# Ikegami

PHASE

# Broadcast Monitor Lineup

HQLM-3125X 4K

**4K HDR** HQLM Series

**Full HD Multi format** **HDR** HLM60 Series

7-inch Dual Monitor/5-inch Triple Monitor

# HQLM-3125X

**31-inch 4K/HD Multi-format LCD Master Monitor**

HDMI™ 4K HDR

NEW

The HQLM-3125X employs an LED-backlight 4096×2160 pixel 10-bit resolution UHD LCD panel with a contrast ratio of 1,000,000:1. 3G-SDI, HD-SDI and HDMI inputs are available as standard features.
When it comes to 3G-SDI×4, square-division and two-sample interleave are available.
For other 4K equipment, a dual-channel 12G-SDI input is also available.
HQLM-3125X can also display test signals such as video waveform and display vertical interval time code.
Additional broadcast related functions include an 8-channel embedded audio and closed caption displays.

| 31-inch 4K LCD | 4096×2160 pixel | Viewing Angle 178degree(H/V) | Contrast Ratio 1M:1 | Brightness 1000cd/m² | | | | |
|---|---|---|---|---|---|---|---|---|
| ITU-R BT.2020/ ACES/ DCI-P3 | 12G-SDI | 3G-SDI | HD-SDI | HDMI (HDCP2.2) | Embedded Audio Output | Embedded Audio Meter | Stereo Speaker Out | 5.1ch Surround Down-mix |
| HDR(HLG) | HDR(PQ) | HD/UHD (2K/4K) | Remote (Parallel) | Remote (Ethernet) | Remote (RS485) | Marker | Uniformity function | ASC CDL*1 |
| Test Signal Generator | Mix Test Signal | VITC/LTC Display | WFM Monitoring Display | Mouse Menu Control | Multi-View | Vector Scope Display | UMD/IMD Display | Closed Caption |
| 3D LUT CC | Gamut Marker | Payload*2 ID | Auto *3 Calibration | | | | | |

| W762×H467×D172mm (W30×H18.39×D6.77inches) | 30kg (66.14 lbs) |
|---|---|

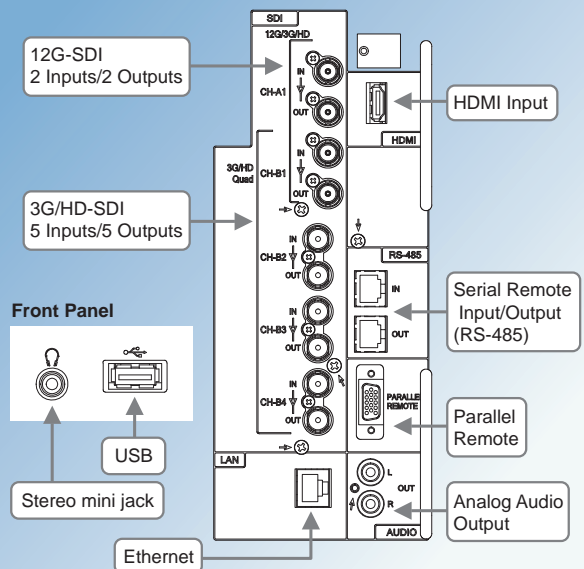# Evolutionary Features for HQLM Series
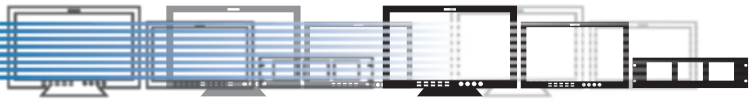
## HDR High Dynamic Range



HDR



SDR

The HDR will comply with Hybrid Log-Gamma (HLG) and SMPTE ST 2084(PQ), among others, using direct backlight (brightness 1,000cd/m²). These features comply with the ITU-R BT.2020 and BT.2100 HDR standards. The HQLM-3125X provides a wide-color gamut corresponding to the ITU-R BT.2020 standard. Support for ITU-R BT.709/ DCI-P3 D65/ DCI-P3/ ACES/ Adobe RGB standards is also available.

● **Supports various Inputs/Outputs**

12G-SDI 2 Inputs/2 Outputs

3G/HD-SDI 5 Inputs/5 Outputs

HDMI Input

RS-485

Serial Remote Input/Output (RS-485)

Parallel Remote

Analog Audio Output

**Front Panel**

USB

Stereo mini jack

Ethernet

# HQLM-3120W
### 31-inch 4K/HD Multi-format LCD Monitor

HDMI™ 4K HDR

The HQLM-3120W is equipped with 2 channels of 12G-SDI input as standard for efficient configuration with 4K equipment such as cameras and switchers. In addition, this monitor includes 3G-SDI, HD-SDI and HDMI inputs as standard. It has the flexibility to work with various interfaces in the image production field. By employing a 31.1-inch 4096×2160 pixel UHD LCD panel using LED backlight, it can reproduce high resolution 4K and 2K images.

| | | | | | |
|---|---|---|---|---|---|
| 31-inch 4K LCD | 4096×2160 pixel | Viewing Angle 178degree(H/V) | Contrast Ratio 1500:1 | Brightness 350cd/m² | |
| ITU-R BT.2020/ ACES/ DCI-P3 | 12G-SDI | 3G-SDI | HD-SDI | HDMI (HDCP2.2) | Embedded Audio Output |
| Embedded Audio Meter | Stereo Speaker Out | 5.1ch Surround Down-mix | | | |
| HDR(HLG) | HDR(PQ) | HD/UHD (2K/4K) | Remote (Parallel) | Remote (Ethernet) | Remote (RS485) |
| Marker | Test Signal Generator | Mix Test Signal | VITC/LTC Display | WFM Monitoring Display | Mouse Menu Control |
| Multi-View | Vector Scope Display | UMD/IMD Display | Closed Caption | Payload※2 ID | Auto ※3 Calibration |
| W750×H459×D107mm (W29.52×H18.07×D4.21inches) | | 14.5kg (31.96 lbs) | | | |

# HQLM-1720WR
### 17-inch 4K/HD Multi-format LCD Monitor

HDMI™ 4K HDR

The HQLM-1720WR is equipped with 2 channels of 12G-SDI input as standard for efficient configuration with 4K equipment such as cameras and switchers. In addition, this monitor includes 3G-SDI, HD-SDI and HDMI inputs as standard. It has the flexibility to work with various interfaces in the image production field. By employing a 16.5-inch 3840×2160 pixel UHD LCD panel using LED backlight, it can reproduce high resolution 4K and 2K images.

| | | | | | |
|---|---|---|---|---|---|
| 17-inch 4K LCD | 3840×2160 pixel | Viewing Angle 178degree(H/V) | Contrast Ratio 800:1 | Brightness 450cd/m² | |
| ITU-R BT.2020/ ACES/ DCI-P3 | 12G-SDI | 3G-SDI | HD-SDI | HDMI (HDCP2.2) | Embedded Audio Output |
| Embedded Audio Meter | Stereo Speaker Out | 5.1ch Surround Down-mix | | | |
| HDR(HLG) | HDR(PQ) | HD/UHD (2K/4K) | Remote (Parallel) | Remote (Ethernet) | Remote (RS485) |
| Marker | Test Signal Generator | Mix Test Signal | VITC/LTC Display | WFM Monitoring Display | Mouse Menu Control |
| Multi-View | Vector Scope Display | UMD/IMD Display | Closed Caption | Payload※2 ID | Auto ※3 Calibration |
| W428×H309×D145mm (W16.85×H2.17×D5.7inches) | | 8.5kg (18.74 lbs) | | | |

※1 The American Society of Cinematographers Color Decision List
※2 12G-SDI : ITU-R BT.2077-2 / 3G-SDI : ITU-R BT.1120-9
※3 Available from November 2019.

## HLM-2460W
### 24-inch HDTV/SDTV Full HD Pixel Multi-format LCD Color Monitor
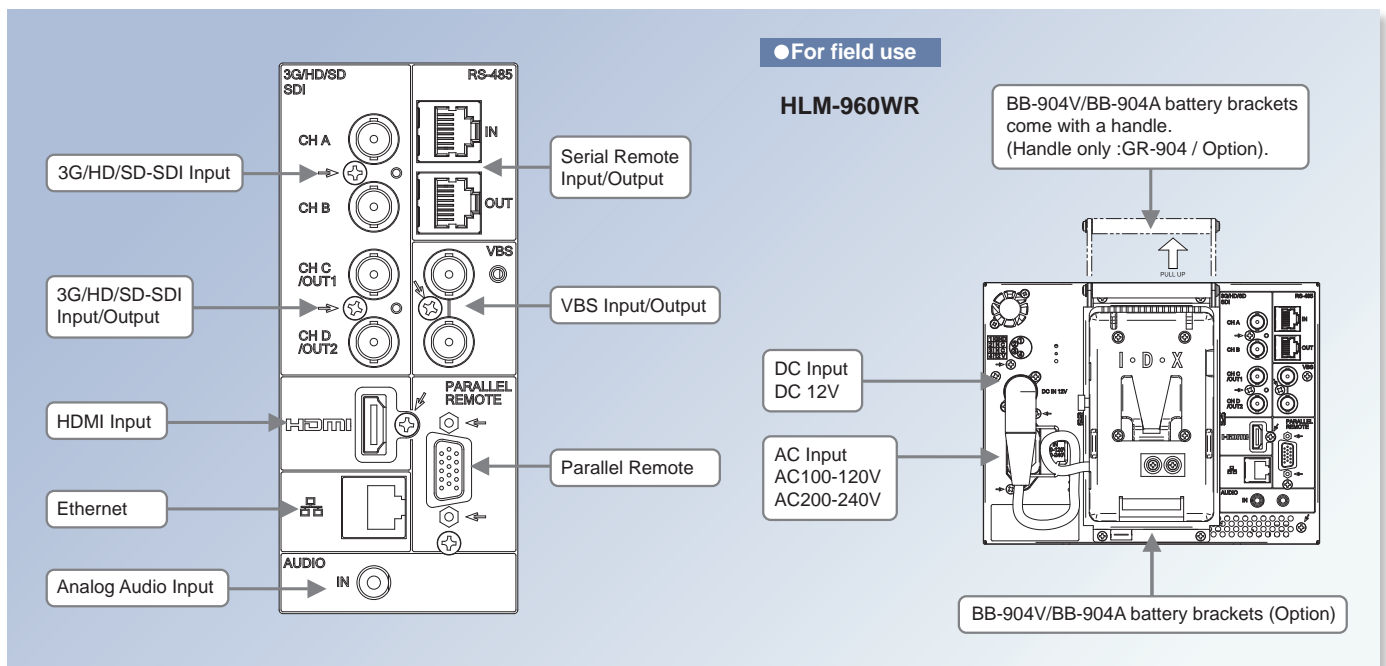
HDMI™ HDR



The HLM-2460W has a 24-inch Full HD 1920×1200 Pixel 400cd/m², 10-bit resolution LCD panel. This model offers very narrow front-to-back dimensions, light weight and low power consumption. Multi-format SDI, 3G-SDI, HDMI and VBS inputs are provided as standard.

By employing a Full 1920×1200 pixel LCD panel which has wide viewing angle, high brightness, high contrast, fast motion response, and high quality colour reproduction, the HLM-2460W achieves real pixel allocation without resizing. Its superb gradation characteristics also make it ideal for a wide range of broadcast applications, including use in monitor walls.

| 24-inch Full HD | WUXGA (1920×1200 pixel) | 66W | Viewing Angle 178degree(H/V) | Contrast Ratio 1500:1 | AC-Input | | | |
|---|---|---|---|---|---|---|---|---|
| VBS Input | 3G/HD/SD(4:2:2)-SDI Input(max.4 Input) | Embedded Audio Meter | Analog Audio 2ch Iutput | 5.1ch Surround Down-mix | HDMI | | | |
| 4:3/16:9 | Remote (Parallel) | Remote (Mouse) | Remote (RS485) | Remote (Wireless) | Marker | User Marker (12 scenes) | Shadow | 7-Test Signal Generator | Mix Test Signal |
| 10-Color temperature-memory | Stereo Speaker | Stereo Headphone | VITC/LTC Display | WFM Monitoring Display | Mouse Menu Control | Split Screen | Dot-by-Dot Display | Vector Scope Display | USB Memory (Data/Picture) |
| UMD/IMD Display | Wipe Display | P in P Display | Split/Full Screen Comparison | 4 Times Zoom | Closed Caption | Ethernet | HDR (Option) | Auto Calibration * |
| W562×H398×D86mm (W22.1×H15.7×D3.4inches) | 9.1kg (20.1 lbs) | | | | | | | |

## HLM 60series Connector Panel



●For field use

HLM-960WR

BB-904V/BB-904A battery brackets come with a handle.
(Handle only :GR-904 / Option).

3G/HD/SD-SDI Input

3G/HD/SD-SDI Input/Output

HDMI Input

Ethernet

Analog Audio Input

Serial Remote Input/Output

VBS Input/Output

Parallel Remote

DC Input DC 12V

AC Input AC100-120V AC200-240V

BB-904V/BB-904A battery brackets (Option)

## HLM-1760WR — 17-inch HDTV/SDTV Full HD Pixel Multi-format LCD Color Monitor

**HDMI** **HDR**

The HLM-1760WR has a 17-inch Full HD 1920×1080 Pixel 450cd/m², 10-bit resolution LCD panel. This model offers very narrow front-to-back dimensions, light weight and low power consumption. Multi-format SDI, 3G-SDI, HDMI and VBS inputs are provided as standard.

By employing a Full 1920×1080 pixel LCD panel which has wide viewing angle, high brightness, high contrast, fast motion response, and high quality colour reproduction, the HLM-1760WR achieves real pixel allocation without resizing. Its superb gradation characteristics also make it ideal for a wide range of broadcast applications, including use in monitor walls.

| 17-inch Full HD | 1920×1080 pixel | AC:40W DC:36W (max) | Viewing Angle 178degree(H/V) | Contrast Ratio 1500:1 | AC-Input | DC-Input |
|---|---|---|---|---|---|---|
| Battery (Option) | | | | | | |
| VBS Input | 3G/HD/SD(4:2:2)-SDI Input(max.4 Input) | Embedded Audio Meter | Analog Audio 2ch Iutput | 5.1ch Surround Down-mix | HDMI | |
| 4:3/16:9 | Remote (Parallel) | Remote (Mouse) | Remote (RS485) | Remote (Wireless) | Marker | User Marker |
| Shadow | 7-Test Signal Generator | Mix Test Signal | 10-Color temperature-memory | Monaural Speaker | Stereo Headphone | VITC/LTC Display |
| WFM Monitoring Display | Mouse Menu Control | Split Screen | Dot-by-Dot Display | Vector Scope Display | USB Memory (Data/Picture) | UMD/IMD Display |
| Wipe Display | P in P Display | 4 Times Zoom | Closed Caption | Ethernet | HDR (Option) | Auto Calibration * |

| W428×H301×D80mm (W16.9×H11.9×D3.2inches) | 7RU | Approx 5.8kg (12.79 lbs) |
|---|---|---|

## HLM-960WR — 9-inch HDTV/SDTV Full HD Pixel Multi-format LCD Color Monitor

**HDMI** **HDR**

The HLM-960WR is a highly compact multi-format LCD monitor with a 9-inch Full HD 1920×1080 pixel 400cd/m² 8-bit resolution LCD panel. This model offers very narrow front-to-back dimensions, light weight and low power consumption. Multi-format SDI, 3G-SDI, HDMI and VBS inputs are provided as standard.

The HLM-960WR is low in power consumption, supporting either AC or DC powering. Battery operation is available using an optional battery bracket. The monitor has a USB connector on the operation panel, allowing setup file store & recall, as well as, remote operation from a mouse for menu navigation, including user maker operation, etc.

| 9-inch Full HD | 1920×1080 pixel | AC:28W DC:27W | Viewing Angle 178degree(H/V) | Contrast Ratio 700:1 | AC-Input | DC-Input |
|---|---|---|---|---|---|---|
| Battery (Option) | | | | | | |
| VBS Input | 3G/HD/SD(4:2:2)-SDI Input(max.4 Input) | Embedded Audio Meter | Analog Audio 2ch Iutput | 5.1ch Surround Down-mix | HDMI | |
| 4:3/16:9 | Remote (Parallel) | Remote (Mouse) | Remote (RS485) | Remote (Wireless) | Marker | User Marker |
| Shadow | 7-Test Signal Generator | Mix Test Signal | 10-Color temperature-memory | Monaural Speaker | Stereo Headphone | VITC/LTC Display |
| WFM Monitoring Display | Mouse Menu Control | Split Screen | Dot-by-Dot Display | Vector Scope Display | USB Memory (Data/Picture) | UMD/IMD Display |
| Wipe Display | P in P Display | 4 Times Zoom | Closed Caption | Ethernet | HDR (Option) | Auto Calibration * |

| W222.4×H173×D69.5mm (W8.8×H6.8×D2.8inches) | 4RU | Approx 1.7kg (3.75 lbs) |
|---|---|---|

* Available from November 2019.

## Common features for HLM 60 series

### High Dynamic Range (Factory Option)

The 60 series monitors support HDR (High Dynamic Range) EOTF tables of HLG1, HLG2, and S-Log3 as an option in addition to conventional gamma.



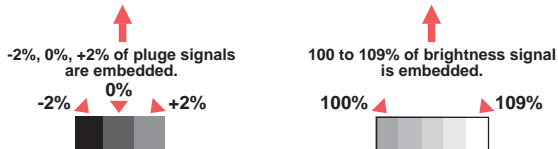**SDR picture**



**HDR picture**

### 2 Split-Screen Display

Captured image and live video can be displayed simultaneously on the same screen.

Display mode can be selected from side by side, picture in picture, horizontal wipe, and vertical wipe. This function is convenient for adjusting colors and position of multiple cameras. Two live signals also can be displayed.



**2-Split-Screen Display**

Captured image of Camera A

Live video of Camera B
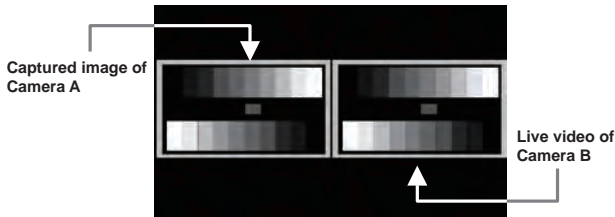
### MIX TEST SIGNAL Function

It is possible to mix the live picture with a reference TEST signal generated by the monitor. This provides a good reference for black and white levels which could otherwise be difficult to confirm with certainty due to the front panel adjustment of Contrast and Brightness. Regarding the peak level of the input signal, users can confirm an overload with the Alarm LED (OVER RANGE) on the Front panel.



**-2%, 0%, +2% of pluge signals are embedded.**
**0%**
**-2%** **+2%**

**100 to 109% of brightness signal is embedded.**
**100%** **109%**

### Zoom Display Function

This function is to enable 2X/4X magnification without scaling of the image. It is useful to confirm errors in the signal, such as dead pixels of a CCD camera and to check in the detailed sections of the picture.



### Use Maker Function (Patent Pending)

● **10 different Scene files for User Markers**

It is possible to create User Marker displays, up to 10 scenes. Each scene can be set in real time by users with the "FUNCTION" switch on the front panel.



Scene10

Scene3
Scene2

Scene1
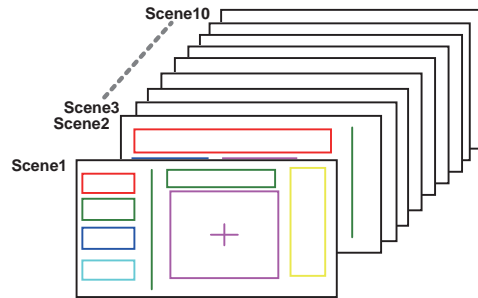
● **Easy Drawing with USB Mouse**

Marker drawing with a USB mouse is possible. For precise adjustment, it is possible to adjust down to 1 pixel out of 1920x1080 pixels. Also, numerical management is provided with XY coordinate data. In addition, by saving the files to USB memory, the marker data can be copied to another indentical model.



**Dragging with a mouse**
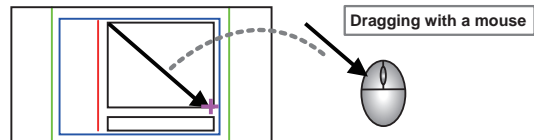
### Full Screen Capture Function

By capturing a full screen (1920x1080), it is possible to compare a live image with a captured still image. Switching between live and still can be done manually or automatically. By copying a captured image to USB memory, users can set the same viewing angle as in the prior shot referring to the captured still image.

● **Manual Switching**

By capturing the image of one of two cameras, it allows users to switch and compare a captured still image with the live image of the other camera. Even if the two video images are not synchronized, switching of images can be done smoothly without any shock. It is useful for luminance or color tone adjustment.



**Input signal for Camera1**

**Captured image for Camera2**
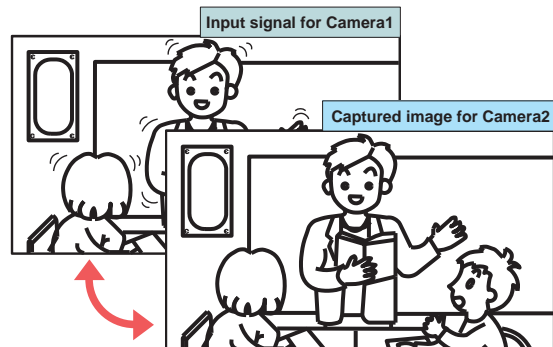
● **Auto Switching**

The time interval of auto switching can be changed per frame (1/2/3/5/10/30 frame). By storing the captured still images in USB memory, and then downloading the image, users can set the same viewing angle and same color as in the prior shot. It can be helpful for "frame-by-frame" shooting.

## HLM-5013WR
### 5-inch Triple Multi-Format LCD Monitor

High-End Broadcast LCD Monitor

Ikegami introduces a triple 5 inch high performance, rack mount ready, professional broadcast monitor that features 2 channels of SD-SDI/HD-SDI/3G-SDI Multi-Format Signal Inputs, 800×480 with LED Back Light panel resolution, Title Generator, Embedded Audio Level Indicators up to 16ch, Waveform Display, Vector Scope and many of the other advantages as higher level broadcast display offerings.

| | | |
|---|---|---|
| Triple 5-inch Wide | 800×480 pixel | AC:34W DC:28.8W/2.4A |
| Viewing Angle 170degree(H/V) | Contrast Ratio 500:1 | |
| 3G/HD/SD(4:2:2) -SDI Input | Embedded Audio Meter | |
| 4:3/16:9 | Remote (Parallel) | Marker |
| 3-Color temperature-memory | VITC/LTC Display | WFM Monitoring Display |
| Vector Scope Display | User Display | |
| W481×H88.1×D56.2mm (W18.88×H3.5×D2.22inches) | 2RU | Approx.1.7kg (3.75lbs) |

## HLM-7012WR
### 7-inch Dual Multi-Format LCD Monitor

High-End Broadcast LCD Monitor

Ikegami introduces a dual 7 inch high performance, rack mount ready, broadcast monitor that features 2 channels of SD-SDI/HD-SDI/3G-SDI Multi-Format Signal Inputs, 800×480 with LED Back Light panel resolution, Title Generator, Embedded Audio Level Indicators up to 16ch, Waveform Display, Vector Scope and many of the other advantages as higher level broadcast display offerings.
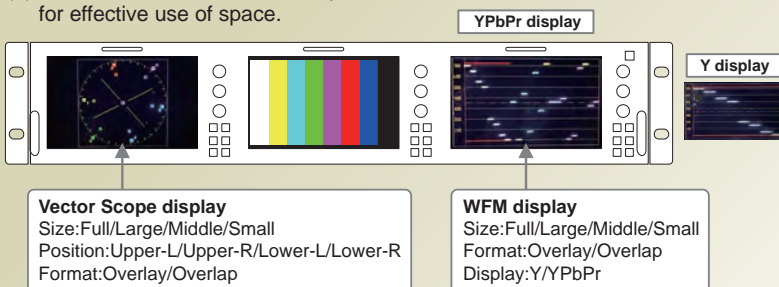
| | | |
|---|---|---|
| Dual 7-inch Wide | 800×480 pixel | AC:30W DC:26.4W/2.2A |
| Viewing Angle 160degree(H/V) | Contrast Ratio 1000:1 | |
| 3G/HD/SD(4:2:2) -SDI Input | Embedded Audio Meter | |
| 4:3/16:9 | Remote (Parallel) | Marker |
| 3-Color temperature-memory | VITC/LTC Display | WFM Monitoring Display |
| Vector Scope Display | User Display | |
| W481×H132.6×D56.2mm (W18.88×H5.25×D2.22inches) | 3RU | Approx.2.1kg (4.63lbs) |

## Feature for HLM-5013WR/HLM-7012WR

### ●WFM & Vector Scope display

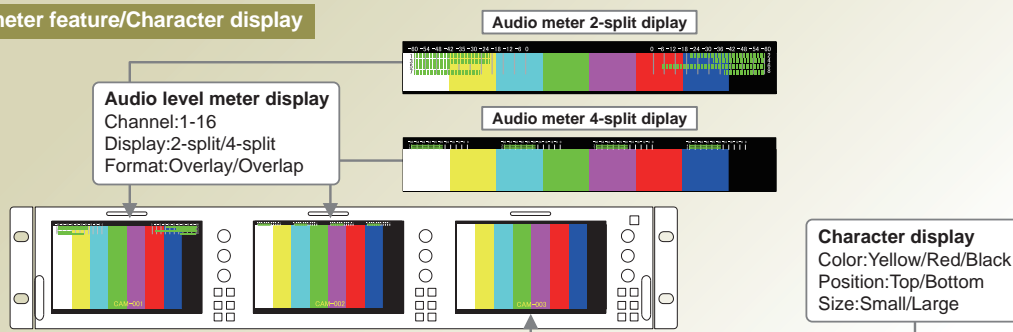＊The following images are for HLM-5013WR, HLM-7012WR contains similar features.

(1) Full screen WFM & Vector Scope for effective use of space.

YPbPr display

Y display

**Vector Scope display**
Size:Full/Large/Middle/Small
Position:Upper-L/Upper-R/Lower-L/Lower-R
Format:Overlay/Overlap

**WFM display**
Size:Full/Large/Middle/Small
Format:Overlay/Overlap
Display:Y/YPbPr

(2) 4-type of display size. (Full/Large/Middle/Small) Overlapping on video also available.

Size:Small  Size:Middle  Size:Large

Vector Scope display

WFM(YPbPr)display

### ●Audio level meter feature/Character display

Audio meter 2-split diplay

**Audio level meter display**
Channel:1-16
Display:2-split/4-split
Format:Overlay/Overlap

Audio meter 4-split diplay

**Character display**
Color:Yellow/Red/Black
Position:Top/Bottom
Size:Small/Large

| | | HQLM-3125X | HQLM-3120W | HQLM-1720WR |
|---|---|---|---|---|
| **Display Panel** | LCD Panel | a-Si TFT-LCD | | |
| | Number of Pixels | H4096×V2160 pixels | | H3840×V2160 pixels |
| | Pixel Pitch | 0.1704×0.1704 mm | | 0.09945×0.09945 mm |
| | Display Size | 17:9 W698×H368mm | | 16:9 W382xH215mm |
| | Brightness (panel) | 1,000cd/m$^2$ | 350cd/m$^2$ | 450cd/m$^2$ |
| | Contrast Ratio | 1,000,000:1 | 1500:1 | 800:1 |
| | Number of Display Colors | 1.07 billion colors | | 16.78 million colors |
| | Viewing Angle | 178° (up&down, left&right: CR≧10) | | |
| **Rating & Performance** | Color Temperature Setting | D65 / D93 / FILE 1 to 8 | | |
| | EOTF | ITU-R BT.2100, SMPTE ST.2084, 2.2, 2.4, 2.6, S-Log, S-Log3, ACES Proxy | | |
| | Color Space | ITU-R BT.2020*, ITU-R BT.709, DCI-P3 D65*, DCI-P3*, ACES*, Adobe RGB*, S-Gamut, S-Gamut3.Cine, Panel *Color space can not be fully displayed. | | |
| | Power Requirement | AC100 to 120 / 200 to 240V±10%, 50/60Hz | | |
| | Power Consumption | Approx.450W | Approx.150W | Approx.120W |
| | Ambient Temperature | 0°C to +35°C (32°F to +95°F) (20 to 85% humidity non-condensing) | 0°C to +40°C (32°F to +104°F) (20 to 85% humidity non-condensing) | |
| | Storage Temperature | -10°C to +50°C (14°F to +122°F) (10 to 85% humidity non-condensing) | -20°C to +60°C ( -4°F to +140°F) (5 to 85% humidity non-condensing) | -20°C to +60°C ( -4°F to +140°F) (20 to 85% humidity non-condensing) |
| | Dimensions | W762×H467×D172mm (W30×H18.39× D6.77 inch) | W750×H459×D107.2mm (W29.52×H18.07× D4.22 inch) | W428×H309×D145mm (W16.85×H12.17× D5.7 inch) |
| | Weight *Excluding stand | 30kg (66.14lbs) | 14.5kg (31.96lbs) | 8.5kg (18.74lbs) |
| **Video** | Input/Output — 12G-SDI | 2 BNC inputs / 2 BNC outputs (Active Loop Through) Max.70m with 5.5CUHD cable | | |
| | Input/Output — 3G-SDI/HD-SDI | 5 BNC inputs (2 shared with 12G-SDI) / 5 BNC outputs (Active Loop Through) | | |
| | Input/Output — HDMI | 1 input (HDCP2.2) | | |
| **Audio** | Display | Embedded Audio Level Meter Display (8ch) | | |
| | Speaker — Rating Output | 1W+1W or more | | |
| | Speaker — Analog Audio Output | ● (Stereo) | | |
| | 5.1ch Surround Down-mix Output | ● | | |
| | Headphone Output | ● | | |
| **Command Control** | Ethernet | ● | | |
| | Parallel Remote | ● | | |
| | Serial Remote (RS-485) | ● | | |
| | TSL (V3.1/V5.0) | ● | | |
| | USB Mouse | ● | | |
| | Infrared rays Remote (Controlled by RCT-30A) | ● | | |
| **Function** | Built-in Test Signal | ● (7 types) | | |
| | Marker | ● | | |
| | User Marker | ● (10 Scenes x 12 Markers) | | |
| | WFM (R/G/B/RGB/Y/Cb/Cr/YCbCr) | ● | | |
| | VITC | ● | | |
| | LTC | ● | | |
| | Vector Scope (VSC) | ● | | |
| | 4-split Screen | ● | | |
| | Auto Calibration | ● (future) | | |
| | UMD/IMD | ● | | |
| | Closed Caption(EIA/CEA-708) | ● | | |
| | HDR | ● | | |
| | U. SELECT (1-4) | ● | | |
| | Payload ID | ● | | |
| | 3D&1D LUT Correction | ● | — | |
| | ASC CDL (Picture quality adjustment) | ● | — | |
| | Gamut Marker | ● | — | |
| | Uniformity Function | ● | — | |

● : Standard

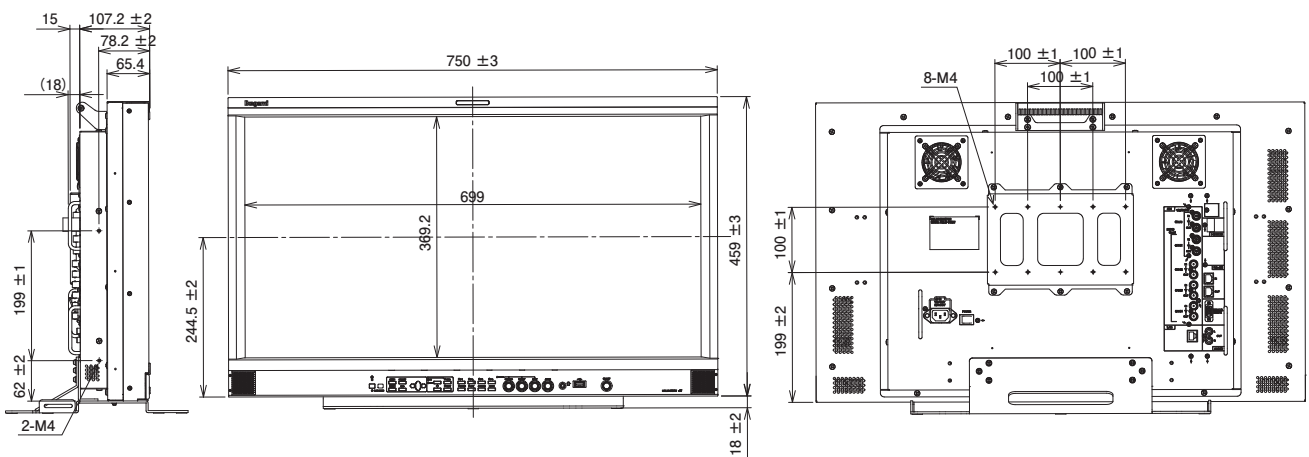| | | HLM-2460W | HLM-1760WR | HLM-960WR | HLM-5013WR | HLM-7012WR |
|---|---|---|---|---|---|---|
| **Display Panel** | Type of Panel | LCD / LED Backlight | | | | |
| | Number of Pixels — Effective Number of Pixels | Full HD (16:9) | | | WVGA (15:9) 800×480 | |
| | Number of Pixels in 16:9 | 1920×1200 | 1920×1080 | | 800×450 | |
| | Display Size (Diagonal) — Display Size(Viewing Area) | 24.0" | 16.5" | 9" | 5.0" | 7.0" |
| | in 16:9 | 24.0" | 16.5" | 9" | 4.9" | 6.9" |
| | Brightness (panel) | 400cd/m² | 450cd/m² | 400cd/m² | 180cd/m² | 290cd/m² |
| | Contrast Ratio (typical) | 1500:1 | | 700:1 | 500:1 | 1000:1 |
| | Number of Display Colors | 1.07 billion colors / 10bit | | 16.77 million colors (RGB 8bit FRC) | 16.77 million colors / 8bit | |
| | Viewing Angle (up & down, left & right typical) | 178° | | | 176° | |
| **Rating & Performance** | Power Requirement — AC | AC100-120V / AC200-240V | | | AC100-240V (When using AC Adaptor) | |
| | DC | — | DC12V (10.5-18V) | | DC12V (10-19V) | |
| | Power Consumption (max) — AC (Standard Spec) | 66W | 40W | 28W | 1.7A | |
| | DC (Standard Spec) | — | 36W / 3.2A | 27W / 2.4A | 34W | 30W |
| | Ambient Temperature | 0°C to +40°C (32°F to +104°F) (20 to 85% humidity non-condensing) | | | 0°C to +40°C (32°F to +104°F) (30 to 85% humidity non-condensing) | |
| | Storage Temperature | -20°C to +60°C (-4°F to +140°F) (5 to 85% humidity non-condensing) | | | -20°C to +60°C (-4°F to +140°F) (0 to 90% humidity non-condensing) | |
| | Dimensions | W562×H398×D86mm (W22.1×H15.7×D3.4 inch) | W428×H301×D80mm (W16.9×H11.9×D3.2 inch) | W222.4×H173×D69.5mm (W8.8×H6.8×D2.8 inch) | W481×H88.1×D56.2mm (W18.88×H3.5×D2.22 inch) | W481×H132.6×D56.2mm (W18.88×H5.25×D2.22 inch) |
| | Rack-mountable Space | 9U | 7U | 4U | 2U | 3U |
| | Weight *Excluding stand | Approx 9.1kg (20.1 lbs) | Approx 5.8kg (12.79 lbs) | Approx 1.7kg (3.75 lbs) | Approx 1.7kg (3.74 lbs) | Approx 2.1kg (4.63 lbs) |
| | Supporting Formats — SDTV | 480i/59.94, 576i/50, 480p/59.94*, 576p/50* (*HDMI only) | | | 480i/59.94, 575i/50 | |
| | HDTV | 1035i/59.94/60*, 1080i/50/59.94/60 1080p/23.98/24/25/29.97/30/50/59.94/60 1080psF/23.98/24/29.97/30 720p/23.98/24/25/29.97/30/50/59.94/60(*SDI only) | | | 1080i/59.94/60 1080p/23.98/24/25/29.97/30/50/59.94/60 1080psF/23.98/24/29.97/30 720p/23.98/24/25/29.97/30/50/59.94/60 | |
| **Video** | Input/Output — HD/SD-SDI | ● 2 Inputs, 2 Outputs (or 4 Inputs, 0 Output) *1 | | | ● 2 Inputs, 1 Output *2 | |
| | 3G-SDI | | | | | |
| | VBS | ● 1 Input/Output (Loop Through) | | | — | |
| | HDMI | ● 1 (HDCP) | | | — | |
| **Audio** | Input — Analog Audio Input | ● (Stereo mini jack) | | | — | |
| | Display — Embedded Audio Level Meter Display | ● (8ch) | | | ● (16ch) | |
| | Speaker — Rating Output | 1W+1W | 1W | | — | |
| | Analog Audio Output | ● (Stereo) | ● (Monaural) | | — | |
| | Embedded Digital Audio Output | ● (Stereo) | ● (Monaural) | | — | |
| | 5.1ch Surround Down-mix Output | ● | | | — | |
| | Headphone Output | ● | | | — | |
| **Command Control** | Ethernet | ● | | | — | |
| | Parallel Remote | ● | | | | |
| | Serial Remote (RS-485) | ● | | | — | |
| | TSL (V3.1/V5.0) | ● | | | — | |
| | USB Mouse | ● | | | — | |
| | Infrared rays Remote (Controlled by RCT-30A) | ● | | | — | |
| **Function** | Display — Built-in Test Signal | ● (7 types) | | | | |
| | Marker | Safety Marker: 100% + 80~99% (Every 1% step) Area Marker:4:3 (at 16:9), 13:9, 14:9, 15:9, 16:9 (at 4:3), 1.85:1, 2.35:1 Cross Marker:Cross, 5×5, 10×10 | | | Safety Marker:100%+80~99%(Every 1% step) Area Marker:4:3 (at 16:9), 13:9, 14:9, 15:9, 16:9 (at 4:3), 1.85:1, 2.35:1 | |
| | User Marker | ● (10 Scenes × 12 Markers) | | | — | |
| | Shadow | Area Marker:4:3 (at 16:9), 13:9, 14:9, 15:9, 16:9 (at 4:3) Shadow Level:0%, 20%, 40%, 60% | | | — | |
| | WFM Display | ● | | | | |
| | Time Code | ● (LTC, VITC, HD-SDI) | | | ● (LTC / VITC1 / VITC2) | |
| | Vector Scope (VSC) | ● | | | | |
| | 2 Screen Display | Still Image & Moving Picture, P in P, Side by Side, Wipe | | | — | |
| | Full Screen Capture Display | ● (1920×1080) | | | — | |
| | UMD/IMD | ● | | | — | |
| | Video & TEST Signal Mix | ● | | | — | |
| | Zoom Function | ● | | | — | |
| | Dot by Dot Display | ● | | | — | |
| | HDR | ▲ | | | — | |
| | Others — Rotary Encoder | ● | | | — | |
| | Operating Time Display | ● | | | — | |
| | Color Temp Memory | ● 6500K / 9300K / 8 User Settings | | | ● 6500K / 9300K / 1 User Setting | |
| | Color/Mono Switching | ● | | | | |
| | VBS COMB Filter | ● | | | — | |
| | APT | ● (ON/OFF, Frequency) | | | ● | |
| | Backlight Dimmer | ● | | | | |
| | R/G/B Screen Display ON/OFF | ● | | ● (MENU) | — | |
| | Scan Selection | NORMAL / UNDER | | | NORMAL / OVER / 4:3ZOOM | |
| | Aspect Selection | 4:3/16:9 (SDTV) | | | AUTO / 4:3 / 16:9 | |
| | I/P Conversion Mode | FIELD | | | FRAME | |
| | External Memory | ● (USB, Max. 100 frames) | | | — | |
| | Saving Still Image (in USB) | ● | | | — | |
| | Function Key | ● 4 | | | — | |
| | SDI Channel Lock Setting | ● | | | — | |
| | USB Memory Version-up | ● | | | — | |
| | Closed Caption | ● | | | — | |

● : Standard, ▲ : Option
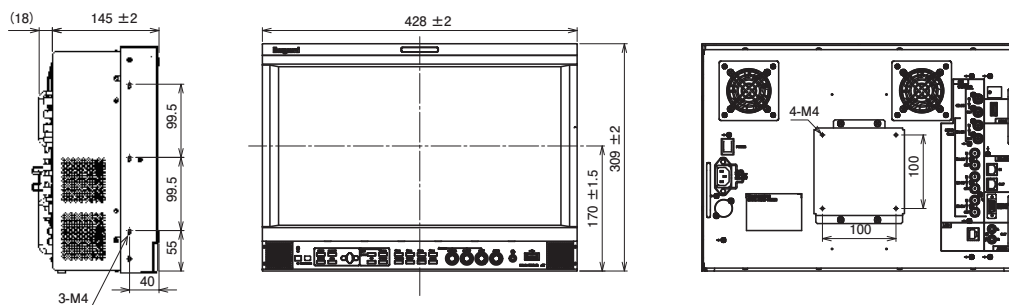*1 SMPTE425M-A/B, YPBPR, 4:2:2  *2 Supports after MPU(Ver 01.04) and FPGA(Ver 02)
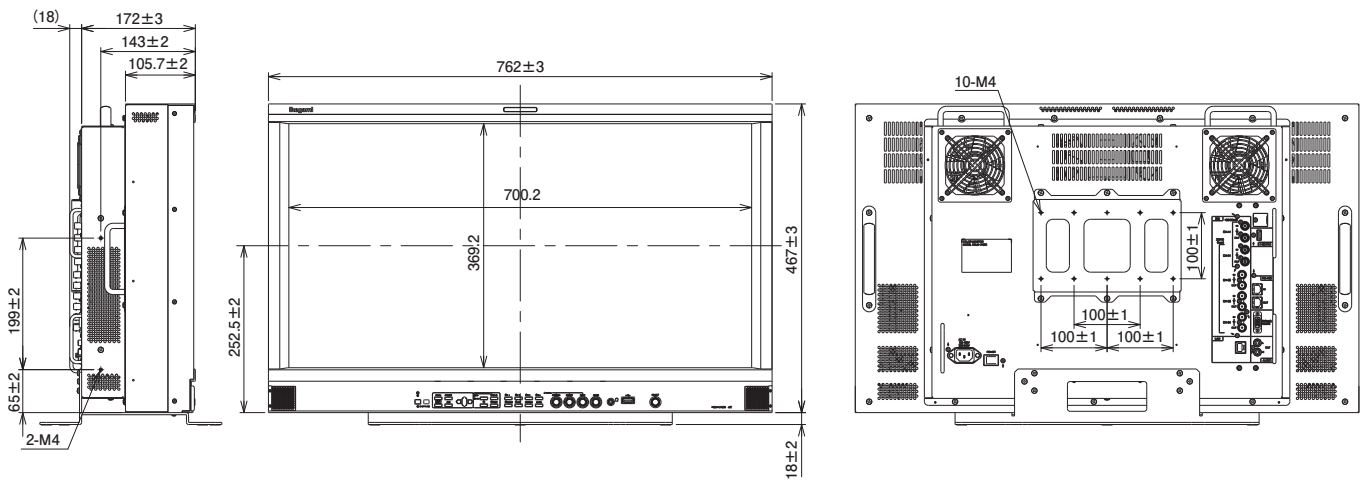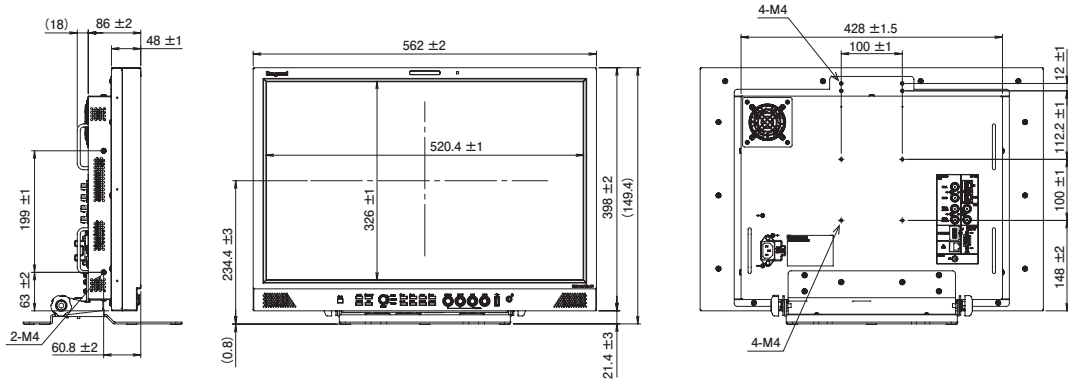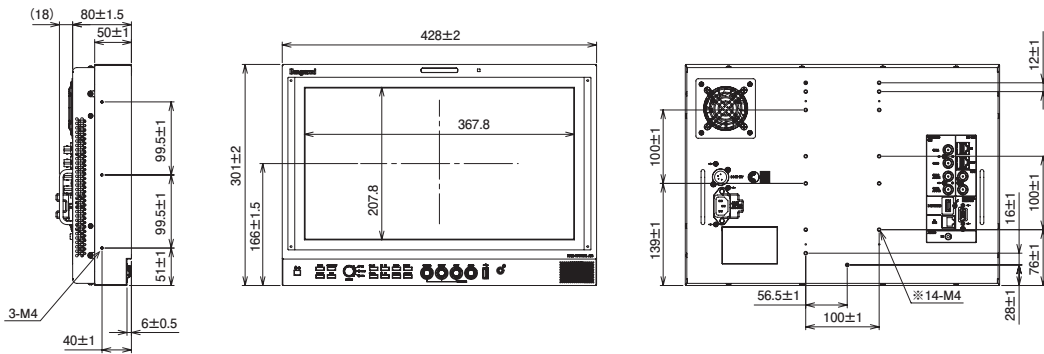
## HQLM-3125X



## HQLM-3120W



## HQLM-1720WR



Unit:mm

## HLM-2460W



## HLM-1760WR



## HLM-960WR



## HLM-5013WR



## HLM-7012WR



Unit:mm

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# Options

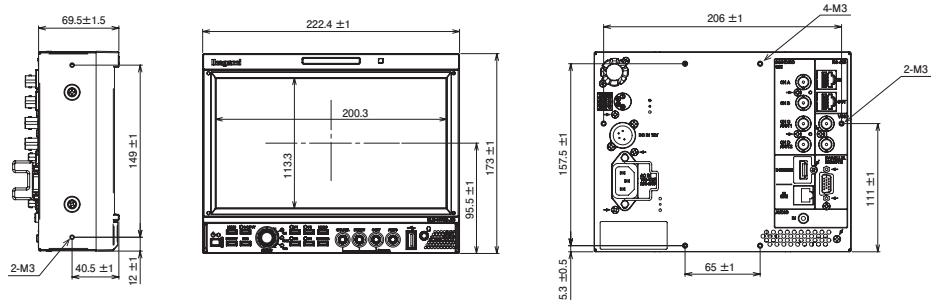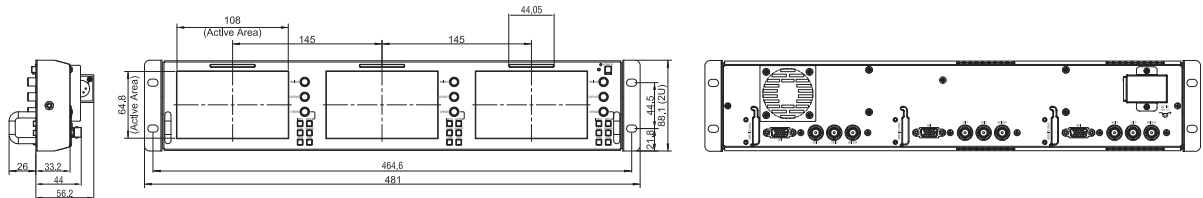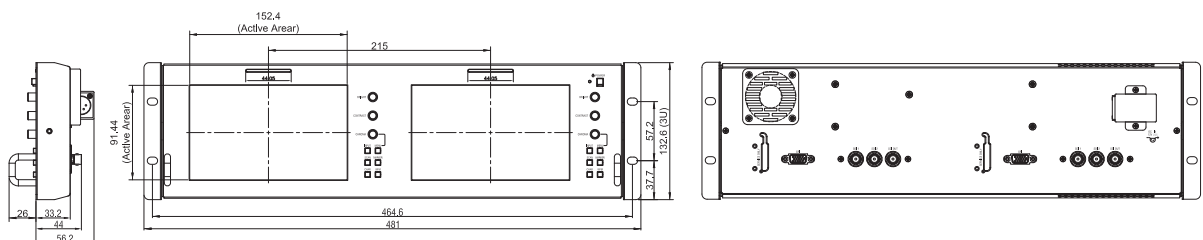| Category | Model | Description | HQLM-3125X | HQLM-3120W | HQLM-1720WR | HLM-2460W | HLM-1760WR | HLM-960WR | HLM-5013WR | HLM-7012WR | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Remote Controller | RCT-30A | Infrared Remote Controller | ● | ● | ● | ● | ● | ● | | | |
| | SRC-400 | Serial Remote Controller | ● | ● | ● | ● | ● | ● | | | Controls up to 96 motnitors with loop through connection |
| Rackmount Adaptor | RS-2450T | Rack Mount Adaptor | | | | ● | | | | | Fixed Tilt Angle Type (Made to order item) |
| | RS-1770 | 19-inch Rack Mount Adaptor | | | | | ● | | | | Fixed type, 7RU height |
| | RS-1770T | 19-inch Rack Mount Adaptor with Tilt Mechanism | | | | | ● | | | | 4-Step Angle, 7RU height |
| | DR-960 | Dual Rack Mount Adaptor | | | | | | ● | | | 4RU Height |
| | DR-960T | Dual Rack Mount Adaptor (Tilt type) | | | | | | ● | | | 5RU Height (Made to order item) |
| | BP-960 | Blank Panel | | | | | | ● | | | for DR-960 |
| | BP-960T | Blank Panel (Tilt type) | | | | | | ● | | | for DR-960T (Made to order item) |
| Stand | STD-3125T | Stand with Tilt Mechanism | ● | | | | | | | | (Made to order item) |
| | STD-3120T | Stand with Tilt Mechanism | | ● | | | | | | | (Made to order item) |
| | STD-1720 | Monitor Stand | | | ● | | | | | | |
| | STD-1720T | Stand with Tilt Mechanism | | | ● | | | | | | Tilt (Axis:Center of Monitor):Up 15 degree/Down 8 degree |
| | STD-1760 | Monitor Stand | | | | | ● | | | | |
| | STD-1760T | Stand with Tilt Mechanism | | | | | ● | | | | Tilt (Axis:Center of Monitor):Up 15 degree/Down 15 degree |
| | STD-1722M | VESA Arm Stand | | | | | ● | | | | |
| | STD-960 | Monitor Stand | | | | | | ● | | | |
| | STD-960T | Stand with Tilt Mechanism | | | | | | ● | | | Tilt (Axis:Center of Monitor):Up 10 degree/Down 10 degree |
| Tripod Mount Plate | AT-900 | Tripod Mount Plate | | | | | | ● | | | 1/4 & 3/8 inch hole plate |
| Handle | GR-1720 | Handle | | | ● | | | | | | |
| | GR-1770 | Handle | | | | ● | ● | | | | |
| | GR-904 | Handle | | | | | | ● | | | |
| LCD Protection Cover | PP-1760 | Screen Protection Cover | | | | | ● | | | | Anti-Refelection Coating |
| | PP-960 | Screen Protection Cover | | | | | | ● | | | Anti-Refelection Coating |
| Battery Bracket | BB-1750A | Battery Bracket (Anton Bauer Type) | | | | | ● | | | | |
| | BB-1750V | Battery Bracket (V-Mount Type) | | | | | ● | | | | |
| | BB-904A | Battery Bracket (Anton Bauer Type) | | | | | | ● | | | |
| | BB-904V | Battery Bracket (V-Mount Type) | | | | | | ● | | | |
| Hood | MH-1750 | Folding Hood | | | | | ● | | | | |
| | MH-904 | Folding Hood | | | | | | ● | | | |
| Carrying Case | CC-3125 | Hard Carrying Case | ● | | | | | | | | (Made to order item) |
| | CC-3120 | Hard Carrying Case | | ● | | | | | | | (Made to order item) |
| | CC-2460 | Hard Carrying Case | | | | ● | | | | | (Made to order item) |
| | CC-1760 | Hard Carrying Case | | | | | ● | | | | (Made to order item) |
| | CC-960 | Hard Carrying Case | | | | | | ● | | | |
| | SO-016 | Soft Carrying Case | | | | | | ● | | | |
| | CC-5013 | Hard Carrying Case | | | | | | | ● | | (Made to order item) |
| | CC-7012 | Hard Carrying Case | | | | | | | | ● | (Made to order item) |

## Remote Controller

**RCT-30A** Infrared Remote Controller

**SRC-400** Serial Remote Controller

## Rackmount Adaptor

**RS-1770/1770T** 19-inch Rack-mount Adaptor

**DR-960** 9-inch Rack-mount Adaptor

**BP-960** Blank Panel for DR-960

## Handle

**GR-1770** Handle

**GR-904** Handle

## Stand

**STD-1760** Stand

**STD-1760T** Tilt Stand

**STD-1722M** VESA Arm Stand

**STD-960** Stand

**STD-960T** Tilt Stand

## Battery Bracket

**BB-1750A** Battery Bracket (Anton Bauer Type)

**BB-1750V** Battery Bracket (V-Mount Type)

**BB-904A** Battery Bracket (Anton Bauer Type)

**BB-904V** Battery Bracket (V-Mount Type)

## LCD Protection Cover/Hood/Carrying Case

**PP-1760** LCD Protection Cover

**PP-960** LCD Protection Cover

**MH-1750** Collapsible Hood

**MH-904** Collapsible Hood

**CC-1760** Hard Carrying Case

**SO-016** Soft Carrying Case

**CC-5013/7012** Hard Carrying Case

Design and specifications are subject to change without notice.

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