

High Definition Plasma Display

TH-58PF12EK

Product summary



- 58" 1080p 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-Weekly Command Timer, Dual picture mode, Digital zoom, Built-in video wall image enlarger, etc..
- Various Energy-saving functions-DPMS, Auto power off, Power save mode, etc..

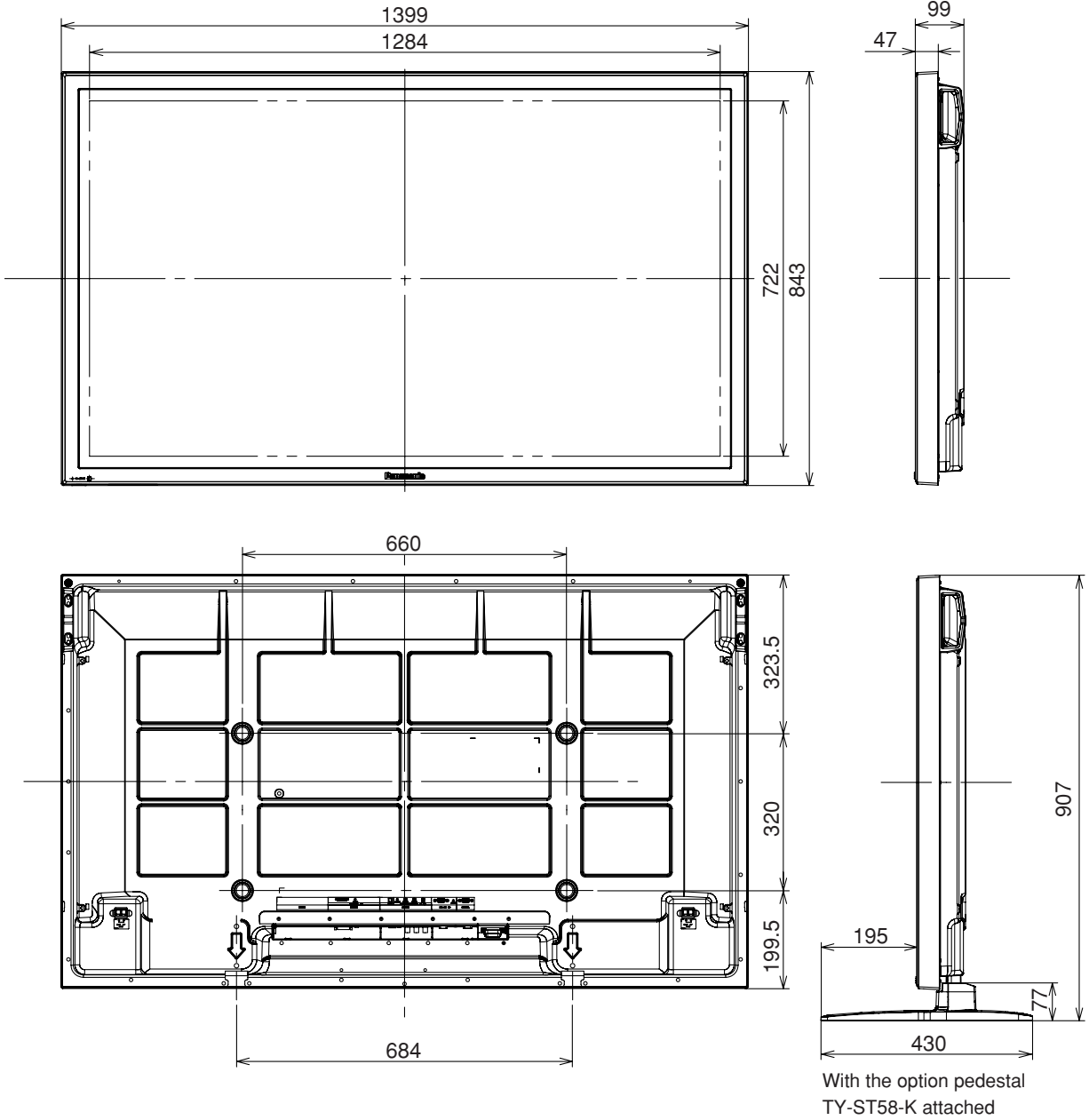
Note: Dual picture mode cannot handle the following combinations of two analog signals Component - Component, Component - PC(RGB), PC(RGB) - Component, PC(RGB) - PC(RGB)

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

DISPLAY	
Screen Size (Diagonal)	58-inch (1473 mm)
Aspect Ratio	16:9
Effective Display Area (W x H)	1,284 x 722 mm
Pixel (H x V)	2,073,600 (1,920 (W) x 1,080 (H)) [5,760 x 1,080 dots]
Pixel Pitch (H x V)	0.669 x 0.669 mm
Contrast Ratio	40,000:1
Gradation	6,144 steps (equivalent)
APPLICABLE SIGNALS	
Scanning format	525 (480) / 60i•60p, 625 (575) / 50i•50p, 750 (720) / 60p•50p, 1125 (1080) / 60i•60p•50i•50p•24p•25p•30p•24sF, 1250 (1080) / 50i
PC Signal Compatibility	VGA, SVGA, XGA, SXGA, UXGA (Over SXGA resolution : compressed) Horizontal scanning frequency 15 -110 kHz Vertical scanning frequency 48 -120 Hz
INPUT / OUTPUT	
Fixed Terminal	
PC Input	Mini D-sub 15pin x 1 (Female) Y / G : 1.0 V p-p (75 Ω) P _B / C _B / B, P _R / C _R / R : 0.7 V p-p (75 Ω) HD / VD : 1.0 ~ 5.0 V p-p (75 Ω) (high impedance)
Audio Input (L/R)	Plug & Play (VESA DDC 2B) M3 jack x 1 0.5 V rms
Serial	D-sub 9-pin x 1 (Male) External control, RS-232C compatible
Interchangeable Terminals	
(Slot1) Vacant	
(Slot2) DVI-D Input	DVI x 1
(Slot2) Audio Input (L/R)	M3 jack x 1 0.5 V rms
(Slot3) Component Input	BNC x 3 Y / G : 1.0 V p-p (75 Ω) P _B / C _B / B, P _R / C _R / R : 0.7 V p-p (75 Ω)
(Slot3) Audio Input (L/R)	M3 jack x 1 0.5 V rms
(Slot3) LAN	RJ45 10BASE-T / 100BASE-TX, compatible with PJLINK™
ELECTRICAL	
Power Requirements	220 - 240 V AC, 50 Hz/60 Hz
Power Consumption	540 W
Power Off Condition	0.4 W
Stand-by Condition	Save OFF 1.2 W, Save ON 0.7 W
SOUND	
Audio Output	6 Ω, 16 W [8 W + 8 W] (10% THD)
MECHANICAL	
Dimensions (W x H x D)	1,399 x 843 x 99 mm
Weight	approx. 48.0 kg
Cabinet Colour	Black
ENVIRONMENTAL	
Operating environment	
Temperature	0 °C - 40 °C
Humidity	20 % - 80 % (Non condensation)
Altitude	0 - 2,800 m
Storage environment	
Temperature	-20 °C - 60 °C
Humidity	20 % - 90 % (Non condensation)
Altitude	0 - 3,300 m
RADIATION REGULATIONS	
EN55022 Class-B, EN55024, EN61000-3-2, EN61000-3-3	
SAFETY STANDARDS	
EN60065 Ver.7	
IR REMOTE CONTROL	
Power Requirements	DC 3V (2 x R6 (UM3) Batteries)
Operation Distance	approx. 7 m in front of plasma display
Weight	approx. 100 g including batteries
INCLUDED ACCESSORIES	
• Fixing Band • AC power cord x 2 • Operating instruction book • Remote control • Batteries	
OPTIONAL ACCESSORIES	
• Wall-hanging bracket (vertical, angled) • Mobile Stand • Pedestal • Touch Panel • Speakers • Anti-Glare Filter • Terminal boards	

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

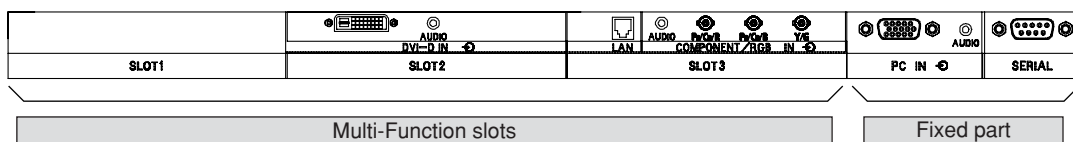
Units : mm



<Terminal dimension>



<Connection terminals>



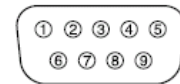
Preset Input Signals

Signal name	horizontal frequency (kHz)	vertical frequency (Hz)	Optional Terminal Board														
			Composite/Component Video TY-42TM6Y	Component Video TY-42TM6A/Z	PC Input TY-42TM6P	RGB Active Through TY-42TM6G	Composite Video TY-42TM6B/V	BNC Dual Video TY-FB9BD	DVI-D TY-FB11DD	SDI TY-FB7SD	HD-SDI TY-FB9HD	HD-SDI with Audio TY-FB10HD	Dual HD-SDI TY-FB11DHD	HDMI TY-FB8HM	Dual HDMI TY-FB10HMD	SCART TY-FB8SC	PC IN(D-sub 15-pin) Fixed Terminal
Composite	NTSC	15.73	59.94	Y												Y	
	PAL	15.63	50.00	Y												Y	
	PAL60	15.73	59.94	Y												Y	
	SECAM	15.63	50.00	Y												Y	
	Modified NTSC	15.73	59.94	Y												Y	
Component / RGB	525(480)/60i	15.73	59.94	Y	Y	Y	Y		Y	Y	Y					Y	Y
	525(480)/60p	31.47	59.94	Y	Y	Y ¹	Y ¹		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
	625(576)/50p	31.25	50.00						Y				Y	Y			
	750(720)/60p	45.00	60.00	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y		Y
	750(720)/50p	37.50	50.00	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y		Y
	1125(1080)/60i	33.75	60.00	Y ²	Y ²	Y ²	Y ²		Y	Y	Y	Y	Y	Y	Y		Y ²
	1125(1080)/60p	67.50	60.00	Y ²	Y ²	Y ²	Y ²		Y			Y		Y			Y ²
	1125(1080)/50i	28.13	50.00	Y ²	Y ²	Y ²	Y ²		Y	Y	Y	Y	Y	Y	Y		Y ²
	1125(1080)/50p	56.25	50.00	Y ²	Y ²	Y ²	Y ²		Y			Y		Y			Y ²
	1125(1080)/30p	33.75	30.00	Y ²	Y ²	Y ²	Y ²		Y	Y	Y	Y					Y ²
	1125(1080)/25p	28.13	25.00	Y ²	Y ²	Y ²	Y ²		Y	Y	Y	Y					Y ²
	1125(1080)/24p	27.00	24.00	Y ²	Y ²	Y ²	Y ²		Y	Y	Y	Y		Y			Y ²
	1125(1080)/24sF	27.00	48.00	Y ³	Y ³	Y ³	Y ³			Y	Y	Y					Y ³
	1250(1080)/50i	31.25	50.00	Y ⁴	Y ⁴	Y ⁴	Y ⁴										Y ⁴
	2048x1080/24p	27.00	24.00														
	2048x1080/24sF	27.00	48.00														
RGB	640x400@70Hz	31.46	70.07	Y	Y	Y	Y										Y
	640x480@60Hz	31.47	59.94	Y ⁶	Y ⁶	Y	Y		Y					Y	Y		Y
	640x480@72Hz	37.86	72.81	Y	Y	Y	Y										Y
	640x480@75Hz	37.50	75.00	Y	Y	Y	Y										Y
	640x480@85Hz	43.27	85.01	Y	Y	Y	Y										Y
	800x600@56Hz	35.16	56.25	Y	Y	Y	Y										Y
	800x600@60Hz	37.88	60.32	Y	Y	Y	Y		Y								Y
	800x600@72Hz	48.08	72.19	Y	Y	Y	Y										Y
	800x600@75Hz	46.88	75.00	Y	Y	Y	Y										Y
	800x600@85Hz	53.67	85.06	Y	Y	Y	Y										Y
	852x480@60Hz	31.47	59.94	Y ⁶	Y ⁶	Y	Y		Y								Y
	1024x768@50Hz	39.55	50.00						Y								
	1024x768@60Hz	48.36	60.00	Y	Y	Y	Y		Y								Y
	1024x768@70Hz	56.48	70.07	Y	Y	Y	Y										Y
	1024x768@75Hz	60.02	75.03	Y	Y	Y	Y										Y
	1024x768@85Hz	68.68	85.00	Y	Y	Y	Y										Y
	1066x600@60Hz	37.64	59.94	Y	Y	Y	Y		Y								Y
	1152x864@60Hz	53.70	60.00						Y								
	1152x864@75Hz	67.50	75.00	Y	Y	Y	Y										Y
	1280x768@60Hz	47.70	60.00	Y	Y	Y	Y										Y
	1280x960@60Hz	60.00	60.00	Y	Y	Y	Y										Y
	1280x960@85Hz	85.94	85.00	Y	Y	Y	Y										Y
	1280x1024@60Hz	63.98	60.02	Y	Y	Y	Y		Y								Y
	1280x1024@75Hz	79.98	75.03	Y	Y	Y	Y										Y
	1280x1024@85Hz	91.15	85.02	Y	Y	Y	Y										Y
	1366x768@50Hz	39.55	50.00						Y								
	1366x768@60Hz	48.36	60.00	Y	Y	Y	Y		Y								Y
	1400x1050@60Hz	65.22	60.00						Y								
	1600x1200@60Hz	75.00	60.00	Y	Y	Y	Y										Y
	1600x1200@65Hz	81.25	65.00	Y	Y	Y	Y										Y
	1920x1080@60Hz	67.50	60.00	Y ⁷	Y ⁷	Y ⁷	Y ⁷		Y ⁷								Y ⁷
	1920x1200@60Hz	74.04	59.95						Y								
	Mac13" (640x480)	35.00	66.67	Y	Y	Y	Y										Y
	Mac16" (832x624)	49.72	74.54	Y	Y	Y	Y										Y
	Mac21" (1152x870)	68.68	75.06	Y	Y	Y	Y										Y

*1:When selected the RGB format and 525p signal input, it is recognized as VGA 60Hz signal. *2:Based on SMPTE 274M standard. *3:Based on SMPTE RP211 standard. *4:Based on SMPTE 295M standard. *5:Based on SMPTE 292M and 372M standards. *6:When inputted VGA 60Hz format signal, it is recognized as 525p signal. *7:The input signal is recognized as 1,125 (1,080) / 60p.

Note: Signals without above specification may not be displayed properly.

Serial RS232C : D-sub 9-Pin (Male)



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
Synchronization method	Asynchronous
Baud Rate	9600 bps
Parity	None
Character Length	8 bits
Stop Bit	1 bit
Flow control	-

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



Signal Name

Pin No.	Signal name
1	R (P _R /C _R)
2	G (Y)
3	B (P _B /C _B)
4	NC (Not connected)
5	GND (Ground)
6	GND (Ground)
7	GND (Ground)
8	GND (Ground)
9	+5V DC
10	GND (Ground)
11	NC (Not connected)
12	SDA
13	HD/SYNC
14	VD
15	SCL