



85-inch Full High Definition Plasma Display

TH-85VX200W

● Product specification (design and specification subject to change without notice)

■ DISPLAY PANEL

Screen Size(Diagonal)	85-inch (2,167 mm)
Aspect ratio	16:9
Effective Display Area(W x H)	1,889 x 1062 mm
Number of pixels (H x V)	1,920 x 1,080 pixels (1 pixel=3 cells for R, G and B)
Pixel pitch(H x V)	0.984 x 0.984 mm
Native contrast	5,000,000:1
Gradation	8,192 steps (equivalent)
Panel Life**	approx. 100,000 hours
Full HD 3D	Yes

*1: Guideline operating hours before the panel brightness is reduced to half when the panel is used to display motion pictures in the Standard mode. Afterimages (burned-in images) and malfunctions are not taken into consideration.

■ CONNECTION TERMINAL

COMPONENT/RGB IN	RCA x 3	Y/G : with sync 1.0 V [p-p] (75Ω) P _B /C _B /B, P _R /C _R /R : 0.7 V [p-p] (75Ω)
AUDIO IN (L/R)	RCA x 1 set	0.5 V [rms]
HDMI IN	HDMI TYPE A connector x 4	Ver. 1.4a (Compatible with Deep color)
PC IN	MINI D-SUB 15PIN x1(Female) Plug & Play (VESA DDC 2B)	Y/G : with sync 1.0 V [p-p] (75Ω) P _B /C _B /B, P _R /C _R /R : 0.7 V [p-p] (75Ω) HD/VD : 1.0~5.0 V [p-p] (high impedance)
AUDIO IN(L/R)	M3 Jack x 1	0.5 V [rms]
AUDIO LINE OUT(L/R)	RCA x 1 set	OUTPUT LEVEL : VARIABLE(∞ to 0 dB) [INPUT 1 KHz/0 dB, 10KΩLoad]
FUNCTION SLOT : SLOT 2.0	1 (Vacant)	

■ CONTROL TERMINAL

SERIAL	D-SUB 9PIN x 1 (EXTERNAL CONTROL TERMINAL), RS-232C COMPATIBLE
LAN	RJ45 10BASE-T / 100BASE-TX, compatible with PjLINK™
3D SHUTTER OUT	M3 Jack x 1 (for Optional 3D IR Transmitter)

■ ELECTRICAL

Power Requirements	200-240 V AC, 50Hz/60Hz
Power Consumption	1,200 W
On Mode Average Power Consumption*	739W
Power off condition	0.3W
Stand-by condition	0.5W

*Based on IEC 62087 Ed.2 measurement method.

■ MECHANICAL

Dimensions(W×H×D)	2,015 x 1,195 x 99 mm
Weight	approx. 117.0 kg
Carton Dimensions(WxHxD)	2,194 x 1,480 x 549 mm
Gross weight	approx. 146.0 kg
Cabinet Color	Black (Aluminum Hairline Finish)

■ ENVIRONMENTAL

Operating environment	Temperature : 0 °C to 40 °C
	Humidity : 20% to 80% (Non condensation)
	Altitude : 0 to 2,400 m
Storage environment	Temperature : -20°C to 60 °C
	Humidity : 20% to 90% (Non condensation)
	Altitude : 0 to 3,300 m

■ STANDARD (CERTIFICATIONS)

SAFETY REGULATIONS	UL60065 ,CAN/CSA-22.2No60065:03, SASO, IEC60065, EN60065, AS / NZS60065, IEC60065 / SS IEC60065 / PAI, GOST, NOM approval
RADIATION REGULATIONS	CISPR22 Class-B, EN55022 Class-B, EN55024, EN61000-3-2, EN61000-3-3

■ REMOTE CONTROL TRANSMITTER

Power Requirements	DC 3V (2 x AA Size batteries)
Operation distance	approx. 7m in front of plasma display
Weight	approx. 160 g (batteries included)

■ INCLUDED ACCESSORIES

- Operating instruction book - Remote control transmitter - Batteries - Fixing Band (2) - Clamper -3D Eyewear (TY-EW3D10)
-Screwdriver (for 3D Eyewear) - Eyebolt cap - Eyebolt - Allen wrench

MAIN FEATURE

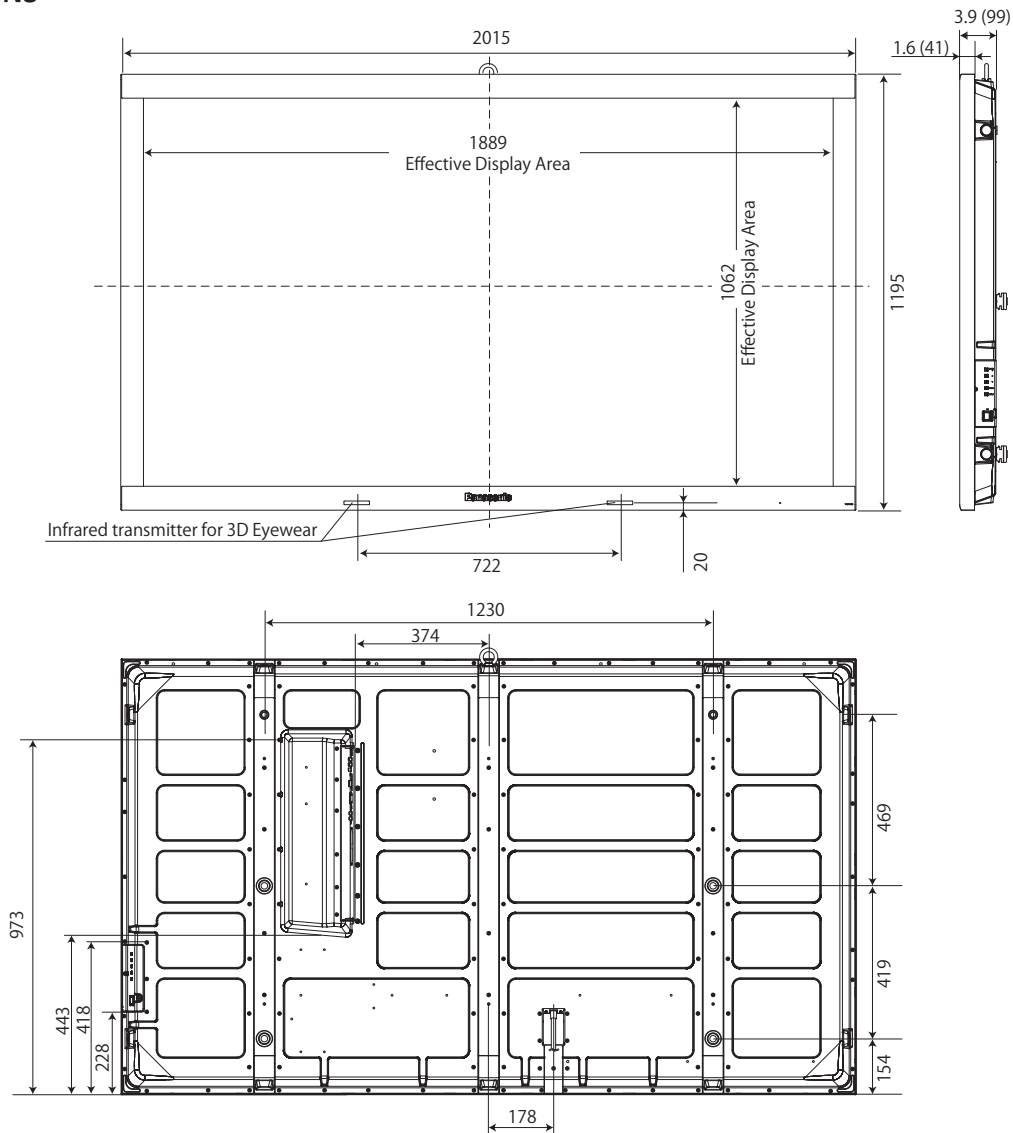
24p Smooth film	Yes
Color Gamut	Yes (DIGITAL CINEMA COLOR/HDTV/CUSTOM/NATIVE)
Network Function	Yes
Web Browser Control	Yes
EXT. SCALER Function	Yes
isf Mode	Day / Night
Picture Profiles	Yes (16 memories)
Blue Only Mode	Yes
1:1 Pixel Mode	Yes
Display Size Setting	Yes
Automatic Picture Positioning	Yes
Screen Savers	Negative Image, Overlay Scrolling Bar, Scrolling Bar only, White Screen,
NANODRIFT saver	Yes
Side Panel Adjustment	Yes
Peak Limit Mode	Yes
Power Save Mode	Yes
Auto Power Off	Yes
Customizing the On-Screen	Yes (3 different type)
Off Timer	Yes

OPTIONAL ACCESSORIES

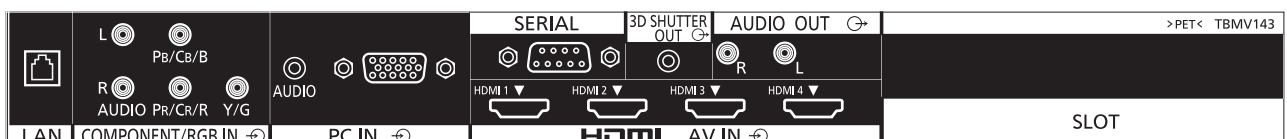
Pedestal	TY-ST85P12
Wall-hanging bracket	TY-WK85PV12
Floor stand	TY-ST85PF12
HD-SDI w/Audio Terminal Board	TY-FB10HD
Dual HD-SDI Terminal Board	TY-FB11DHD
BNC Dual Video Terminal Board	TY-FB9BD
DVI-D Terminal Board	TY-FB11DD
AV Terminal Box	TY-TB10AV
3D IR TRANSMITTER	TY-3DTRW
3D Eyewear	TY-EW3D10 TY-EW3D2S TY-EW3D2M TY-EW3D2L

DIMENSIONS

Cautions: This drawing is not a scale
Units : mm



CONNECTION TERMINAL



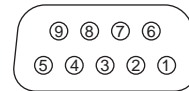
● Preset Input Signals for 2D Input

	horizontal frequency (kHz)	vertical frequency (Hz)	Fixed Terminal			Optional Board				
			Component Video	HDMI	PC IN (D-sub 15-pin)	BNC Dual Video (TY-FB9BD)	DVI-D (TY-FB11DD)	HD-SDI with Audio (TY-FB10HD)	Dual Link HD-SDI (TY-FB11DHD)	HD-SDI (TY-FB11DHD)
NTSC	15.73	59.94				Y				
PAL	15.63	50.00				Y				
PAL60	15.73	59.94				Y				
SECAM	15.63	50.00				Y				
Modified NTSC	15.73	59.94				Y				
525(480)/60i	15.73	59.94	Y	Y	Y			Y		
525(480)/60p	31.47	59.94	Y	Y	Y*1		Y			
625(575)/50i	15.63	50.00	Y		Y			Y		
625(576)/50i	15.63	50.00		Y				Y		
625(575)/50p	31.25	50.00	Y		Y					
625(576)/50p	31.25	50.00		Y			Y			
750(720)/60p	45.00	60.00	Y	Y	Y		Y	Y		Y
750(720)/50p	37.50	50.00	Y	Y	Y		Y	Y		Y
1125(1080)/60i	33.75	60.00	Y*2	Y	Y*2		Y	Y	Y	Y
1125(1080)/60p	67.50	60.00	Y*2	Y	Y*2		Y	Y	Y	Y
1125(1080)/50i	28.13	50.00	Y*2	Y	Y*2		Y	Y	Y	Y
1125(1080)/50p	56.25	50.00	Y*2	Y	Y*2		Y	Y	Y	Y
1125(1080)/30p	33.75	30.00	Y*2		Y*2		Y	Y	Y	Y
1125(1080)/25p	28.13	25.00	Y*2		Y*2		Y	Y	Y	Y
1125(1080)/24p	27.00	24.00	Y*2	Y	Y*2		Y	Y	Y	Y
1125(1080)/24sF	27.00	48.00	Y*3		Y*3		Y	Y	Y	Y
1250(1080)/50i	31.25	50.00	Y*4		Y*4					
2048x1080/24P	27.00	24.00							Y*5	
2048x1080/24 s F	27.00	48.00							Y*5	
640x400@70Hz	31.46	70.07	Y		Y					
640x480@60Hz	31.47	59.94	Y*6	Y	Y		Y			
640x480@72Hz	37.86	72.81	Y		Y					
640x480@75Hz	37.50	75.00	Y		Y					
640x480@85Hz	43.27	85.01	Y		Y					
800x600@56Hz	35.16	56.25	Y		Y					
800x600@60Hz	37.88	60.32	Y	Y	Y		Y			
800x600@72Hz	48.08	72.19	Y		Y					
800x600@75Hz	46.88	75.00	Y		Y					
800x600@85Hz	53.67	85.06	Y		Y					
852x480@60Hz	31.47	59.94	Y*6		Y		Y			
1024x768@50Hz	39.55	50.00					Y			
1024x768@60Hz	48.36	60.00	Y	Y	Y		Y			
1024x768@70Hz	56.48	70.07	Y		Y					
1024x768@75Hz	60.02	75.03	Y		Y					
1024x768@85Hz	68.68	85.00	Y		Y					
1066x600@60Hz	37.64	59.94	Y		Y		Y			
1152x864@60Hz	53.70	60.00					Y			
1152x864@75Hz	67.50	75.00	Y		Y					
1280x768@60Hz	47.70	60.00	Y		Y					
1280x960@60Hz	60.00	60.00	Y		Y					
1280x960@85Hz	85.94	85.00	Y		Y					
1280x1024@60Hz	63.98	60.02	Y	Y	Y		Y			
1280x1024@75Hz	79.98	75.03	Y		Y					
1280x1024@85Hz	91.15	85.02	Y		Y					
1366x768@50Hz	39.55	50.00					Y			
1366x768@60Hz	48.36	60.00	Y		Y		Y			
1400x1050@60Hz	65.22	60.00					Y			
1600x1200@60Hz	75.00	60.00	Y		Y		Y			
1600x1200@65Hz	81.25	65.00	Y		Y					
1920x1080@60Hz	67.50	60.00	Y*7		Y*7		Y*7			
1920x1200@60Hz	74.04	59.95					Y			
Mac13" (640x480)	35.00	66.67	Y		Y					
Mac16" (832x624)	49.72	74.54	Y		Y					
Mac21" (1152x870)	68.68	75.06	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 60 Hz format signal, it is recognized as 525p signal. *7:Recognized as 1,125(1,080)/60p signal. Note: Signals without above specification may not be displayed properly.

● Pin assignments and signal names

■ Serial RS232C : D-sub 9-Pin (Male)

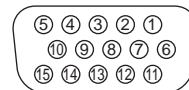


No.	Descriptions
2	Receive Data
3	Transmit Data
5	Ground
4 • 6	Not used
7	Short Circuit
8	
1 • 9	NC

Communication parameters

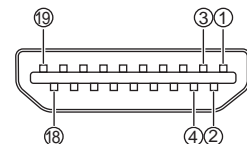
Signal level	RS-232C compliant
Synchronization method	Asynchronous
Baud rate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
Flow control	-

■ PC Input : D-Sub 15-Pin (Female)



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

■ HDMI Terminal



No.	Signal name	No.	Signal name
1	T.M.D.S. data 2+	11	T.M.D.S. clock shield
2	T.M.D.S. data 2 shield	12	T.M.D.S. clock-
3	T.M.D.S. data 2-	13	CEC
4	T.M.D.S. data 1+	14	Reserved (N.C. on device)
5	T.M.D.S. data 1 shield		
6	T.M.D.S. data 1-	15	SCL
7	T.M.D.S. data 0+	16	SDA
8	T.M.D.S. data 0 shield	17	DDC/CEC Ground
9	T.M.D.S. data 0-	18	+5 V DC
10	T.M.D.S. clock+	19	Hot Plug Detect

● Preset Input Signals for 3D Input

3D Format	horizontal frequency (kHz)	vertical frequency (Hz)	Fixed Terminal			Optional Terminal Board			
			Component Video	HDMI	PC IN (D-sub 15-pin)	DVI-D (TY-FB11DD)	HD-SDI with Audio (TY-FB10HD)	Dual Link HD-SDI (TY-FB11DHD)	
			Side By Side Top and Bottom	Frame Sequential	Side By Side Top and Bottom	Side By Side Top and Bottom	Side By Side Top and Bottom	Side By Side Top and Bottom	Side By Side Top and Bottom
525(480)/60i	15.73	59.94	Y	Y	Y ^{*3}	Y		Y	
525(480)/60p	31.47	59.94	Y	Y	Y ^{*3}	Y ^{*1}	Y		
625(575)/50i	15.63	50.00	Y	Y	Y ^{*3}	Y		Y	
625(576)/50i	15.63	50.00		Y	Y ^{*3}				
625(575)/50p	31.25	50.00	Y			Y			
625(576)/50p	31.25	50.00		Y	Y ^{*3}		Y		
750(720)/60p	45.00	60.00	Y	Y	Y ^{*3}	Y	Y	Y	Y
750(720)/50p	37.50	50.00	Y	Y	Y ^{*3}	Y	Y	Y	Y
1125(1080)/60i	33.75	60.00	Y ^{*2}	Y	Y	Y ^{*2}	Y	Y	Y
1125(1080)/60p	67.50	60.00	Y ^{*2}		Y	Y ^{*2}	Y	Y	Y
1125(1080)/50i	28.13	50.00	Y ^{*2}	Y	Y	Y ^{*2}	Y	Y	Y
1125(1080)/50p	56.25	50.00	Y ^{*2}		Y	Y ^{*2}	Y		Y
1125(1080)/30p	33.75	30.00	Y ^{*2}			Y ^{*2}	Y	Y	Y
1125(1080)/25p	28.13	25.00	Y ^{*2}			Y ^{*2}	Y	Y	Y
1125(1080)/24p	27.00	24.00	Y ^{*2}	Y	Y	Y ^{*2}	Y	Y	Y
640×480@60Hz	31.47	59.94			Y	Y	Y		
852×480@60Hz	31.47	59.94					Y		
1024×768@60Hz	48.36	60.00					Y		
1152×864@60Hz	53.70	60.00					Y		
1280×768@60Hz	47.70	60.00					Y		
1280×1024@60Hz	63.98	60.02					Y		
1400×1050@60Hz	65.22	60.00					Y		
1600×1200@60Hz	75.00	60.00					Y		
1920×1200@60Hz	74.04	59.95					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:Compatible with Side-by-Side Full and Side-by-Side Half, the others are compatible with only Side-by-Side Half.

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