



65-inch Interactive Plasma Display

TH-65PB2E

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

■ DISPLAY

Screen Size (Diagonal)	65-inch (1,645 mm)
Aspect Ratio	16:9
Effective Display Area (WxH)	1434 x 806 mm
Number of pixels (HxV)	1920 x 1080 pixels
Pixel Pitch (HxV)	0.747 x 0.747 mm
Contrast Ratio*1	5,000,000:1
Gradation	6,144 steps (equivalent)
Panel Life*2	approx. 100,000 hours
Touch Technology	Plasma light detection system
IR Reduction Filter	Yes

*1: The dark-room contrast ratio of the panel unit that can be displayed simultaneously on the same screen. Measured in "Dynamic" picture mode using a white signal in a 4% window.

*2: 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

VIDEO IN	BNC x 1	1.0 V [p-p] (75 Ω)
AUDIO IN (L/R)	M3 jack x 1 set (Shared with COMPONENT/RGB IN)	0.5 V [rms]
COMPONENT/RGB IN	BNC x 3	Y/G : with sync 1.0 V [p-p] (75 Ω) B/Pb/Cb, R/Pr/Cr : 0.7 V [p-p] (75 Ω)
AUDIO IN (L/R)	M3 jack x 1 set (Shared with VIDEO)	0.5 V [rms]
HDMI IN	HDMI TYPE A connector x 1	
DVI-D IN	DVI-D 24pin x 1	Compliance with DVI Revision 1.0 Compatible with HDCP 1.1
AUDIO IN (L/R)	M3 jack x 1 (Shared with PC IN)	0.5 V [rms]
PC IN	MINI D-sub 15pin x 1 (Female)	Y/G : with sync 1.0 V [p-p] (75 Ω) without sync 0.7 V [p-p] (75 Ω) B/Pb/Cb, R/Pr/Cr : 0.7 V [p-p] (75 Ω) HD/VD : 1.0~5.0 V [p-p] (high impedance)
	Plug & Play (VESA DDC 2B)	0.5 V [rms]
AUDIO IN (L/R)	M3 jack x 1 (Shared with DVI-D IN)	
Wireless I/F	Wireless Module(ET-WM200E) x1	
Electronic Pen Adaptor	Electronic Pen Adaptor x 1*3	
External Memory/Charge	USB Memory*3 / Electronic Charging x 1	
Charge	Electronic Pen Charging x 1	
Function Slot:SLOT 2.0	1 (Vacant)	
External Speaker	8Ω, 20 W [10 W + 10 W] (10%THD)	

*3: Only effective when using Easy whiteboard function.

■ CONTROL TERMINAL

LAN	RJ45 10 BASE-T/100 BASE-TX, Compatible with PLink
SERIAL	D-sub 9pin x 1 (EXTERNAL CONTROL TERMINAL), RS-232C Compatible

■ ELECTRICAL

Power Requirements	220-240 V AC, 50 Hz/60 Hz
Power Consumption	515 W
On Mode Average Power Consumption*4	approx. 280 W
Power off condition	approx. 0.3 W
Stand-by condition	approx. 0.5 W

*4: Based on IEC 62087 Ed.2 measurement method.

■ MECHANICAL

Dimensions (W x H x D)	1,554 x 925 x 99 mm
Carton Dimensions (W x H x D)	1,700 x 1,032 x 400 mm
Weight	approx. 58 kg
Gross weight	approx. 71 kg
Cabinet Color	Black

■ SOUND

Audio Output	20 W [10 W + 10 W] (10 % THD)
Speakers	120 mm x 40 mm x 2 pcs

■ ENVIRONMENTAL

Operating environment	Temperature	: 0 °C to 40 °C
	Humidity	: 20 % to 80 % (Non condensation)
	Altitude	: 0 to 2,800 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	EN60065, IEC60065, GOST
RADIATION REGULATIONS	EN55022 Class-B, EN55024, EN61000-3-2, EN61000-3-3

■ REMOTE CONTROL TRANSMITTER

Power Requirements	DC 3 V (2 x R6 Size batteries)
Operation distance	approx. 7 m in front of display
Weight	approx. 100 g including batteries

ELECTRONIC PEN

Transmission system	2.4 GHz radio transmission
Battery	Rechargeable Li-ion Polymer Battery
External Dimensions (L x H)	201.2 x 21.3 mm (239.2 x 25.4 mm with optical attachment)
Weight	approx. 43 g (approx. 55 g with optical attachment)
Operation time	approx. 5 h
Charging time	approx. 4 h
Charging method	Inductive coupling type
Operable distance of remote pointer	In front: 5 m , At an angle of 45° : 3 m

MAIN FEATURE

Easy Whiteboard Function	Yes
Dual picture	Yes (Picture-in-Picture / Picture-in-Whiteboard)
Remote Pointer Function	Yes
Wireless connections	Yes*
Digital Zoom	Yes
1 : 1Pixel Mode	Yes
Display size setting	Yes
Auto Set Up	Yes
Picture profile (Memory save)	Yes
NANO DRIFT Mode	Yes (Smooth / Pixel)
Power Save	Yes
Stand By Save	Yes
Power Management (PC/DVI)	Yes
No Signal Power Off	Yes
Studio Mode (W/B, Gain)	Yes
Initial INPUT/VOL Level	Yes
Maximum VOL level	Yes
Eco Mode	Yes
Brightness Sensor	Yes

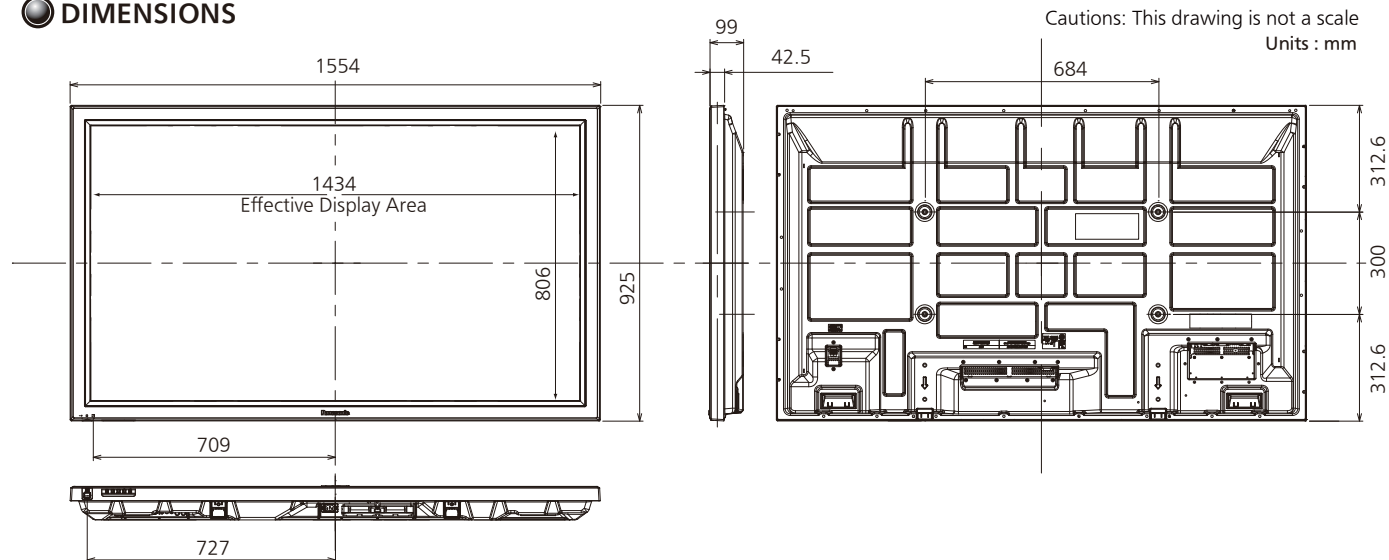
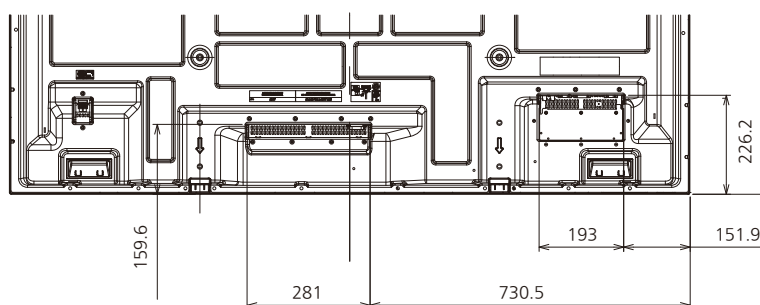
*Panasonic Wireless Module (ET-WM200E), sold separately, is required.

INCLUDED ACCESSORIES

- Operating instruction book - Software CD-ROM x 1
- Remote control transmitter - Batteries - Clamper x 1 - AC power cord
- Electronic Pen set
Electronic Pen x 1, Electronic Pen Adaptor x 1, Pen Tip x 1, Eraser Tip x 1,
Optical attachment x 1, Charger x 1, Stand x 1, Mounting bracket x 1,
Clamper x 1, Recharger Cable x 1, Cable x 2, Screw x 2

OPTIONAL ACCESSORIES

Pedestal	TY-ST65P20
Wall-hanging bracket (vertical / angled)	TY-WK65PR20
Mobile stand (Black)	TY-ST65PB2
Electronic Pen	TY-TPEN2
Electronic Pen Adapter	TY-TAD20
Charger (For Electronic Pen)	TY-TCG20
Wireless Module	ET-WM200E
Easy Wireless Stick	ET-UW100
Touch Panel	TY-TP65P30K
BNC Dual Video Terminal Board	TY-FB9BD
DVI-D Terminal Board	TY-FB11DD
Dual HDMI Terminal Board	TY-FB10HMD
HD-SDI Terminal Board	TY-FB9HD
HD-SDI with Audio Terminal Board	TY-FB10HD
Dual link HD-SDI Terminal Board	TY-FB11DHD

DIMENSIONS**TERMINAL DIMENSIONS****CONNECTION TERMINAL**

AV IN	AUDIO 1 IN	PEN ADAPTER	MEMORY / (CHARGE)	CHARGE	AUDIO 2 IN	SERIAL
VIDEO	Y/G					
Pr/Cr/R	Pb/Cb/B					
COMPONENT / RGB IN	PC IN	DVI-D IN	HDMI	AV IN	WIRELESS MODULE	LAN

● Applicable Input Signals

* Mark: Applicable input signal

	Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)	COMPONENT / RGB IN / PC IN (Dot clock (MHz))	DVI-D IN (Dot clock (MHz))	HDMI
1	525 (480) / 60i	15.73	59.94	* (13.5)	* (27.0)	*
2	525 (480) / 60p	31.47	59.94	* (27.0) *5	* (27.0)	*
3	625 (575) / 50i	15.63	50.00	* (13.5)		
4	625 (576) / 50i	15.63	50.00		* (27.0)	*
5	625 (575) / 50p	31.25	50.00	* (27.0)		
6	625 (576) / 50p	31.25	50.00		* (27.0)	*
7	750 (720) / 60p	45.00	60.00	* (74.25)	* (74.25)	*
8	750 (720) / 50p	37.50	50.00	* (74.25)	* (74.25)	*
9	1,125 (1,080) / 60p	67.50	60.00	* (148.5) *1	* (148.5)	*
10	1,125 (1,080) / 60i	33.75	60.00	* (74.25) *1	* (74.25)	*
11	1,125 (1,080) / 50p	56.26	50.00	* (148.5) *1	* (148.5)	*
12	1,125 (1,080) / 50i	28.13	50.00	* (74.25) *1	* (74.25)	*
13	1,125 (1,080) / 24sF	27.00	48.00	* (74.25) *2		
14	1,125 (1,080) / 30p	33.75	30.00	* (74.25) *1	* (74.25)	
15	1,125 (1,080) / 25p	28.13	25.00	* (74.25) *1	* (74.25)	
16	1,125 (1,080) / 24p	27.00	24.00	* (74.25) *1	* (74.25)	*
17	1,250 (1,080) / 50i	31.25	50.00	* (74.25) *3		
18	2,048 × 1,080 / 24sF *7	27.00	48.00			
19	2,048 × 1,080 / 24p *7	27.00	24.00			
20	640 × 400 @70 Hz	31.46	70.07	* (25.17)		
21	640 × 480 @60 Hz	31.47	59.94	* (25.18) *6	* (25.18)	*
22	640 × 480 @72 Hz	37.86	72.81	* (31.5)		
23	640 × 480 @75 Hz	37.50	75.00	* (31.5)		
24	640 × 480 @85 Hz	43.27	85.01	* (36.0)		
25	800 × 600 @56 Hz	35.16	56.25	* (36.0)		
26	800 × 600 @60 Hz	37.88	60.32	* (40.0)	* (40.0)	*
27	800 × 600 @72 Hz	48.08	72.19	* (50.0)		
28	800 × 600 @75 Hz	46.88	75.00	* (49.5)		
29	800 × 600 @85 Hz	53.67	85.06	* (56.25)		
30	852 × 480 @60 Hz	31.47	59.94	* (33.54) *6	* (34.24)	*
31	1,024 × 768 @50 Hz	39.55	50.00		* (51.89)	*
32	1,024 × 768 @60 Hz	48.36	60.00	* (65.0)	* (65.0)	*
33	1,024 × 768 @70 Hz	56.48	70.07	* (75.0)		
34	1,024 × 768 @75 Hz	60.02	75.03	* (78.75)		
35	1,024 × 768 @85 Hz	68.68	85.00	* (94.5)		
36	1,066 × 600 @60 Hz	37.64	59.94	* (53.0)	* (53.0)	*
37	1,152 × 864 @60 Hz	53.70	60.00		* (81.62)	*
38	1,152 × 864 @75 Hz	67.50	75.00	* (108.0)		
39	1,280 × 768 @60 Hz	47.70	60.00	* (80.14)		
40	1,280 × 960 @60 Hz	60.00	60.00	* (108.0)		
41	1,280 × 960 @85 Hz	85.94	85.00	* (148.5)		
42	1,280 × 1,024 @60 Hz	63.98	60.02	* (108.0)	* (108.0)	*
43	1,280 × 1,024 @75 Hz	79.98	75.03	* (135.0)		
44	1,280 × 1,024 @85 Hz	91.15	85.02	* (157.5)		
45	1,366 × 768 @50 Hz	39.55	50.00		* (69.92)	*
46	1,366 × 768 @60 Hz	48.36	60.00	* (86.71)	* (87.44)	*
47	1,400 × 1,050 @60 Hz	65.22	60.00		* (122.61)	*
48	1,600 × 1,200 @60 Hz	75.00	60.00	* (162.0)	* (162.0)	*
49	1,600 × 1,200 @65 Hz	81.25	65.00	* (175.5)		
50	1,920 × 1,080 @60 Hz	67.50	60.00	* (148.5) *4	* (148.5)	*
51	1,920 × 1,200 @60 Hz	74.04	59.95		* (154.0)	*
52	Macintosh13" (640 × 480)	35.00	66.67	* (30.24)		
53	Macintosh16" (832 × 624)	49.72	74.54	* (57.28)		
54	Macintosh21" (1,152 × 870)	68.68	75.06	* (100.0)		

* 1: Based on SMPTE 274M standard.

* 2: Based on SMPTE RP211 standard.

* 3: Based on SMPTE 295M standard.

* 4: The input signal is recognized as 1,125 (1,080) / 60p.

* 5: When selected the RGB format and 525p signal input to the PC IN terminal, it is recognized as VGA 60Hz signal.

* 6: When inputted VGA 60Hz format signal from the other than PC IN terminal, it is recognized as 525p signal.

* 7: Based on SMPTE 292M and 372M standards. These signals can be received when the Dual Link HD-SDI Terminal Board (TY-FB11DHD) is installed.

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