

# High Definition Plasma Display

# TH-50PF10EK

## Product summary

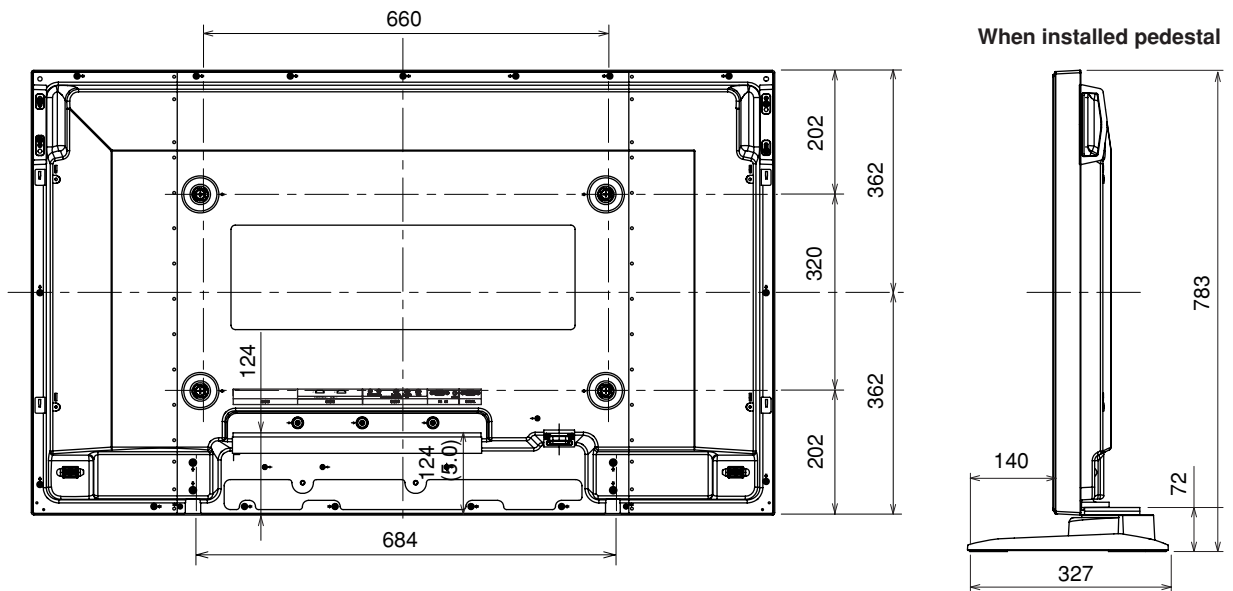
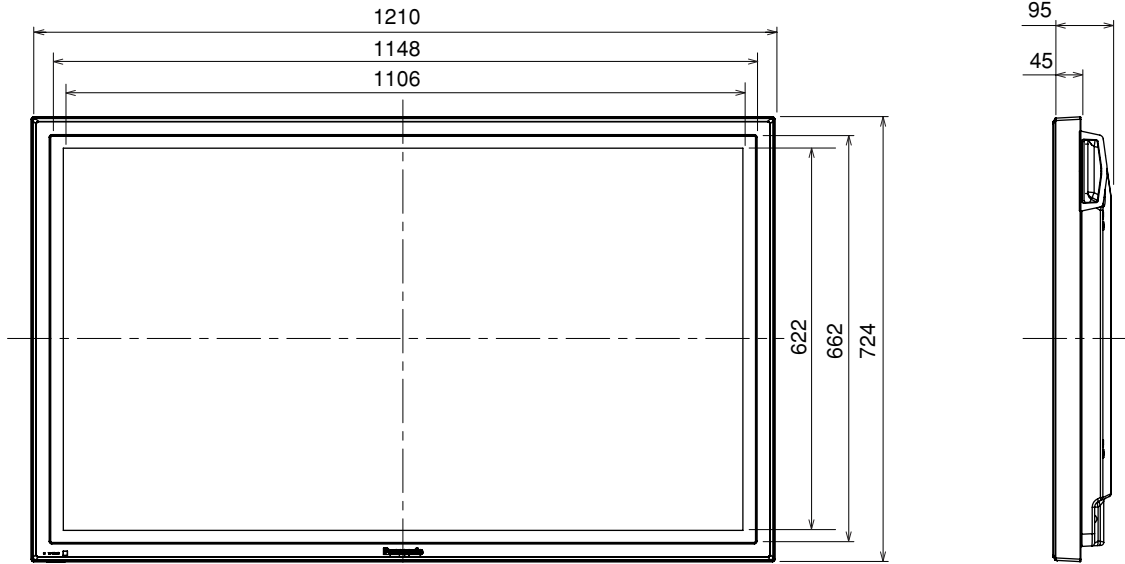
- 50" 1080p High Definition Plasma Display for Professional use
- "Super Cinema Mode" - perfectly tuned color setting for true professional users - enables a reference monitor level of color reproduction on native 1080p high resolution panel
- Equipped with three interchangeable slots - provides flexible and powerful system solution by adding/exchanging a wide variety of optional plug-in boards
- Optional plug-in boards are also available to maximize 1080p resolution panel performance - TY-FB9FDD (UXGA compatible DVI board (pre-installed when shipped)), TY-FB10HD (HD-SDI board with Audio)
- Available with various unique professional features like, Portrait Zoom, Weekly Command Timer, Dual picture mode, Digital zoom, Built-in video wall image enlarger, etc...

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

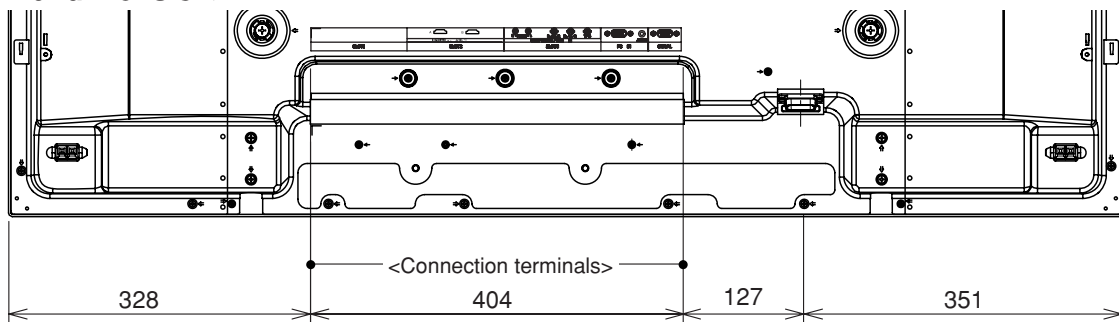
Display	
Screen Size (Diagonal)	50-inch (127 cm)
Aspect ratio	16:9
Effective Display Area (W x H)	1,106 x 622 mm
Resolution (H x V)	1,920 x 1,080 pixels (1pixel=3cells for R, G and B)
Pixel Pitch (H x V)	0.576 x 0.576 mm
Brightness	1,000 cd/m <sup>2</sup>
Contrast Ratio	10,000:1
Gradation	4,096 steps (equivalent)
Signal Compatibility	
Scan Rate	Horizontal frequency 15 - 110 kHz Vertical frequency 48 - 120 Hz
PC Signal Compatibility	VGA, WVGA, SVGA, XGA, WXGA, WXGA+, SXGA, SXGA+, WSXGA+ UXGA, WUXGA (UXGA and over resolution : compressed)
Supported Video Standards	NTSC, PAL, PAL 60, SECAM, Modified NTSC
Input / Output	
Fixed Terminals	
PC IN	Mini D-sub 15pin x 1 (Female) Analog RGB/Components *Plug & Play (VESA DDC 2B)
AUDIO IN	M3 jack x 1
SERIAL	D-sub 9-pin x 1 (Male) External control, RS-232C compatible
Interchangeable Terminals	
(Slot1) (Slot2:TY-FB9FDD)	Vacant DVI-D IN AUDIO IN
(Slot3:TY-42TM6A)	COMPONENT IN AUDIO IN (L/R)
	DVI 24 pin x 1 M3 jack x 1 L/R : 0.5 Vrms BNC x 3 Analog RGB / Component RCA pin jack x 2
ELECTRICAL	
Power Requirements	AC 220 - 240 V , 50 Hz/60 Hz
Power Consumption	595 W
Power off condition	0.3 W
Stand-by condition	Save Off 0.8 W, Save On 0.6 W
SOUND	
Audio Output	16 W [8 W + 8 W] (10 % THD)
MECHANICAL	
Dimensions (W x H x D)	1,210 x 724 x 95 mm (exclusive protruding portion)
Weight	approx. 41.0 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 3 V (2 x R6 (UM3) Battery)
Operation distance	approx. 7 m in front of plasma display
Weight	approx. 130 g including batteries
INCLUDED ACCESSORIES	
• Remote controller • Batteries • Fixing Band x 2 • AC Power cord x 2 • Operating instruction book	
OPTIONAL ACCESSORIES	
• Wall-hanging bracket (vertical, angled, drawer type) • Pedestal • Ceiling-hanging bracket • Mobile stand • Touch Panel • Speakers • Anti-glare filter • Terminal boards	

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

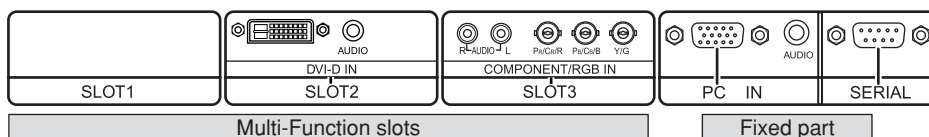
Units : mm



<Terminal dimension>



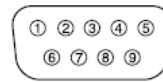
<Connection terminals>



# Preset Input Signals

Signal name	horizontal frequency (kHz)	vertical frequency (Hz)	Optional Terminal Board													
			Composite/Component TY-42TMBY	Component Video TY-42TMB6AZ	PC Input TY-42TMBP	RGB A ctive Through TY-42TMBG	Composite Video TY-42TMBBV	BNC Dual Video TY-FB9BD	DVI-D TY-FB9FDD	SDI TY-FB7SD	HD-SDI TY-FB9HD	HD-SD with Audio TY-FB10HD	HDMI TY-FB8HM	HDMI TY-FB10HMD	SCART TY-FB8SC	PC IN(D-sub 15-pin) Fixed Terminal
<b>Composite</b>																
NTSC	15.73	59.94	Y					Y	Y						Y	
PAL	15.63	50.00	Y					Y	Y						Y	
PAL60	15.73	59.94	Y					Y	Y						Y	
SECAM	15.63	50.00	Y					Y	Y						Y	
Modified NTSC	15.73	59.94	Y					Y	Y						Y	
<b>Component / RGB</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	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	
750(720)/50p	37.50	50.00	Y	Y	Y	Y			Y	Y	Y	Y	Y		Y	
1125(1080)/60i	33.75	60.00	Y	Y	Y	Y			Y	Y	Y	Y	Y		Y	
1125(1080)/60p	67.50	60.00	Y	Y	Y	Y			Y						Y	
1125(1080)/50i	28.13	50.00	Y	Y	Y	Y			Y	Y	Y	Y	Y		Y	
1125(1080)/50p	56.25	50.00	Y	Y	Y	Y			Y					Y	Y	
1125(1080)/30p	33.75	30.00	Y	Y	Y	Y			Y	Y					Y	
1125(1080)/25p	28.13	25.00	Y	Y	Y	Y			Y	Y					Y	
1125(1080)/24p	27.00	24.00	Y	Y	Y	Y			Y	Y			Y		Y	
1125(1080)/24sF	27.00	48.00	Y	Y	Y	Y				Y	Y				Y	
1250(1080)/50i	31.25	50.00	Y	Y	Y	Y									Y	
<b>RGB</b>																
640×400@70	31.46	70.07	Y	Y	Y	Y									Y	
640×480@60	31.47	59.94	Y	Y	Y	Y			Y			Y	Y		Y	
640×480@72	37.86	72.81	Y	Y	Y	Y									Y	
640×480@75	37.50	75.00	Y	Y	Y	Y									Y	
640×480@85	43.27	85.01	Y	Y	Y	Y									Y	
800×600@56	35.16	56.25	Y	Y	Y	Y									Y	
800×600@60	37.88	60.32	Y	Y	Y	Y			Y						Y	
800×600@72	48.08	72.19	Y	Y	Y	Y									Y	
800×600@75	46.88	75.00	Y	Y	Y	Y									Y	
800×600@85	53.67	85.06	Y	Y	Y	Y									Y	
852×480@60	31.47	59.94	Y	Y	Y	Y			Y						Y	
1024×768@50	39.55	50.00							Y							
1024×768@60	48.36	60.00	Y	Y	Y	Y			Y						Y	
1024×768@70	56.48	70.07	Y	Y	Y	Y									Y	
1024×768@75	60.02	75.03	Y	Y	Y	Y									Y	
1024×768@85	68.68	85.00	Y	Y	Y	Y									Y	
1066×600@60	37.88	60.32	Y	Y	Y	Y			Y						Y	
1152×864@60	53.70	60.00							Y							
1152×864@75	67.50	75.00	Y	Y	Y	Y									Y	
1280×960@60	60.00	60.00	Y	Y	Y	Y									Y	
1280×960@85	85.94	85.00	Y	Y	Y	Y									Y	
1280×1024@60	63.98	60.02	Y	Y	Y	Y			Y						Y	
1280×1024@75	79.98	75.03	Y	Y	Y	Y									Y	
1280×1024@85	91.15	85.02	Y	Y	Y	Y									Y	
1366×768@50	39.55	50.00							Y							
1366×768@60	48.36	60.00	Y	Y	Y	Y			Y						Y	
1400×1050@60	65.22	60.00							Y							
1600×1200@60	75.00	60.00	Y	Y	Y	Y			Y						Y	
1600×1200@65	81.25	65.00	Y	Y	Y	Y									Y	
1920×1080@60	67.50	60.00	Y	Y	Y	Y			Y						Y	
1920×1200@60	74.04	59.95							Y							
Mac13" (640×480)	35.00	66.67	Y	Y	Y	Y									Y	
Mac16" (832×624)	49.72	74.54	Y	Y	Y	Y									Y	
Mac21" (1152×870)	68.68	75.06	Y	Y	Y	Y									Y	

## 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

### Communication parameters

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 <sub>R</sub> /C <sub>R</sub> )
2	G (Y)
3	B (P <sub>B</sub> /C <sub>B</sub> )
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