

Production-tough LCD Monitors for the Studio or the Road



Panasonic HD/SD Monitors: Full Support for Broadcasting



Compact, energy-efficient
LCD monitors

with the superior picture quality
and functions professionals need.

Four models for everything
from field recording
to master monitoring
in studios.

BT-LH80W

The 7.9" wide-screen LCD is sized perfectly for recording use or installation in a vehicle. A focus assist function lets this monitor serve as a viewfinder for an HD camera.

- 7.9" wide-screen LCD panel with 800 x 450-pixel resolution
- Advanced image-enhancing circuitry, including an I/P conversion circuit for excellent motion response and a diagonal line compensation circuit
- Focus-in-Red function for easy focusing in HD
- Pixel-to-pixel display without resizing HD pixels
- Waveform monitoring
- Cross hatch overlay display
- 15-pin viewfinder terminal for compatible camera-recorders
- SDI (optional) and component input
- DC operation (Anton Bauer/DC IN) and low power consumption
- Thin, small and light for on-camera mounting
- RS-232C/GPI remote control terminals
- Marker and blue-only functions
- Tally lamp (red, green)
- Die Cast Aluminum frame

BT-LH900A

This small, lightweight, 8.4" unit features a high-resolution LCD panel and is ideal for monitoring recordings, installation in an broadcast and production vehicles, and for more more uses.

- 8.4" XGA LCD panel with 1024 x 768-pixel resolution
- Broadcast-quality color and gradation
- Wide 170° horizontal and vertical viewing angle
- HD/SD multi-format compatibility with two SDI and component inputs
- Versatile detached control panel
- DC operation (Anton Bauer/DC IN) and low power consumption
- Thin, small and light for on-camera mounting
- Cine-gamma (F-REC) compensation for VariCam shooting
- Waveform monitoring
- Marker and blue-only functions
- RS-232C/GPI remote control terminals
- Side-by-side rack mounting (with optional BT-MA900G)
- Tally lamp (red, green)
- Die Cast Aluminum frame



BT-LH1700W

With the superior image quality demanded in the studio and in the field, this versatile, rack-mountable 17" LCD operates on AC/DC power and can be used in various applications.

- 17" WXGA LCD panel with 1280 x 768-pixel resolution
- Advanced image-enhancing circuitry, including excellent motion response and a diagonal line compensation circuit
- Wide 176° horizontal and vertical viewing angle
- Two SDI and component inputs, PC input compatible
- Coordination of multiple cameras on split screens
- Waveform monitoring
- Cine-gamma (F-REC) compensation for VariCam shooting
- RS-232C/GPI remote control terminals
- Tally lamp (red, green)
- Built-in stereo speakers
- Rack mount (optional BT-MA1710G)
- AC/DC power supplies
- Die Cast Aluminum frame

BT-LH2600W

High-Grade monitor for use in HD video production and transmission. Large 26" LCD panel with a Pixel-to-Pixel function renders HD images accurately.

- 26" WXGA LCD panel with 1366 x 768-pixel resolution
- Advanced image-enhancing circuitry, including excellent motion response and a diagonal line compensation circuit
- Wide 176° horizontal and vertical viewing angle
- Two SDI and component inputs, PC input compatible
- Pixel-to-pixel function display without resizing HD pixels
- Audio level meter overlay display
- Coordination of multiple cameras on split screens
- Waveform monitoring
- Cine-gamma (F-REC) compensation for VariCam shooting
- RS-232C/GPI remote control terminals
- Tally lamp (red, green)
- Built-in stereo speakers
- Die Cast Aluminum frame

Outstanding Display Performance

I/P Conversion Circuit for Motion Response

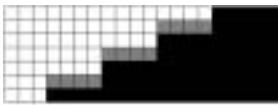
[2600W] [1700W] [80W]

A circuit delay time (excluding the panel) of approximately 5 msec*1 is realized by incorporating a I/P converter circuit that converts SD and HD interlace signals with high precision and generates a progressive signal without causing field-length delay. Minimizing the delay between the input signal and monitor output enables the user to confirm footage without any incongruity.

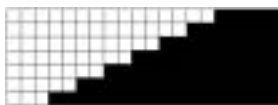
*1: Differs slightly depending on the signal format.

Diagonal Line Compensation

[2600W] [1700W] [80W]



Conventional Vertical Interpolation



New Diagonal Interpolation

Jagged noise on diagonal lines in moving images is a common problem. These LCD monitors solve this by detecting correlations in the diagonal direction, resulting in smooth, precise reproduction of moving images.

High-Speed Response

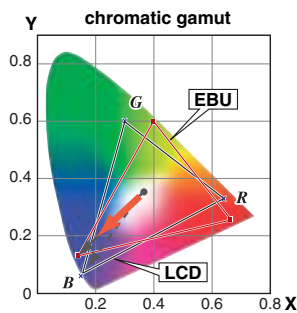
[2600W] [1700W]

The biggest concern when receiving a video feed is response time in the intermediate gradations. Installing an overdrive circuit improved the response in intermediate gradations to around 8 ms*2 (gray-to-gray), which is around half that of existing Panasonic models, enabling the vivid display of video without blurring.

*2: BT-LH2600W only, BT-LH1700W: around 10 ms.

Broadcast Quality Color Gamut

[2600W] [1700W]



Colors on CRT monitors appear different from those on LCD monitors due to slight differences in the monitors' chromatic ranges. The BT-LH2600W and the BT-LH1700W uses a technology called color space conversion to produce the same EBU*3-based colors as a CRT.

*3: SMPTE-C in North America.

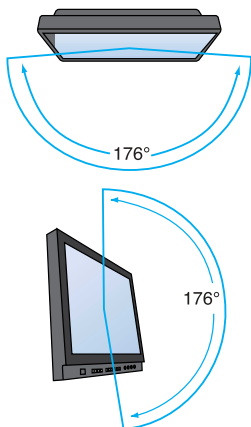
Wide 176° Viewing Angle

[2600W] [1700W]

Wide 170° Viewing Angle

[900A]

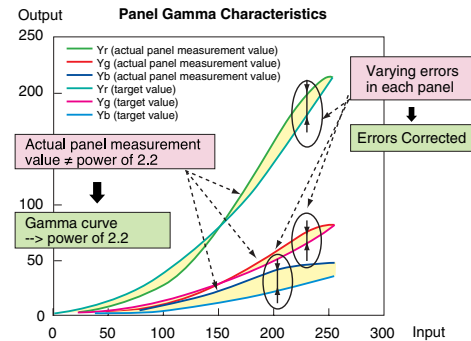
A 176° horizontal and vertical viewing angle has been realized in both BT-LH2600W and BT-LH1700W by using a high intensity, high contrast LCD panel. BT-LH900A also has a wide 170° viewing angle (horizontal and vertical). Ease of viewing is secured by reducing changes in color due to the viewing angle.



Gamma Compensation for Each Monitor

[2600W] [1700W]

In order to make the LCD monitor suitable for professional broadcasting applications, compensation is conducted for each monitor in 256 discrete RGB steps, rated gamma properties ($\gamma=2.2$) are reproduced, and gradation suitable for broadcasting is achieved. Color temperature of 9300K/6500K/5600K; 3000K to 9300K can be selected with the variable setting.



Useful Functions for Professional Use

HD/SD Multi-Format

[2600W] [1700W] [900A] [80W]

Compatible with most HD and SD formats, Panasonic LCD monitors are ideal for a wide range of applications in locations around the world.

Cine Gamma Compensation

[2600W] [1700W] [900A]

Equipped with cine-gamma (F-REC) compensation function for compatibility as a monitor for VariCam AJ-HDC27H Camcorder.

Waveform Monitoring

[2600W] [1700W] [900A] [80W]



The input signal is displayed as a waveform for monitoring. The BT-LH2600W and the BT-LH1700W, Display of the waveform can be positioned in any of the four corners of the screen. The BT-LH80W can be displayed in the lower right portion of the screen.

SDI and Component Input

[2600W] [1700W] [900A] [80W]

All four monitors allow for SDI with automatic switching between HD and SD.

The BT-LH2600W and the BT-LH1700W are equipped with two SDI input and one SDI output. These are equipped with a Component input (Y/P_B/P_R, RGB switching), Y/C and Composite. RGB is compatible with PC input.

The BT-LH900A is equipped with two SDI input and one SDI output, one component input (Y/P_B/P_R or RGB switching) and one composite input. The BT-LH80W allows SDI input with optional BT-YA80G, and equipped with component (Y/P_B/P_R) input.

Tough Enough to Travel

[2600W] [1700W] [900A] [80W]



Panasonic BT-series LCD Monitors are built with a Die Cast Aluminum frame. This superior build quality has been proven in the field to be production tough.

Suited to the Studio BT-LH2600W/LH1700W

Pixel-to-Pixel Display

[2600W]



This function allows you to display and confirm video pixels inputted in HD-SDI without any resizing. When using 1080i, choose from five display area; center, right-top, right-bottom, left-top and left-bottom. In 720p, it is displayed in the actual size.

Audio Level Meter Overlay

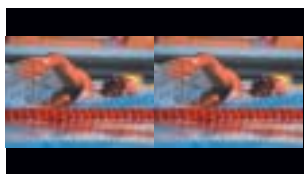
[2600W]



The BT-LH2600W comes with an audio embedded function. In addition, the SDI-input audio level can be displayed on the screen with a white skeleton bar meter. Choose from 2ch/4ch/8ch/off for the display.

Coordination of Multiple Cameras on Split Screens

[2600W] [1700W]



A frame of video can easily be frozen and displayed as a still image on the left side of the screen. This function can be utilized to match a live camera with a frame of video shot at an earlier time or with a

different camera. There are two display modes: FULL for displaying and comparing the entire image on the screen and PART for displaying and comparing only the center part of the images.

Various Markers

[2600W] [1700W]

Various markers can be displayed in both of 16:9 and 4:3 aspect ratio.



4:3 Aspect Marker

- Aspect Marker (16:9): 4:3, 13:9, 14:9, CNSCO or VISTA, with background brightness control of 0%, 50% or 100%.
- Safe Area Marker (16:9/4:3): 95%, 93%, 90%, 88% or 80%
- Center Marker (16:9/4:3): ON/OFF

With the BT-LH2600W, safe area marker can be displayed over 4:3 aspect marker.



Safe Area and Center Marker

Additional Functions

[2600W] [1700W]

- Blue only mode
- H/V delay
- Mono mode
- Fan On/Off Menu Selectable
- Tally lamp (red, green)
- Built-in stereo speakers
- RS-232C and GPI remote control terminals

BT-LH1700W Set Up Facilities

[1700W]

- Rack mount capability with optional BT-MA1710G adaptor
- Compatible with AC/DC power supplies

Suited to the Field BT-LH900A/LH80W

Thin, Small and Lightweight

[900A] [80W]

Making full use of the LCD panel's thinness and light weight, the BT-LH80W is only 65 mm (2-5/8") deep and weighs just 1.5 kg (3.3 lbs). The BTLH900A is a similar depth and weighs 2.0 kg (4.4 lbs).

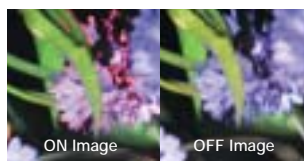
DC and Low Power Operation

[900A] [80W]

DC operation (Anton Bauer/DC IN) makes the BT-LH900A and BT-LH80W ideal for use outdoors. Power consumption is very low, despite its HD/SD compatibility.

Focus Assist Functions for HD Shooting

[80W]



• **Focus-in-Red:** This function emphasizes the sharply focused area of the image by showing it in an easily visible red, making it easier to focus the camera.

• **Pixel-to-Pixel:** This function lets you see the pixel without resizing, making it easier to make focus adjustments. With 1080/60i input signals, you can check the focus with a screen width equivalent to 19 inches.

Cross Hatch Overlay

[80W]

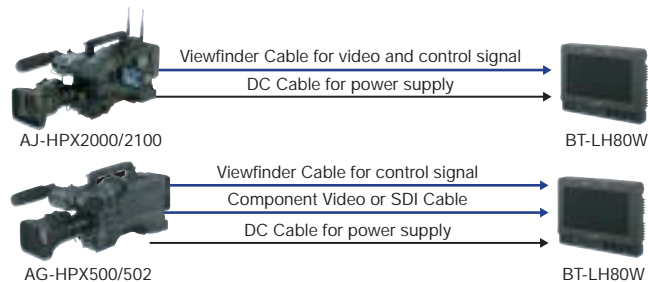


Simple Cross Hatch overlay display (at 50 dots interval, fixed) to check the tilt of camera. You can allocate the cross hatch function to any of the three "Function" keys.

Viewfinder Connector

[80W]

Equipped with a 15-pin viewfinder terminal, the BT-LH80W can also be used as a viewfinder for compatible Panasonic camera-recorders -- AJ-HDX900, AJ-HDC27H, AJ-HPX2000 (US model), AJ-HPX2100 (European/Asian model), AG-HPX500, and AG-HPX502 (Asian model). You can also run the BT-LH80W on DC power supplied by these camera-recorders. Connection is easy, requiring only a viewfinder cable and DC power cable.



Detached Control Panel Adds Versatility

[900A]

The control panel is separated from the monitor, making the BT-LH900A suitable for a wide range of applications, including use as a monitor or viewfinder.

Additional Functions

[900A] [80W]

- Blue only mode
- Markers
- Tally lamp (red, green), the BT-LH80W also equipped with back tally (red)
- RS-232C and GPI remote control terminals

Rack Mount

[900A]

Side-by-side rack mounting (with optional BT-MA900G), with vertical tilt mechanism

Front Control Panel



BT-LH2600W



BT-LH1700W



BT-LH900A



BT-LH80W

Interfaces and Supported Video Format



BT-LH2600W Rear Connectors



BT-LH1700W Rear Connectors

Supported RGB/PC Display by BT-LH2600W/LH1700W

| Pixel Size | 60 Hz | 70 Hz | 75 Hz | 85 Hz |
|-------------|-------|-------|-------|-------|
| 600 x 400 | | yes | | |
| 640 x 480 | yes | | yes | yes |
| 800 x 600 | yes | | yes | yes |
| 1024 x 768 | yes | yes | yes | yes |
| 1280 x 768 | yes | | yes | yes |
| 1280 x 1024 | yes | | | |



BT-LH900A Rear Panel



BT-LH80W Rear Panel

Supported Video Format

| Input Signal | BT-LH2600W/1700W | | | | | | BT-LH900A | | | | BT-LH80W | | | | |
|---------------|------------------|-----|-------|-------|---------|-----|-----------|-----|---------|-----|----------|----------|------------|---------|--------------|
| | VIDEO | Y/C | SDI 1 | SDI 2 | Y/Pb/Pr | RGB | VIDEO | SDI | Y/Pb/Pr | RGB | VIDEO | VF-VIDEO | VF-Y/Pb/Pr | Y/Pb/Pr | SDI (option) |
| NTSC | yes | yes | | | | | yes | | | | yes | yes | | | |
| PAL | yes | yes | | | | | yes | | | | yes | yes | | | |
| 480/59.94i | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 480/59.94P | | | | | yes | yes | | | yes | yes | | | yes | yes | |
| 576/50i | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 576/50P | | | | | yes | | | | | | | | yes | yes | |
| 720/50P | | | yes | yes | yes | | | yes | yes | | | | yes | yes | yes |
| 720/59.94P | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 720/60P | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 1035/59.94i* | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 1035/60i* | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 1080/23.98P | | | yes | yes | yes | | | yes | yes | | | | | | |
| 1080/23.98Psf | | | yes | yes | yes | | | yes | yes | | | | yes | yes | yes |
| 1080/24P | | | yes | yes | yes | | | yes | yes | | | | | | |
| 1080/24Psf | | | yes | yes | yes | | | yes | yes | | | | yes | yes | yes |
| 1080/25P | | | yes | yes | yes | | | yes | yes | | | | | | |
| 1080/29.97P | | | yes | yes | yes | | | yes | yes | | | | | | |
| 1080/30P | | | yes | yes | yes | | | yes | yes | | | | | | |
| 1080/50i | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 1080/50P | | | | | yes | | | | | | | | | | |
| 1080/59.94i | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 1080/59.94P | | | | | yes | | | | | | | | | | |
| 1080/60i | | | yes | yes | yes | yes | | yes | yes | yes | | | yes | yes | yes |
| 1080/60P | | | | | yes | | | | | | | | | | |

*Indicates display with 1080/59.94i or 1080/60i, instead of 1035/59.94i or 1035/60i

Optional Accesories



BT-YAE1700G
Embedded Audio Unit
for BT-LH1700W



BT-MA1700G
Rack Mount Adaptor
for BT-LH1700W



BT-MA900G
Rack Mount Adaptor
for BT-LH900A



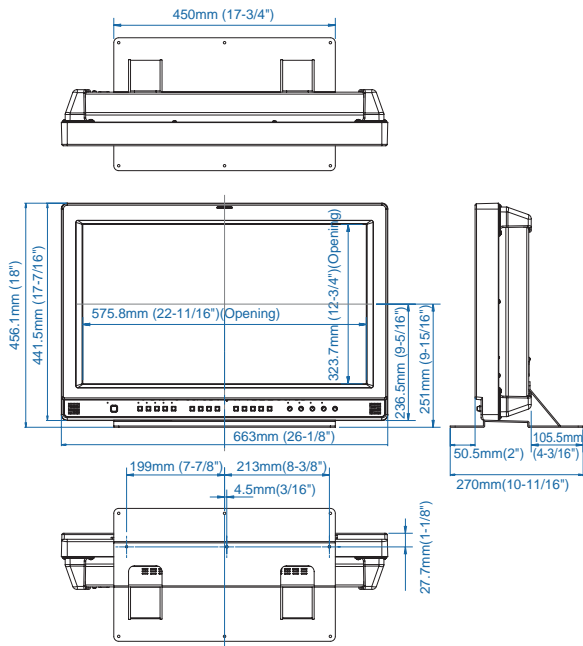
BT-YA80G
SDI Input Unit
for BT-LH80W



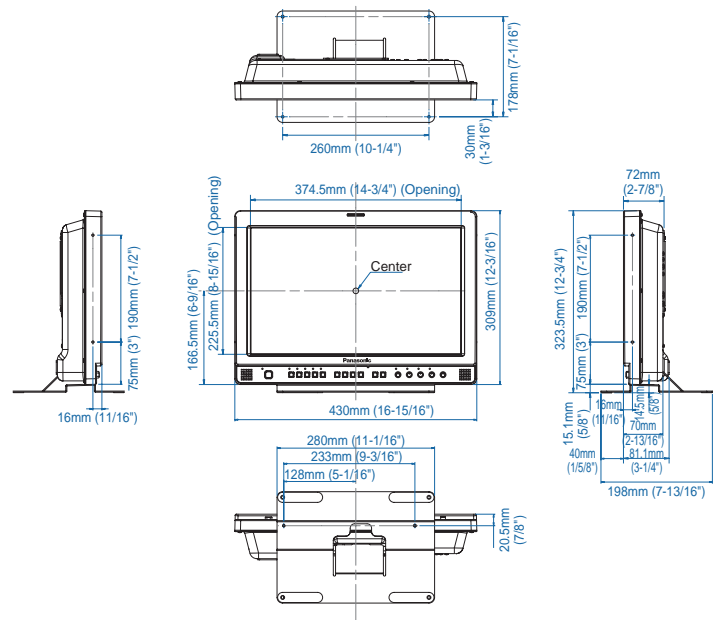
BT-CS80G
VF Cable set
(Viewfinder Cable, DC Cable
for BT-LH80W)

Dimensions

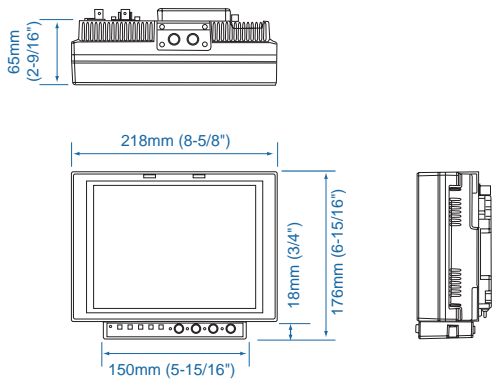
BT-LH2600W



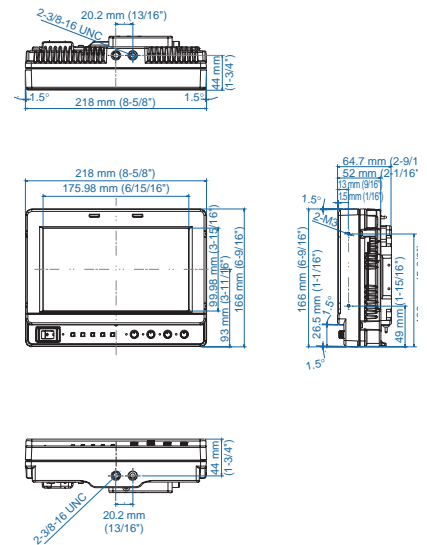
BT-LH1700W



BT-LH900A



BT-LH80W



Specifications

| | BT-LH2600W | BT-LH1700W | BT-LH900A | BT-LH80W |
|--------------------------|--|--|---|--|
| GENERAL | | | | |
| Power Requirement: | AC100V to 240V 50/60Hz | AC100V to 240V 50/60Hz, DC12V (11V to 17V) | DC12V (11 to 17V) | DC12V (11 to 17V) |
| Power Consumption: | 1.5A to 0.6 A | 1.1A to 0.6 A ; 4.5A with DC 12V | 1.45 A with DC 12V | 1.5 A with DC 12V |
| Dimensions (WxHxD): | 663 x 456.1 x 270 mm (26-3/32" x 17-31/32" x 10-5/8", Including stand) 663 x 441.5 x 114mm (26-3/32" x 17-3/8" x 4-1/2", Main unit only; not including stand) | 430 x 323.5 x 198mm (16-15/16" x 12-3/4" x 7-13/16", Including stand) 430 x 309 x 81.1mm (16-15/16" x 12-3/16" x 3-1/4", Main unit only; not including stand) | 218 x 176 (4U) x 65 mm (8-5/8" x 6-15/16" x 2-9/16") | 218 x 166 x 64.7 mm (8-5/8" x 6-9/16" x 2-9/16") |
| Weight: | 17.5kg (38.5 lbs) (Including stand), 15.0kg (33.0 lbs) (not including stand) | 8.1kg (17.8 lbs) (Including stand), 7.2kg (15.8 lbs) (not including stand) | 2.0 kg (4.4 lbs) | 1.5kg (3.3 lbs) |
| Operating Temperature: | +5°C to +35°C (41°F to 95°F) | +5°C to +35°C (41°F to 95°F) | +0°C to +40°C (32°F to 104°F) | +0°C to +40°C (32°F to 104°F) |
| Operating Humidity: | 20% to 80% (non dew) | 20% to 80% (non dew) | 10% to 85% (non dew) | 10% to 85% (non dew) |
| Storage Temperature: | -20°C to +60°C (-4°F to 140°F) | -20°C to +60°C (-4°F to 140°F) | -20°C to +60°C (-4°F to 140°F) | -20°C to +60°C (-4°F to 140°F) |
| Storage Humidity: | 10% to 90% (non dew) | 10% to 90% (non dew) | | |
| LCD PANEL | | | | |
| Panel Size: | 26 inch | 17.1 inch | 8.4 inch | 7.9 inch (Effective display area) |
| Aspect Ratio: | 16:9 | 15:9 | 4:3 | 16:9 (Effective display area) |
| Resolution: | 1,366 x 768 pixels (WXGA) | 1,280 x 768 pixels (WXGA) | 1024 x 768 pixels (XGA) | 800 x 450 pixels (Effective display area) |
| Display colors: | Approx. 16,770,000 colors | Approx. 16,700,000 colors | Approx. 16,770,000 colors | Approx. 16,770,000 colors |
| Viewing Angle: | 176° (both horizontal and vertical) | 176° (both horizontal and vertical) | 170° (both horizontal and vertical) | 110° vertical, 120° horizontal |
| CONNECTORS | | | | |
| Video input: | Video: BNC x 2 (with through-out connector) Y/C: 4-pin x 2 (with through-out connector) Y/Pb/Pr/RGB: BNC x 8 (with through-out connector x 4*) SDI: BNC x 3 (switched-out connector x 1) | Video: BNC x 2, (with through-out connector) Y/C: 4-pin x 2, (with through-out connector) Y/Pb/Pr/RGB: BNC x 8 (with through-out connector x 4*) SDI: BNC x 3 (switched-out connector x 1) | Video: BNC x 2 (with through-out connector) Y/Pb/Pr/RGB: BNC x 4 SDI (BNC) x 3 (switched out connector x 1) | Video: BNC x 1 Y/Pb/Pr/RGB: BNC x 3 (Y shares with Video) SDI: BNC x 1 (Effective only when the optional BT-YA80G is installed) VF: D-SUB, 15pin x 1 |
| Audio input: | Pinjack x 2 (stereo) | Pinjack x 2 (stereo) | -- | -- |
| Remote: | GPI: D-SUB, 9pin RS-232C: D-SUB, 9pin | GPI: D-SUB, 9pin RS-232C: D-SUB, 9pin | GPI: D-SUB, 9pin RS-232C: D-SUB, 9pin | GPI: D-SUB, 9pin RS-232C: D-SUB, 9pin |
| External DC power input: | -- | XLR, 4-pin | XLR, 4-pin | XLR, 4-pin |
| SIGNAL LEVEL | | | | |
| Video: | EXT SYNC signal level: 0.3Vp-p to 4.0Vp-p HD/VD signal level: TTL level | EXT SYNC signal level: 0.3Vp-p to 4.0Vp-p HD/VD signal level: TTL level | | |
| Audio: | Audio input signal level: 0.5Vrms Speaker output: 0.5W + 0.5W | Audio input signal level: 0.5Vrms Speaker output: 0.5W + 0.5W | | |
| OTHERS | | | | |
| Supplied Accessories: | Power cord, power cord hook, screw | Power cord, power cord hook, screw | Battery holder for Anton/Bauer battery (Built-in) | Battery holder for Anton/Bauer battery (Built-in) |
| Option: | | Embedded audio unit, Rack mount adaptor | Rack mount adaptor | SDI input unit, VF cable set (Viewfinder Cable, DC Cable) |

*However, with RGB-COMP input, it is R, G, B, HD, VD, BNC x 5.

The specifications shown above are subject to change without notice

Panasonic®

Matsushita Electric Industrial Co., Ltd.
Systems Business Group
 2-15 Matsuba-cho, Kadoma, Osaka 571-8503
 Japan
 Phone +81 6 6905 4650 Fax +81 6 6908 5969
<https://www.pavc.panasonic.co.jp/pro-av/>

[Countries and Regions]

Argentina +54 1 308 1610
 Australia +61 2 9986 7400
 Austria +43 (0)1 610 80 773
 Bahrain +973 252292
 Belgium +32 (0)2 481 04 57
 Bulgaria +359 2 946 0786
 Brazil +55 11 3889 4035
 Canada +1 905 624 5010
 China +86 10 6515 8828
 (Hong Kong +852 2313 0888)
 Czech Republic +420 236 032 552/511
 Denmark +45 43 20 08 57
 Egypt +20 2 3938151
 Finland, Latvia, Lithuania, Estonia
 +358 (9)521 52 53
 France +33 (0)1 55 93 66 67
 Germany +49 (0)611 235 401
 Greece +30 210 96 92 300
 Hungary +36 (1)382 60 60
 Indonesia +62 21 385 9449
 Iran +98 21 2271463
 Italy +39 02 67 88 449
 Jordan +961 6 586 1914
 Kazakhstan +7 3272 504 777
 Korea +82 2 2106 6641

Kuwait +965 481 2123
 Lebanon +961 1 216827
 Malaysia +60 3 5549 5422 (PSE)
 +60 3 5546 7000 (PM)
 Mexico +52 55 5488 1000
 Montenegro, Serbia +41 (0)26 466 25 20
 Netherlands +31 73 64 02 577
 New Zealand +64 9 272 0100
 Norway +47 67 91 78 00
 Pakistan +92 5370320 21
 Panama +507 229 2955
 Peru +51 1 614 0000
 Philippines +63 2 633 6162
 Poland +48 (22)338 1100
 Portugal +351 21 425 77 04
 Puerto Rico +1 787 750 4300
 Romania +40 21 211 4855
 Russia & CIS +7 095 258 42 06
 Saudi Arabia +966 1 465 0709
 Singapore +65 6270 0110
 Slovak Republic +421 (0)2 52 92 14 23
 Slovenia, Croatia, Bosnia, Macedonia
 +44 (0)20 76 63 36 57
 South Africa +27 11 313 1400

Spain +34 (93) 425 93 00
 Sweden +46 (8) 680 26 41
 Switzerland +41 (0)41 259 96 32
 Taiwan +886 2 2725 9100
 Thailand +66 2 731 8888
 Turkey +90 216 578 3700
 U.A.E. +971 4 282201
 Ukraine +380 44 4903437
 +380 44 4903438
 [ext. 112]
 U.K. +44 (0) 1344 70 69 20
 U.S.A. +1 201 348 5300



Factories of Systems Business Group have received ISO14001:2004-the Environmental Management System certification.