells for R, G and B)	
Pixel Pitch (H x V)	0.810 x 0.810 mm	
Brightness	1,200 cd/m <sup>2</sup>	
Contrast Ratio (Bright room)	10,000:1 (400:1)	
Gradation	3,072 steps (equivalent)	
Signal Compatibility		
Scan Rate	Horizontal frequency 15-110 kHz Vertical frequency 48 -120 Hz	
PC Signal Compatibility	VGA, SVGA, XGA, SXGA, UXGA ..... (Compressed)	
Supported Video Standards	NTSC, PAL, PAL 60, SECAM, Modified NTSC	
Video Signal Compatibility	525(480)/60i•60p, 625(575)/50i•50p, 750(720)/60p•50p, 1125(1080)/60i•50i•24p•24sF•25p•30p.....SMTPE274M, 1250(1080)/50i	
Input / Output		
Fixed Terminal		
PC IN	Mini D-sub 15pin x 1 Analog RGB/Components *Plug & Play (VESA DDC 1/2B)	
AUDIO IN	M3 jack x 1	
SERIAL	D-sub 9-pin x 1 External control, RS-232C compatible	
Interchangeable Terminals		
Slot1	Vacant	
Slot2 (TY-FB9BD)	CVBS IN BNC x 1 Composite AUDIO IN(L/R) RCA pin jack x 2 S-VIDEO S-VIDEO x 1 AUDIO IN(L/R) RCA pin jack x 2	
Slot3 (TY-42TM6A)	COMPONENT IN BNC x 3 Analog RGB/Components AUDIO IN(L/R) RCA pin jack x 2	
ELECTRICAL		
Power Requirements	120 V AC, 50 Hz/60 Hz	
Power Consumption	460 W	
Power off condition	0.1 W	
Stand-by condition	Save OFF 0.5 W, Save ON 0.3 W	
SOUND		
Audio Output	16 W [8 W + 8 W] (10% THD)	
MECHANICAL		
Dimensions (W x H x D)	47.6" x 28.5" x 3.7" (1,210 x 724 x 95 mm) (exclusive protruding portion)	
Weight	approx. 81.6 lbs (37.0 Kg)	
ENVIRONMENTAL		
Operating environment		
Temperature	32 °F - 104 °F (0 °C - 40 °C)	
Humidity	20 % - 80 % (Non condensation)	
Altitude	0 - 9,100 feet (0 - 2,800 m)	
Storage environment		
Temperature	-4 °F - 140 °F (-20 °C - 60 °C)	
Humidity	20 % - 90 % (Non condensation)	
Altitude	0 - 10,800 feet (0 - 3,300 m)	
EMI REGULATIONS		
FCC Part 15 (Class B Digital Devices)		
SAFETY STANDARDS		
UL6500 Ver.2		
IR REMOTE CONTROL		
Power Requirements	DC 3V (2 x AA Size dry cells)	
Operation distance	approx. 23ft (7m) in front of plasma display	
Weight	approx. 4.6oz (130g) including batteries	
INCLUDED ACCESSORIES		
• Fixing Band x 2 • AC power cord • Operating instruction book		
OPTIONAL ACCESSORIES		
• Wall-hanging bracket(vertical,angled,drawer type) • Pedestal • Wall stand • Ceiling-hanging bracket • Mobile stand • Touch Panel • Speakers • Non glare filter • Terminal boards • Remote control		

**■Dimensions** (Shown with optional Pedestal stand)

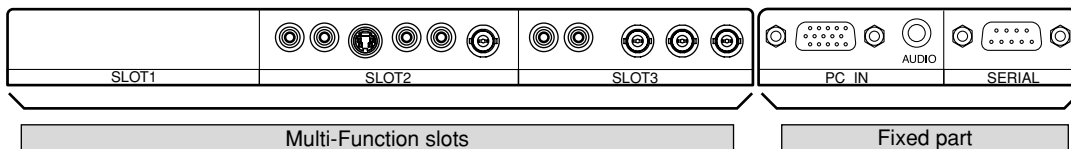
Units : inches (mm)



**<Terminal dimension>**



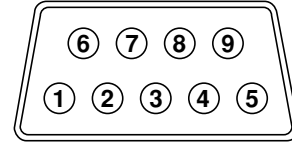
**<Connection terminals>**



# ■ Preset Input Signals

Signal name	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Optional Terminal Board															
			Composite Video TY-42TM6B/V	Component Video TY-42TM6A/Z	PC Input TY-42TM6P	RGB (Digital) TY-42TM6D	HDMI TY-FB8HM	BNC Dual Video TY-FB9BD	Composite/Component Video TY-42TM6Y	RGB Active Through TY-42TM6G	SDI TY-FB7SD	HD-SDI TY-FB7HD	PC IN (D-Sub15pin) Fixed Terminal					
<b>Composite</b>	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								
<b>Component</b>	525 (480)/60i	15.73	59.94		Y	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	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		Y	
	750 (720)/50p	37.50	50.00		Y	Y	Y	Y		Y	Y						Y	
	1125 (1080)/60i	33.75	60.00		Y	Y	Y	Y		Y	Y			Y	Y		Y	
	1125 (1080)/50i	28.13	50.00		Y	Y	Y	Y		Y	Y			Y	Y		Y	
	1125 (1080)/24p	27.00	24.00		Y	Y				Y	Y			Y	Y		Y	
	1125 (1080)/24sF	27.00	48.00		Y	Y				Y	Y			Y	Y		Y	
	1125 (1080)/25p	28.13	25.00		Y	Y				Y	Y			Y	Y		Y	
	1125 (1080)/30p	33.75	30.00		Y	Y				Y	Y			Y	Y		Y	
	1250 (1080)/50i	31.25	50.00		Y	Y				Y	Y						Y	
	<b>RGB</b>	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	

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



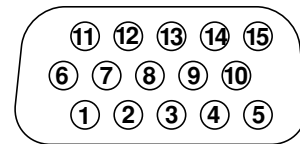
### Pin Assignment and Signal Name

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

## PC Input: D-Sub 15-Pin (Female)



### Signal Name

Pin No.	Signal name
1	R (PR/CR)
2	G (Y)
3	B (Pb/Cb)
4	GND (Ground)
5	GND (Ground)
6	GND (Ground)
7	GND (Ground)
8	GND (Ground)
9	NC (Not)
10	GND (Ground)
11	GND (Ground)
12	SDA
13	HD/SYNC
14	VD
15	SCL