

# Panasonic

ideas for life

LCD Monitors Lineup Catalogue

BT-LH1800

BT-LH1500

BT-LH900

BT-LS1400



# Panasonic LCD Video Monitors Perfected

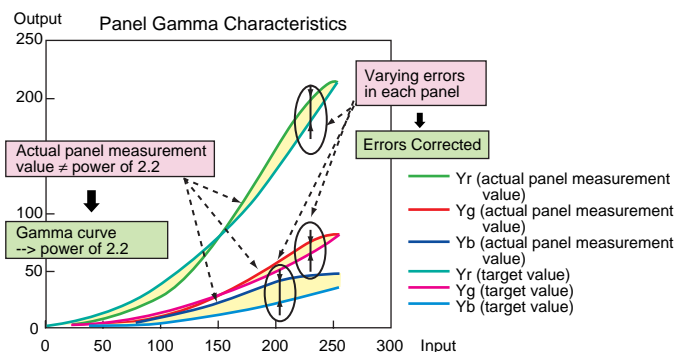
Panasonic's BT series new LCD monitors can meet the needs from professional market. Comprising three HD/SD models and one dedicated SD model, the BT series is designed for professionals. These models combine the thinprofile and light weight



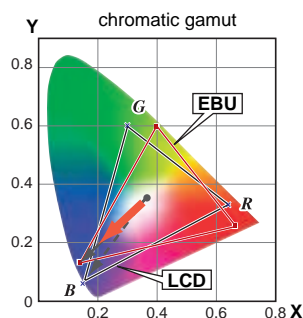
that distinguish LCD monitors with the superior picture quality and performance needed for broadcasting use. They are equipped to serve in a studio, OB van, non-linear editing system, or on location in the field.

## Broadcast-Quality Gradation: Each Monitor Individually Adjusted

Panasonic adjusts each BT series monitor individually for 256 gradation steps\* in its independent R, G, and B signals. This is your assurance that each monitor delivers broadcast-quality gradation, with standardized gamma characteristics of  $g = 2.2$ . The industry-standard D65 or D93 color temperatures can be selected to match colors and gradation when multiple monitors are used. \*BT-LS series monitors have 8 gradation steps.



## Color Gamut



Colors on CRT monitors appear different from those on LCD monitors due to slight differences in the monitors' chromatic ranges. BT-LH series models use a technology called color space conversion to produce the same EBU-based colors as a CRT.

### Formats Supported by the BT Series

⊙: Standard ○: Optional

Formats	BT-LH1800/1500	BT-LH900	BT-LS1400P(NTSC)	BT-LS1400E(PAL)
NTSC	⊙	⊙	⊙	
PAL	⊙	⊙		⊙
480/59.94i	○	⊙	⊙	
480/59.94p	○	⊙	⊙	
576/50i	○	⊙		⊙
720/60p, 59.94p	○	⊙		
1035/60i, 59.94i	○	⊙		
1080/50i	○	⊙		
1080/60i, 59.94i	○	⊙		
1080/30p, 29.97p		⊙		
1080/25p		⊙		
1080/24p, 23.98p		⊙		
1080/24psF, 23.98psF	○	⊙		

### Formats Supported by the Input Units of the BT-LH1800/1500

Formats	standard feature	Optional Input Units		
		Component BT-YA100P	SDI BT-YA200P	HD-SDI BT-YA320P
NTSC	⊙			
PAL	⊙			
480/59.94i		⊙	⊙	
480/59.94p		⊙		
576/50i		⊙	⊙	
720/60p, 59.94p		⊙		⊙
1035/60i, 59.94i		⊙		⊙
1080/50i		⊙		⊙
1080/60i, 59.94i		⊙		⊙
1080/24psF, 23.98psF		⊙*		⊙

\*Y/Pb/Pr Input Only

# for Broadcasting, Production Uses

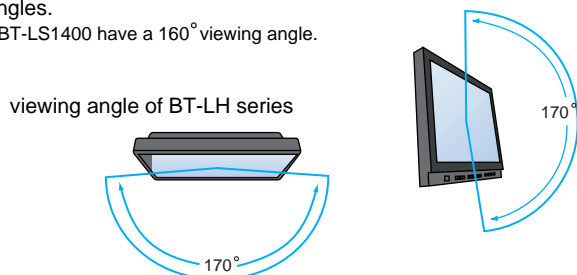
## HD/SD Multi-Format Compatibility

The BT-LH series supports both HD and SD formats. The BT-LH1800 and BT-LH1500 are equipped with composite and Y/C inputs, with optional inputs for component, SDI, and HD-SDI also available. The BT-LH900 is equipped with component, composite, and two SDI inputs.

## 170° Viewing Angle

High-brightness, high-contrast horizontal alignment (IPS) LCD panels give BT-LH monitors a best-in-the industry 170° viewing angle, both vertically and horizontally. This minimizes color variation and ensures sharp, easy-to-see images when the monitor is viewed from different angles.

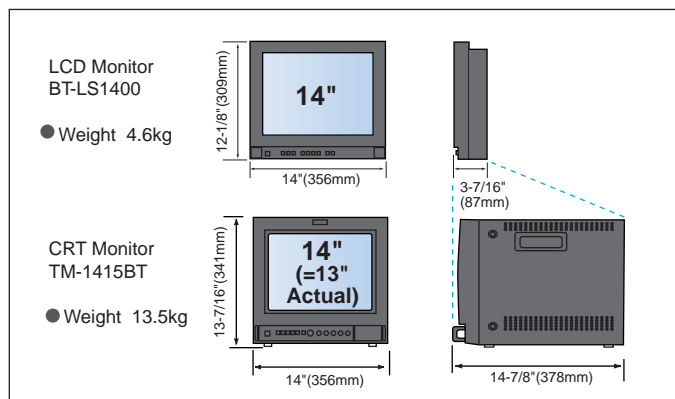
\*BT-LS1400 have a 160° viewing angle.



## Thin, Light and Compact – Easy Layout

A key advantage of these LCD monitors are their thin profile and light weight. BT series monitors can be rack-mounted in a studio or OB van, saving substantial space and reducing weight in mobile vehicles.

When a BT series monitor is used in a non-linear editing system or for other desktop use, VESA brackets and arm stands allow unrestricted layout. This makes it easy to find the optimum positioning and angle adjustment.



## Wide Range of Broadcast Functions

All models feature underscan, blue-only, and external remote (D-Sub 9-pin) functions. BT-LH models also feature an HV delay function.

## Magnetic Field Resistance, Minimal Electrostatic Generation

LCD video monitors are virtually unaffected by the earth's magnetic field or fields generated by speakers and other peripherals, so there are preventing color streaking. There's no need to take anti-magnetic measures when grouping several monitors. And because these monitors generate minimal static electricity, their screens remain virtually dust-free.

## Long-Life Backlight (approx. 50,000 hours)

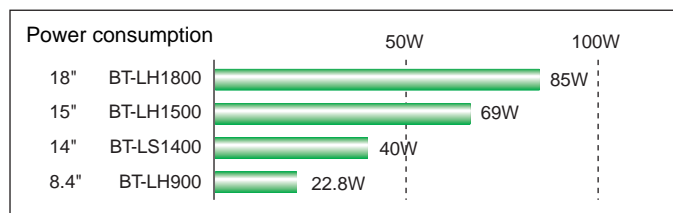
The monitors' LCD panel suffers virtually no performance degradation. The backlight has a service life of about 50,000 hours – or around 8.5 years when used 16 hours a day. You're assured many long years of bright viewing.

\*Actual service life varies with usage conditions.

\*The BT-LS1400 backlight has a service life of around 60,000 hours.

## Energy-Saving Design

These LCD monitors consume far less power than CRT monitors. They save electricity in other ways, too. For example, LCD monitors generate little heat, so less air conditioning is needed. These energy savings mean lower electric bills and less impact on the environment.



## Comparison of Professional Video Monitors

	LCDmonitor	CRTmonitor
Color reproduction, gradation	◎	◎
Weight*	1/3(4.6kg)	1(13kg)
Depth*	1/4(87mm)	1(378mm)
Volume*	1/2(9,570cm <sup>3</sup> )	1(45,888cm <sup>3</sup> )
Power consumption*	2/3 (40 W)	1(60 W)
Magnetic influence	◎ (No)	X (Yes)
Electrostatic generation	(No)	X (Yes)
Lifetime	◎	○

\*Comparing the BT-LS1400 and the Panasonic TM-1415BT 14" CRT monitor.

## The Panasonic Lineup

Application Range	Model	BT-LH1800	BT-LH1500	BT-LH900	BT-LS1400
HD/SD Multi-Format Monitor	HD/SD Studio	◎	◎	◎	
	HD/SD OB van	◎	◎	◎	
	HD/SD Location		◎	◎	
	HD Camera Viewer			◎ (VARICAM)	
SD Picture Monitor	SDTV Studio				◎
	SDTV OB van				◎
	Built-in to a VE table				◎
	Non-linear editing				◎
	Office Viewer				◎

All screen images are simulated.

# 18" Model with HD/SD Compatibility

**LH series**

HDTV	SDTV	HD-SDI *	SDI *	Component*
R G B *	16:9 4:3	Under-scan display	Blue-only	Rack mounting *

\*Optional

**BT-LH1800**

18" HD/SD Multi-Format LCD Monitor



## High-Performance LCD Monitors for Broadcasting and Professional Usage

Designed to meet exacting broadcasting and professional needs, Panasonic's new high-performance LCD monitors combine the industry's widest viewing angle ---170°, both vertically and horizontally --- with outstanding resolution, color reproduction, and gradation. Two sizes, 18" and 15", fit a variety of applications.

## Thin, Light, Compact

Compact in size and only 3 7/16"(86mm) deep (without option), these ultra-thin LCD monitors give you greater freedom in setup locations and methods. They're light in weight , a major advantage for ENG and EFP use.



rear view (BT-LH1500)

## HD/SD Multi-Format Input

Each monitor is equipped for NTSC or PAL input (composite x 2, Y/C x 1). Adding an optional plug-in board provides compatibility with HD SDI, SD SDI, and analog component/RGB input as well as giving you a single unit that handles virtually all HD/SD formats. (See specifications for format compatibility.)

## Rack and VESA Mounting

Optional brackets enable fast and easy EIA rack mounting. VESA brackets are also included for a variety of mounting configurations, such as commercially-available VESA wall mounting and arm stand use.

## Manual Controls

The BT-LH1800 and BT-LH1500 come with all the controls you need for production and broadcasting tasks. You can adjust contrast, brightness, phase, and chroma using manual controls. Because these and other controls are standardized from conventional broadcast monitors, operation is easy and intuitive.

## Remote

Each monitor is equipped with a GPI remote terminal for versatile remote control over a variety of functions.

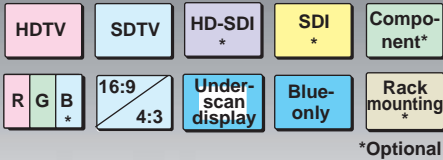
- Equipped with marker and blue-only functions

front control panel



# 15" Model with HD/SD Compatibility

**LH series**



\*Optional

**BT-LH1500**

15" HD/SD Multi-Format LCD Monitor



## OPTIONAL ACCESSORIES



**BT-YA100P**  
Component Input Unit

Input Video Signal: 1080/60i, 1035/60i, 1080/59.94i, 1035/59.94i, 1080/50i, 720/60p, 720/59.94p, 576/50i, 480/59.94p, 480/59.94i

RGB Input: BNC x 3, 0.7Vp-p, 75 Ω through out: BNC x 3

External Sync: BNC x 1, 0.3V/4V, 75 Ω through out: BNC x 1

Input Video Signal: 1080/60i, 1035/60i, 1080/59.94i, 1035/59.94i, 1080/50i, 1080/24psF, 1080/23.98psF, 720/60p, 720/59.94p, 576/50i, 480/59.94p, 480/59.94i

YPBPR Input: BNC x 3, 0.7Vp-p, 75 Ω through out: BNC x 3  
Y: 1.0Vp-p(with Sync), Pb/Pr: 0.7Vp-p

Dimensions: 109 x 168 x 25 mm  
(W x H x D) (4-5/16" x 6-5/8" x 1")

Weight: 330 g (0.73 lbs)



**BT-YA200P**  
SDI Input Unit

Input Video Signal: 480/59.94i, 576/50i (component serial digital)

SD-SDI Input: BNC x 1, 75 Ω 0.8Vp-p

SD-SDI Output: BNC x 1 (active through out)

Dimensions: 109 x 168 x 25 mm  
(W x H x D) (4-5/16" x 6-5/8" x 1")

Weight: 260 g (0.58 lbs)



**BT-YA320P**  
HD SDI Input Unit

Inout Video Signal: 1080/60i, 1035/60i, 1080/59.94i, 1035/59.94i, 1080/50i, 720/60p, 720/59.94p, 1080/24psF, 1080/23.98psF

HD-SDI Input: BNC x 2, 75 Ω 0.8Vp-p

HD-SDI Output: BNC x 1 (switched out)

Dimensions: 109 x 168 x 25 mm  
(W x H x D) (4-5/16" x 6-5/8" x 1")

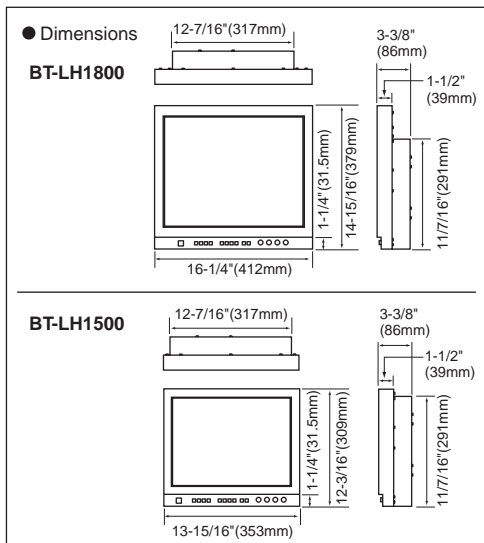
Weight: 300 g (0.66 lbs)



**BT-MA1800P**  
Rack Mount Adaptor  
for BT-LH1800



**BT-MA1500P**  
Rack Mount Adaptor  
for BT-LH1500



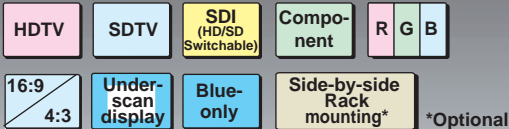
## SPECIFICATIONS

	BT-LH1800	BT-LH1500
Power Requirements:	AC100V- 240V, 50Hz/60Hz	
Power Consumption:	0.95A - 0.40A	0.66A - 0.31A
Dimensions (W x H x D):	16-1/4" x 14-15/16" x 3-3/8" (412 x 379 x 86* mm)	13-15/16" x 12-3/16" x 3-3/8" (353 x 309 x 86* mm)
	*110 mm (4-3/8") depth with a optional Input board	
Weight:	8.3 kg (18.3 lbs)	6.3 kg (13.9 lbs)
Operating Temperature:	5°C - 35°C (41 F - 95 F)	
Operating Humidity:	20% - 80% (non dew)	
Input Video Signal:	NTSC (3.58MHz), PAL (4.43MHz)	
	Line In: BNC x 2, composite, 1.0Vp-p, 75 Ω through out: BNC x 2	
	S-Video: 4-pin x 1, 75 Ω /through out: 4-pin x 1	
Color Temperature:	D65/D93/user	
Viewing Angle:	170 °	
Resolution:	H(max) 1280 dots, V(max) 1024 lines	H(max) 1024 dots, V(max) 768 lines
Aspect Ratio:	5:4	4:3
Display Color:	approx. 16,770,000	approx. 16,770,000
Optional Input Slot:	1 slot	
Remote Terminal:	GPI, D-SUB9	
Accessory:	Power cord, Vesa adaptor	

Weight and dimensions shown are approximate. Specifications are subject to change without notice.

# Compact 8.4" Model with HD/SD Compatibility

## LH series



## BT-LH900

8.4" HD/SD Multi-Format LCD Monitor



### Thin, Lightweight and Energy Efficient, Plus DC Operation

With its slim 2.5" (65mm) profile and light 4.4lbs (2.0kg) weight, the HD-compatible BT-LH900 provides the full advantage of the LCD panel's space-saving design. It saves energy too, consuming far less power than a conventional CRT HD monitor. And its DC operation makes the BT-LH900 ideal for outdoor locations.

### HD/SD Compatibility

The BT-LH900 is equipped with two SDI inputs (auto HD/SD IN, switched OUT), one component input (Y/Pb/Pr or RGBS) and one composite input.

### 170° Viewing Angle

A high-brightness, high-contrast LCD panel gives the BT-LH900 a wide viewing angle of 170°, both vertically and horizontally. This minimizes color variation and ensures sharp, easy-to-see images when the monitor is viewed from different angles.

### Broadcast-Quality Color and Gradation

With 1,024 x 768 (XGA) pixels, the BT-LH900 has the high resolution needed to provide broadcast-quality color reproduction and gradation.

### Detached Control Panel Adds Versatility

The control panel is separate from the monitor, making the BT-LH900 suitable for a wide range of applications, including use as a monitor or viewfinder.

#### Panel Features:

- Cine gamma correction function allows use as a viewfinder for the VARICAM AJ-HDC27F
- Equipped with a waveform monitor function
- Equipped with marker and blue-only functions
- External remote control via RS-232C, GPI terminals
- Side-by-side rack mounting (with optional BT-MA900G), with vertical tilt mechanism



Mounted to the AJ-HDC27F (for use as a viewfinder)



Waveform monitor screen

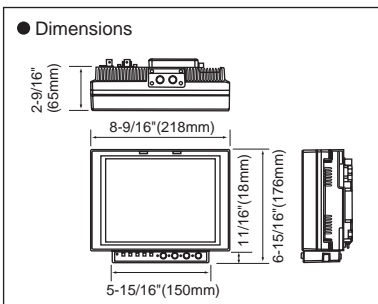
#### BT-MA900G Rack Mount Adaptor



Side-by-side rack mounting example



Rear Panel



Power Requirements:	DC12V(10 ~ 17V)
Power Consumption:	22.8W
Dimensions (W x H x D):	8-9/16" x 6-15/16" x 2-9/16" (218 x 176(4U) x 65 mm)
Weight:	2.0 kg (4.4 lbs)
Video Input :	SDIX2(auto HD/SD IN) switched OUT ComponentX1(Y/Pb/Pr or RGBS) CompositeX1
Viewing Angle:	170°
Panel Size:	8.4v
Resolution:	H(max) 1024 dots, V(max) 768 lines
Aspect Ratio:	4:3
Remote Terminal:	GPI, D-SUB9

# Versatile 14" Model with Quick Motion Response for Professional Applications



## BT-LS1400

14" LCD Monitor



### High-Speed Panel – 16 msec

The BT-LS1400's high-speed (16 msec) LCD panel provides a super-fast response with moving pictures. You get clear, sharp images in action scenes, with no afterimages or color shift.

### Thin, Lightweight and Energy Efficient

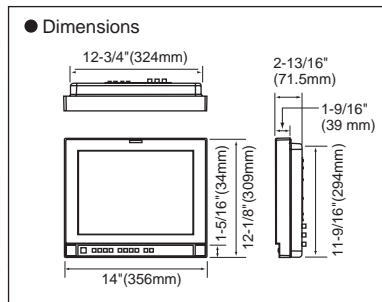
The BT-LS1400 lets you take advantage of the LCD panel's slim design, with its 3.4" (87-mm) profile and 10.1-lb. (4.6-kg) weight. Power consumption is a low 40 W.

### SD TV Signal Monitor, with SDI-Compatibility and Built-In Stereo Speakers

The BT-LS1400 is equipped with two composite and Y/C input terminals and one component input terminal (Y/Pb/Pr). An optional board is available for SDI input. The BT-LS1400 also has L/R audio input terminals and built-in stereo speakers.



Rear Panel (Optional SDI Input Unit BT-YA210G attached)



### Metal Cabinet for Rugged Use

Encased in a tough metal cabinet, the BT-LS1400 is ready for active use. Mount it in an OB van or incorporate it into an SD TV studio rack or viewing station. table. It also comes with a stand and allows VESA-compliant mounting.

### Wide Viewing Angle, High Picture Quality

A viewing angle of 160° both vertically and horizontally helps minimize color variation and ensure easy-to-see images when the BT-LS1400 is viewed from different angles. The 640 x 680-dot (VGA) pictures are clear and sharp.

- Equipped with underscan, blue-only functions
- Tally function
- GPI terminal for external remote control

**BT-YA210G**  
SDI Input Unit

**BT-MA1400G**  
Rack Mount Adaptor



Power Requirements:	AC100V ~ 240V)
Power Consumption:	40W, 48W(including SDI input Yunit)
Dimensions (WxHxD):	14" x 12-1/8" x 2-13/16" ( 356 x 309 x 71.5 mm )
Weight:	4.6 kg (10.1 lbs)
Video Input :	Composite X 2 (loop-through) S-VIDEO X 2 (loop-through) Component X1 (Y/Pb/Pr) SDI X 1 (option) Audio X 1 (L/R)
Viewing Angle:	160°
Panel Size:	14v
Resolution:	H(max) 640 dots, V(max) 480 lines
Aspect Ratio:	4:3
Accessory:	Power cord, Stand

# Panasonic

**Matsushita Electric Industrial Co., Ltd.**  
**Systems Business Group**  
 2-15 Matsuba-cho, Kadoma, Osaka 571-8503  
 Japan  
 Tel. 81-6-6905-4650 Fax. 81-6-6903-5969  
<http://www.pavc.panasonic.co.jp/pro-av/>

## [Countries and Regions]

Argentina	+54 1 308 1610	Korea	+82 2 6670 5160
Australia	+61 2 9887 6222	Kuwait	+965 481 2123
Austria	+43 (0)1 610 80 773	Lebanon	+961 1 216827
Bahrain	+973 252292	Malaysia	+60 3 5549 5422
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Germany	+49 (0)611 235 401	Portugal	+351 21 425 77 04
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Spain	+34 (93) 425 93 00
Sweden	+46 (8) 680 26 41
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U.A.E.	+971 4 282201
Ukraine	+380 44 4903437
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