Specification

Model		TH-50BT300ER	TH-42BT300ER
Display	Screen Size	50-inch (1,268 mm)	42-inch (1,057 mm)
	Aspect Ratio	16:9	16:9
	Effective Display Area (W x H)	1,105 x 622 mm	921 x 518 mm
	Resolution (H x V)	1,920 x 1,080 pixels	1,920 x 1,080 pixels
	Pixel Pitch (H x V)	0.576 x 0.576 mm	0.480 x 0.480 mm
	Contrast Ratio*1	5,000,000:1	5,000,000:1
	Gradation	12,288 steps (equivalent)	12,288 steps (equivalent)
	Full HD Moving Picture Resolution Speed	1,200 pixel per second	1,200 pixel per second
	Moving Picture Resolution	1,080 lines	1,080 lines
	Panel Life*2	Approx. 100,000 hours	Approx. 100,000 hours
	FULL HD 3D*3	FULL HD 3D Ready	FULL HD 3D Ready
Connection Terminal	VIDEO IN/AUDIO IN (L/R)	BNC x 1/RCA pin Jack x 1 set	BNC x 1/RCA pin Jack x 1 set
	COMPONENT/RGB IN/AUDIO IN (L/R)	BNC x 3/RCA pin Jack x 1 set	BNC x 3/RCA pin Jack x 1 set
	HDMI IN	HDMI TYPE A x 1	HDMI TYPE A x 1
	DVI-D IN/AUDIO IN (L/R)	DVI-D 24-pin x 1/M3 Jack x 1 (Common terminal with PC IN)	DVI-D 24-pin x 1/M3 Jack x 1 (Common terminal with PC IN)
	PC IN/AUDIO IN (L/R)	D-Sub 15-pin x 1/M3 Jack x 1 (Common terminal with DVI-D IN)	D-Sub 15-pin x 1 /M3 Jack x 1 (Common terminal with DVI-D IN)
Control Terminal	LAN	RJ45 10BASE-T/100BASE-TX, Compatible with PJLink™	RJ45 10BASE-T/100BASE-TX, Compatible with PJLink™
	Serial	D-Sub 9-pin x 1 (EXTERNAL CONTROL TERMINAL), RS-232C Compatible	D-Sub 9-pin x 1 (EXTERNAL CONTROL TERMINAL), RS-232C Compatible
	3D Shutter Out	M3 Jack x 1 (For 3D IR Transmitter)	M3 Jack x 1 (For 3D IR Transmitter)
	DC 8V Out for 3D IR Transmitter	Centre Plus for EIAJ 4 mm Plug	Centre Plus for EIAJ 4 mm Plug
Function Slot	SLOT2.0	Yes	Yes
Electrical	Power Requirements	220-240 V AC, 50/60 Hz	220-240 V AC, 50/60 Hz
	Power Consumption	390 W	305 W
	On Mode Average Power Consumption*4	Approx. 200 W	Approx. 165 W
	Power off Condition	0.3 W	0.3 W
	Stand-by Condition	Save ON 0.5 W, Save OFF 0.8 W	Save ON 0.5 W, Save OFF 0.8 W
Sound	Speaker Out	6 Ω, 16 W [8 W + 8 W] (10 % THD)	6 Ω, 16 W [8 W + 8 W] (10 % THD)
Mechanical	Dimensions (W x H x D)	1,210 x 724 x 89 mm	1,020 x 610 x 89 mm
	Weight (Approx.)	34 kg	26 kg
	Cabinet Colour	Black	Black
Operating Environment	Temperature	0 to 40 °C	0 to 40 °C
	Humidity (Non Condensation)	20 % to 80 %	20 % to 80 %
	Altitude	0 to 2,800 m	0 to 2,800 m

*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. *3: An optional 3D IR Transmitter and 3D Eyewear are required for viewing 3D images. *4: Based on IEC 62087 Ed.2 measurement method.

Options

3D-compatible Dual HD-SDI Terminal Board
TY-FB30DHD3D

Dual Link HD-SDI Terminal Board
TY-FB11DHD

Pedestal
TY-ST20-K

Mobile Stand
TY-TS58PF20

3D-compatible Dual DVI-D Terminal Board
TY-FB30DD3D

DVI-D Terminal Board
TY-FB11DD

Wall-hanging Bracket (Vertical)
TY-WK42PV20

Detachable Stereo Speakers
TY-SP50P8W-K
(for 50-inch)
TY-SP42P8W-K
(for 42-inch)

HD-SDI Terminal Board
TY-FB9HD

Dual HDMI Terminal Board
TY-FB10HMD

Wall-hanging Bracket (Angled)
TY-WK42PR20

AV Terminal Board
TY-TB10AV

HD-SDI Terminal Board with Audio
TY-FB10HD

BNC Dual Video Terminal Board
TY-FB9BD

Ceiling-hanging Bracket
TY-CE42PS20

3D IR Transmitter
TY-3D30TRW

• Various terminal boards and 3D Eyewear are also available.

Panasonic
ideas for life

2D/3D Broadcast and Post-production Reference Monitors
with faithful colour reproduction, expression and image quality
for demanding image production workflows.

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FULL HD   3D FULL HD   neo plasma   PJLink™   SLOT 2.0   NANODRIFT

2D/3D Broadcast and Post-production Monitors that Support a Wide Range of Applications, from Post-Production to Cinema CG

The TH-50BT300ER and TH-42BT300ER offer the faithful colours, excellent moving picture resolution and wide-angle viewing that come from the self illuminating plasma displays. The BT300 Series further enhance tonal expression by doubling* dark gradation over conventional models and include.
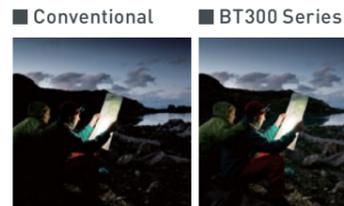
* Compared with the PF20 Series

High-Quality Moving Picture Display Performance — Optimal for Post-Production Applications

Faithful Colour Reproduction with the High-Performance Professional-Grade Engine

The professional-grade engine features 10-bit processing with YUV 4:4:4 for each channel. By faithfully reproducing all of the colour and luminance signals output by image sources, it produces smooth, vibrant colours across the entire screen.

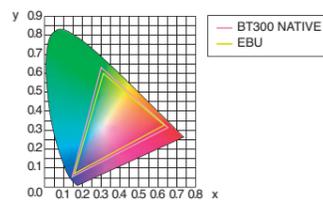### Bi-level Drive Technology* Smoothly Displays Dark Areas

Improving the luminous efficiency of the panel has achieved steady illumination even with a small electrical discharge. By reducing the minimum unit of brightness per flash by 1/2 compared to previous panels, this makes it possible to display finer gradation steps. Smoother tonal expression is gained in dark areas thanks to a total of 12,288 steps, twice the number of our conventional models (compared with the PF20 Series).

■ Conventional   ■ BT300 Series
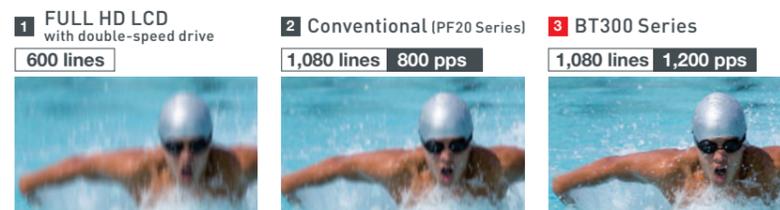
*Valid for Cinema mode and Monitor mode.

The Wide Colour Gamut Panel Reproduces Colours That Professional Applications Demand

The BT300 Series offers superb images with stunning colours for displaying materials in all their natural beauty. Six modes are provided, including the colour gamut modes for broadcasting and post-production use including (SMPTE-C/EBU/BT.709) and Digital Cinema Colour and Native. Custoum mode allows you to set the hue for each RGB colour while viewing a simplified chroma diagram.

— BT300 NATIVE
— EBU

Superb Moving Picture Resolution

The BT300 Series provides a motion-image performance that is 1.5 times*[1] that of conventional models. The Full-HD moving picture resolution speed index is 1,200 pps*[2] (1,080 lines of moving picture resolution*[3]). This treats viewers to steady, blur-free, fast-moving images such as in sports scenes and action films.

1 FULL HD LCD with double-speed drive	2 Conventional (PF20 Series)	3 BT300 Series
600 lines	1,080 lines 800 pps	1,080 lines 1,200 pps

*1: Comparing previous models (the PF20 Series) in the same-size.
*2: This is a new motion-image performance index that was announced by the Advanced PDP Display Development Centre Corporation (APDC) on January 27, 2011, as an advanced version of the conventional moving-picture resolution index. It expresses the ability to display motion images in Full-HD resolution based on the speed at which an image moves (the number of pixels that move per second).
*3: According to the method for measuring moving-picture resolution to indicate motion-image display performance that was developed by the Advanced PDP Development Centre Corporation (APDC). With Moving Picture Resolution turned ON.

Versatile Display Functions   Meet Professional Needs

Various Marker Functions

A variety of markers can be used when editing images. The BT300 Series has markers that can be used for both 16:9 and 4:3 modes. And multiple markers can be displayed simultaneously.

Aspect Marker

Confirm the angle of view with the 4:3, 13:9, 14:9, VISTA marker, and CNSCO marker.

Safe Area Marker (16 : 9/4 : 3)

Select the user area marker from 80 % to 100 % in 1 % increments. During 16:9 mode, you can also layer and display the 4:3 area marker.
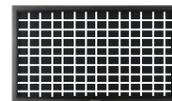
Centre Marker (16 : 9/4 : 3)

The centre marker can be displayed together with another marker. It can also be displayed together with the area marker.

Crosshatch Grid

Display a grid within the screen for easy horizontal and vertical alignment.

* Vertical lines are displayed as perceived on 3% of the screen width.

Gamma Settings

When used as a broadcast monitor, the standardised gamma characteristics can be reproduced. Select from γ1.0,* γ2.2, γ2.35, γ2.4, and γ2.6.

* When 2K1K signals are received with the Dual Link HD-SDI Terminal Board or Dual HD-SDI Terminal Board for 3D, Gamma 1.0 cannot be selected.

Colour Temperature Settings

Select from 9300K, D65, approx 6,100K, approx 5,600K, approx 3,200K (compatible with tungsten lighting for on-camera use), 11300K.

Wave Form Monitor

This function displays the waveform for the brightness and colour levels of input signals from other video devices, for easy monitoring.

■ Single Line Scan Mode   ■ Full Scan Mode

Scan Line

Displays the waveform for a signal that is input at any desired line (shown by the white line).

Displays the input signal waveforms for the entire screen.

HV Delay Display

This function delays the synchronisation signals for horizontal and vertical positioning to display the image blanking intervals.

H Delay
Displays the horizontal blanking interval.

V Delay
Displays the vertical blanking interval.

HV Delay
Displays both the horizontal and vertical blanking intervals.

* During component/RGB/PC [video format], SDI input signal.

Other Features

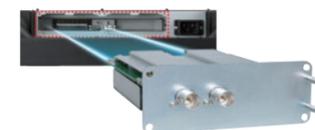|	
Blue-Only Mode	R/G/B Cut-off
Monochrome	LAN Control

SLOT2.0 Compatibility Enhances Expandability

The SLOT2.0 function slot greatly expands the display's range of applications. It also enables the addition of an optional HD-SDI or Dual Link HD-SDI function board.

Special Functions for Professional 3D Video Production

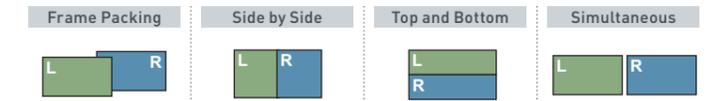### Clear 3D Images with Virtually No Double Images

Pursuit of even faster panel response in the BT300 Series plasma displays led to phosphor improvements and original lighting controls that deliver clear 3D images with virtually no double images (crosstalk).

Blurred 3D image

(Panel with ultra-high speed drive) Crisp 3D image

Four 3D Image Inputs Supported

The BT300 Series is compatible with Frame Packing, Simultaneous, Side-by-Side and Top-and-Bottom methods.

■ 3D Input Format

Frame Packing	Side by Side	Top and Bottom	Simultaneous
L R	L R	L / R	L R

New Function Boards Support Simultaneous 3D Image Input

SLOT 2.0

3D-Compatible Dual HD-SDI Terminal Board:
TY-FB30DHD3D
Provides easy interface to professional video 3D sources.

3D-Compatible Dual DVI-D Terminal Board:
TY-FB30DD3D
Allows for direct connection to workstations running 3D applications.

3D Image Production Supported by the 3D Viewing Mode

The 3D images are separated and displayed as right and left images.

■ 3D Viewing Mode

3D	Comparison	Left	Right
L R	Top and Bottom / Side by Side	Only the left image (L) is displayed.	Only the Right image (R) is displayed.