Ikegami

MONITORS

HQLM-3125X — 31-inch 4K/HD Multi-format LCD Master Monitor

HDMI **4K** **HDR**

NEW

The HQLM-3125X employs an LED-backlight 4,096×2,160 pixel 10-bit resolution UHD LCD panel with a contrast ratio of 1,000,000:1. Single-channel 3G-SDI×5, 3G/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. A wide critical viewing angle of 178°(horizontal/vertical) allows users to see accurately displayed images from any angle. 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)	Payload ID Analysis	HD/UHD (2K/4K)	Remote (Parallel)	Remote (Ethernet)	Remote (RS485)	Marker	Uniformity function
ASC CDL*	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						

ᵂ750×ᴴ459×ᴰ225mm (ᵂ29.52×ᴴ18.07×ᴰ8.86inches)	30kg (66.14 lbs)	∗ ASC:The American Society of Cinematographers Color Decision List

Evolutionary Features for HQLM Series

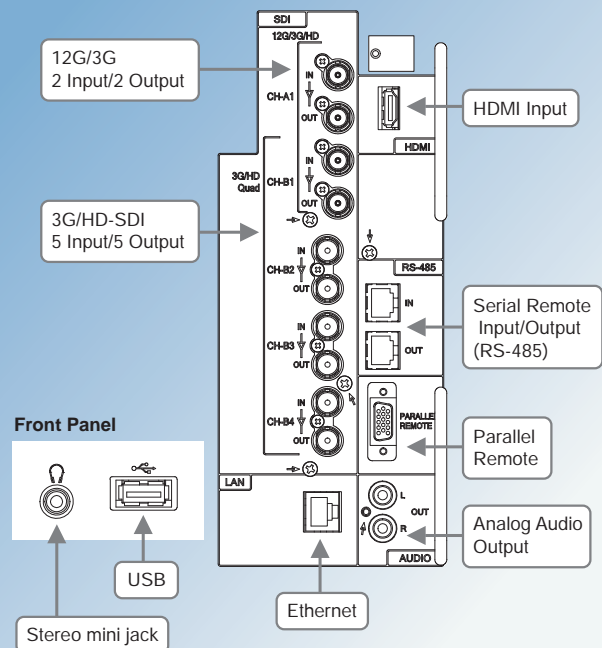### HDR — High Dynamic Range

HDR

SDR

The HDR will comply with Hybrid Log-Gamma (HLG) and SMPTE ST 2084(PQ), among others, using direct backlight (brightness 1,000nits). 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/3G 2 Input/2 Output
- 3G/HD-SDI 5 Input/5 Output
- HDMI Input
- Serial Remote Input/Output (RS-485)
- Parallel Remote
- Analog Audio Output

Front Panel

- Stereo mini jack
- USB
- Ethernet

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

HDMI **4K** **HDR**

NEW

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 ID Analysis	

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**

NEW

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 ID Analysis	

W428×H309×D145mm (W16.85×H12.17×D5.7inches)	8.5kg (18.74 lbs)

HEM-2570W
25-inch Full HD Pixel Multi-format OLED Master Monitor

High-End Broadcast OLED Monitor

The HEM-2570W employs a 25-inch full 1920×1080 pixel Organic Light Emitting Diode (OLED) panel, and achives wide dynamic range, wide viewing angle, superb quick motion response and true color reproduction. It incorporates many useful standard functions like 10 scene files for user markers, embedded audio output, etc. It also achieves a compact size (same as LCD monitors) with its 102.8mm depth. It is a master monitor designed with Ikegami's new concept having both the high performance of a master monitor and the operating functions of an all purpose monitor.

25-inch Full HD	1920×1080 pixel	Viewing Angle 178degree(H/V)	Contrast Ratio 5000:1 *1	AC:135W (max) *2			
VBS Input	Y,P$_B$,P$_R$/ RGB Input ▲	3G/HD/SD(4:2:2) -SDI Input	Embedded Analog Audio Output	Embedded Audio Meter	DVI-D Input	Analog PC Iutput ▲	Analog Audio 2ch Iutput
5.1ch Surround Down-mix	ASP-100 ▲ *4						

4:3/16:9	Remote (Parallel)	Remote (Wireless)	Remote (Mouse)	Remote (RS485)	Marker	User Marker (10 scenes)	Shadow
7-Test Signal Generator	10-Color temperature-memory	Stereo Speaker	Stereo Headphone	VITC Display	WFM Monitoring Display	Split Screen/ Full Screen Comparison	Dot-by-Dot Display
Vector Scope Display	Mouse Menu Control	USB Memory (Data/Picture)	Interlace Display	2Times/4Times Zoom	Mix Test Signal	Operation Panel Lighting	Closed Caption *3

^{W}585×^{H}398×^{D}102.8mm (^{W}23.1×^{H}15.7×^{D}4.1inches)	Approx 11.4kg (25.13lbs) *

*1 EIAJ ED-2810 dark place, partial lighting contrast
*2 Tentative figure
*3 Supports after MPU(Ver 01.24) and FPGA(Ver 06)
*4 Supports after Rev2

* Excluding Options and Stand

HEM-1770WR
17-inch Full HD Pixel Multi-format OLED Master Monitor

High-End Broadcast OLED Monitor

The HEM-1770WR employs a 17-inch full 1920×1080 pixel Organic Light Emitting Diode (OLED) panel, and achives wide dynamic range, wide viewing angle, superb quick motion response and true color reproduction. It incorporates many useful standard functions like 10 scene files for user markers, embedded audio output, etc. It has a compact space saving size with 98mm depth and is light weight, allowing use in various places. Supports AC or DC powering, battery operation is avaialble using an optional battery bracket. It is Ikegami's new style of master monitor having both the high performance of a master monitor and the operating functions of an all purpose monitor.

17-inch Full HD	1920×1080 pixel	Viewing Angle 178degree(H/V)	Contrast Ratio 5000:1 *1	AC:81W (max) DC:76W (max) *2			
VBS Input	Y,P$_B$,P$_R$/ RGB Input ▲	3G/HD/SD(4:2:2) -SDI Input	Embedded Analog Audio Output	Embedded Audio Meter	DVI-D Input	Analog PC Iutput ▲	
Analog Audio 2ch Iutput	5.1ch Surround Down-mix	ASP-100 ▲ *4					

4:3/16:9	Remote (Parallel)	Remote (Wireless)	Remote (Mouse)	Remote (RS485)	Marker	User Marker (10 scenes)
Shadow	7-Test Signal Generator	10-Color temperature-memory	Stereo Speaker	Stereo Headphone	VITC Display	WFM Monitoring Display
Split Screen/ Full Screen Comparison	Dot-by-Dot Display	Vector Scope Display	Mouse Menu Control	USB Memory (Data/Picture)	Interlace Display	2Times/4Times Zoom
Mix Test Signal	Operation Panel Lighting	Closed Caption *3				

^{W}428×^{H}301×^{D}98mm (^{W}16.9×^{H}11.9×^{D}3.9inches)	7RU	Approx 7.5kg (16.53lbs) *

*1 EIAJ ED-2810 dark place, partial lighting contrast
*2 Tentative figure
*3 Supports after MPU(Ver 01.24) and FPGA(Ver 06)
*4 Supports after Rev2

* Excluding Options and Stand

▲ Option

Evolutionary Features of the HEM-2570W & the HEM-1770WR OLED Master Monitors

● OLED Features

◆ High Contrast and Fast Quick Motion Response

OLED is a light emitting device, as well as an LED, but unlike the flat picture image projected from the rear of an LCD panel, it is similar to the picture image produced by reflection of natual light we are always looking at with our eyes, realistically reproducing the brightness of the twinkle of the stars, the black color of a grand piano, etc.

OLED | LCD
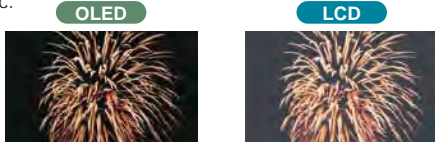
Also, its organic emitters instantly react to the change of current when video level is changed, it can achieve the same performance as a CRT in motion response even when shooting objects moving quickly in sports, etc.

◆ Interlace Display Function

In the case of the OLED monitor, there is no I/P conversion displaying "BLACK" between the lines, the same as with a CRT monitor. It is possible to directly display the input signal as it is without passing through an extra interpolation process.
It is also possible to reproduce the microscopic noise and almost invisible flicker which could only be reproduced by a CRT monitor, with the same performance as a CRT.

※1080i only

First Field

Second Field
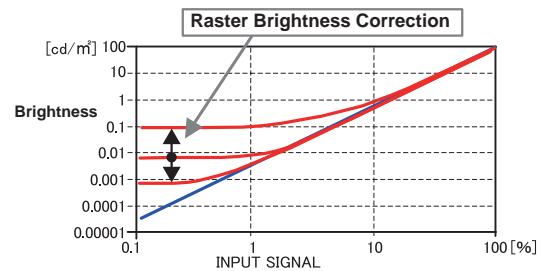
Insert black in between lines
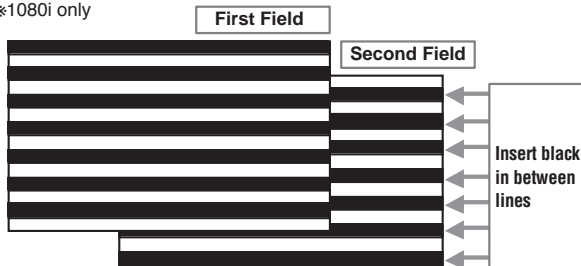
◆ CRT Gamma Function

With an OLED panel, black does not emit, so, it is possible to reproduce exceedingly true black color.
Ikegami's OLED monitors have a CRT Gamma Mode setting approximating the gamma of the CRT monitor, providing images with same feeling as previous CRT monitors.

OLED | CRT | LCD

$[cd/m^2]$

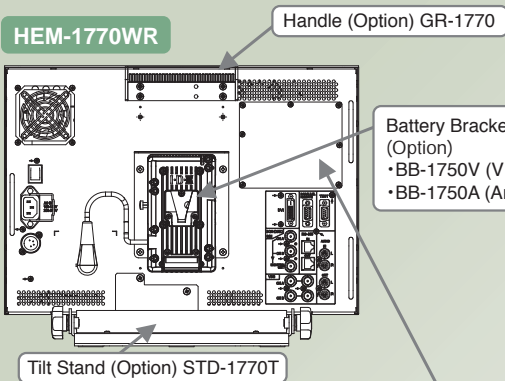Brightness

INPUT SIGNAL [%]
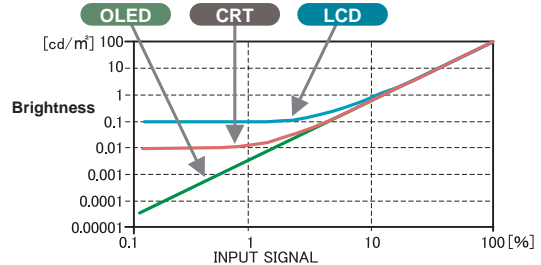
◆ Raster Brightness Correction for CRT Gamma

In the case of a CRT monitor, the raster brightness is slightly different depending on the type of CRT.
Ikegami's OLED monitors allow users to voluntarily correct the setting of CRT gamma according to the raster brightness of the master monitor being used at present.
The Raster Brightness Correction function allows comfortable transition when upgrading from CRT to the new OLED technology.
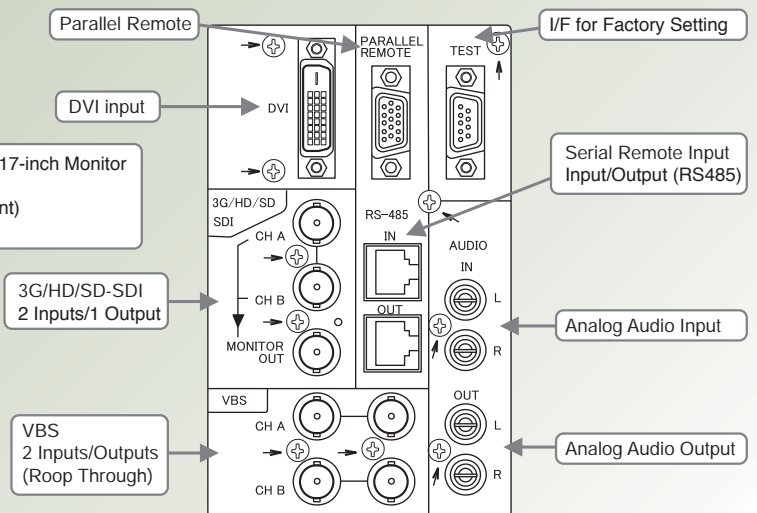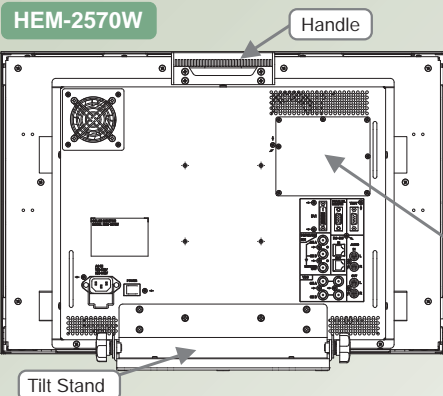
Raster Brightness Correction

$[cd/m^2]$

Brightness

INPUT SIGNAL [%]

● Supports various Inputs/Outputs

HEM-1770WR

Handle (Option) GR-1770

Battery Bracket for 17-inch Monitor (Option)
・BB-1750V (V mount)
・BB-1750A (Anton)

Tilt Stand (Option) STD-1770T

HEM-2570W

Handle

Tilt Stand

Parallel Remote

PARALLEL REMOTE

TEST

I/F for Factory Setting

DVI input

DVI

3G/HD/SD SDI

CH A

CH B

MONITOR OUT

RS-485

IN

OUT

AUDIO

IN

L

R

OUT

L

R

3G/HD/SD-SDI 2 Inputs/1 Output

Serial Remote Input Input/Output (RS485)

Analog Audio Input

Analog Audio Output

VBS

CH A

CH B

VBS 2 Inputs/Outputs (Roop Through)

Slot for Optional Modules
・CM-70 (Analog RGB/YPbPr, PC Input)
・SP-70 (Supports two SFP modules)

COMPONENT

Y/G

Pb/B

Pr/R

PC

SYNC

CM-175

CM-175

CM-70 | SP-70

<Available SFP Modules>
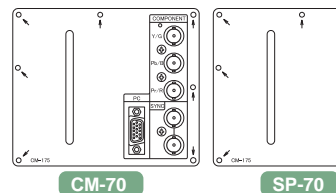
Made by Embrionix
・EB34TD1R-SN HDMI Module 1 input
・EB30HD2R-LN 3G-SDI Module 2 Inputs
・EB30HDRT-LN 3G-SDI Module 1 Input/ 1 Output

※ HDCP is not available.
Other type of modules are under consideration.

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

HDMI High-End Broadcast LCD Monitor

NEW

The HLM-2460W has a 24-inch Full HD 1920×1200 Pixel 400cd, 10-bit resolution LCD panel.
This models offer very narrow front-to-back dimensions, light weight and low power consumption.
Multi-format SDI, 3G-SDI, HDMI, Ethernet 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.
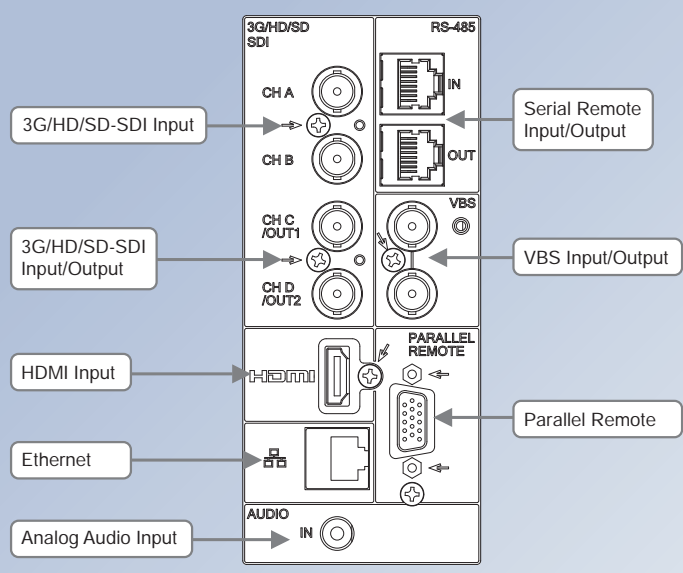
24-inch Full HD	WUXGA (1920×1200 pixel)	66W	Viewing Angle 178degree(H/V)	Contrast Ratio 1500:1	AC-Input			
VBS Input	3G/HD/SD(4:2:2)-SDI Input(max.4 Input)	Embedded Audio Meter	Analog Audio 2ch Iutput	5.1ch Surround Down-mix	HDMI			
4:3/16:9	Remote (Parallel)	Remote (Mouse)	Remote (RS485)	Remote (Wireless)	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
W562×H398×D86mm (W22.1×H15.7×D3.4inches)	9.1g (20.1 lbs)							

HLM 60series Connector Panel

●For field use

HLM-960WR

3G/HD/SD SDI — CH A / CH B / CH C /OUT1 / CH D /OUT2

RS-485 — IN / OUT

3G/HD/SD-SDI Input

3G/HD/SD-SDI Input/Output

HDMI Input

Ethernet

Analog Audio Input

Serial Remote Input/Output

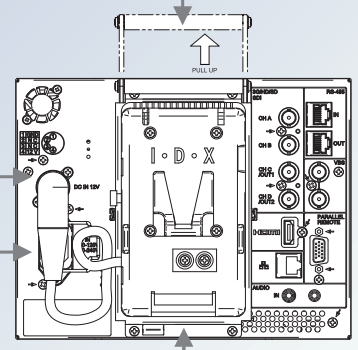VBS Input/Output

PARALLEL REMOTE — Parallel Remote

AUDIO — IN

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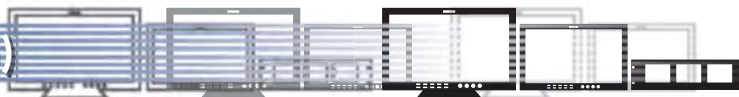(Handle only :GR-904 / Option).

PULL UP

DC Input DC 12V

AC Input AC100-120V AC200-240V

I · D · X

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

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

HDMI — High-End Broadcast LCD Monitor

NEW

The HLM-1760WR has a 17-inch Full HD 1920×1080 Pixel 450cd, 10-bit resolution LCD panel. This models offer very narrow front-to-back dimensions, light weight and low power consumption. Multi-format SDI, 3G-SDI, HDMI, Ethernet 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 (max) DC:36W	Viewing Angle 178degree(H/V)	Contrast Ratio 1500:1	AC-Input	DC-Input
Battery						

VBS Input	3G/HD/SD(4:2:2)-SDI Input(max.4 Input)	Embedded Audio Meter	Analog Audio 2ch Output	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		

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 — High-End Broadcast LCD Monitor

NEW

The HLM-960WR is a highly compact multi-format LCD monitor with a 9-inch Full HD 1920×1080 pixel 400cd 8-bit resolution LCD panel. This models offer very narrow front-to-back dimensions, light weight and low power consumption.
Multi-format SDI, 3G-SDI, HDMI, Ethernet 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						

VBS Input	3G/HD/SD(4:2:2)-SDI Input(max.4 Input)	Embedded Audio Meter	Analog Audio 2ch Output	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		

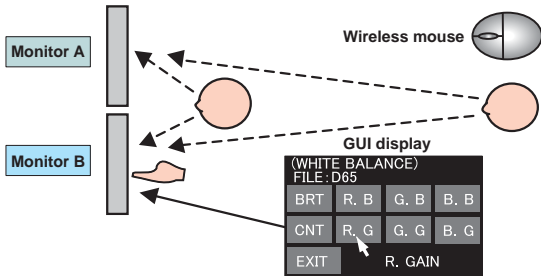| W222.4×H173×D69.5mm (W8.8×H6.8×D2.8inches)	4RU	Approx 1.7kg (3.75 lbs)

Common features for HEM-1770WR, HEM-2570W, HLM 60 series

White balance adjustment Assist Function

The monitors are equipped with various ways to adjust the white balance easier.
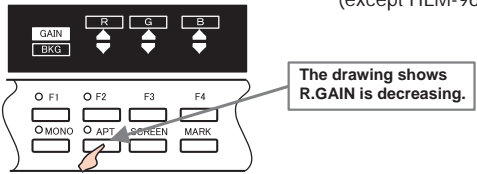
● Adjustment by wireless Mouse

A GUI Display with pointer for white balance setting will appear on the screen, and the color temperature can be adjusted by using a wireless mouse.(HEM series only)

Monitor A
Monitor B
Wireless mouse

GUI display
(WHITE BALANCE)
FILE:D65
BRT R. B G. B B. B
CNT R. G G. G B. G
EXIT R. GAIN

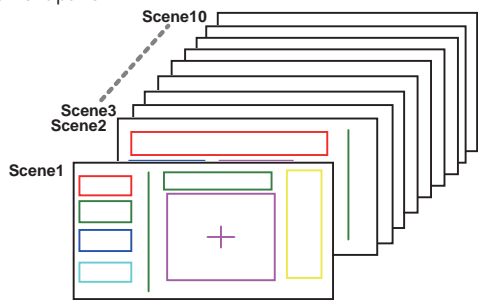#### ● Adjustment by assignment of the front panel controls

By assigning the color temperature adjustment functions to each of 8 controls on the front panel, white balance can be done easily.
(except HLM-960WR)

The drawing shows R.GAIN is decreasing.

High performance 12-BIT VIDEO PROCESSING Engine

In order to reproduce true 10-bit smooth gradation, a cutting-edge 12-bit video processor is incorporated. It greatly increases gradation levels, resulting in much smoother and more natural images, for example in the skin tone or the reproduction of clouds.(HEM series only)

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.(HEM series only)

-2%, 0%, +2% of pluge signals are embedded.
-2% 0% +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.
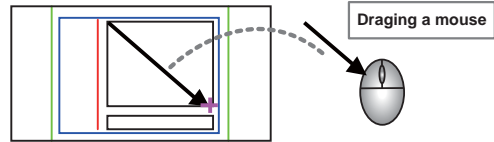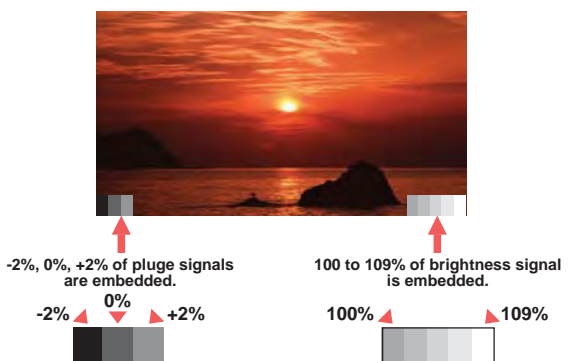
Use Maker Function (Patent Pending)

● 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.

Draging 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
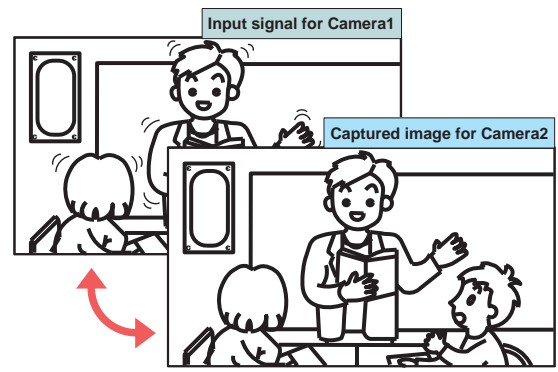
● Auto Switching

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.
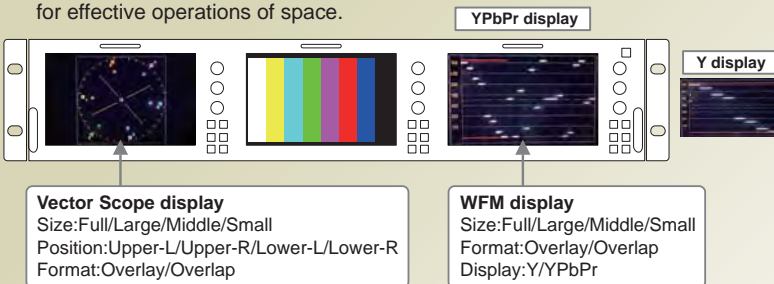
Dual 7-inch Wide	800×480 pixel	AC:30W DC:26.4W/2.2A
Viewing Angle 160degree(H/V)	Contrast Ratio 1000:1	
3G/HD/SD(4:2:2)-SDI Input	Embedded Audio Meter	
4:3/16:9	Remote (Parallel)	Marker
3-Color temperature-memory	VITC/LTC Display	WFM Monitoring Display
Vector Scope Display	User Display	
W481×H132.6×D56.2mm (W18.88×H5.25×D2.22inches)	3RU	Approx.2.1kg (4.63lbs)

Feature for HLM-5013WR/HLM-7012WR

● WFM & Vector Scope display

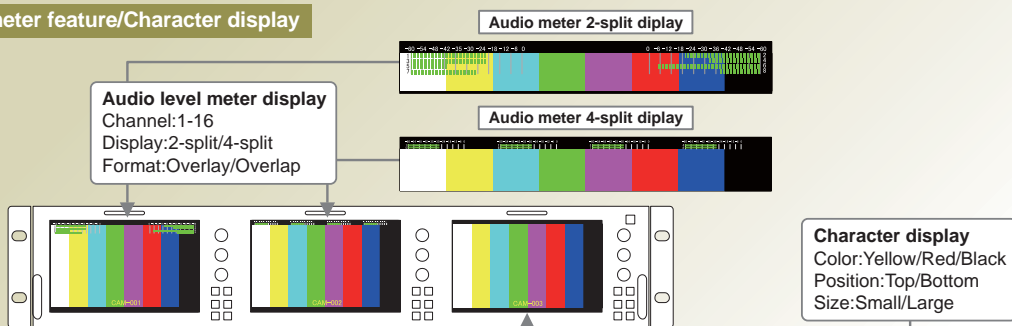※ Below Images are for HLM-5013WR, HLM-7012WR contains similar features.

(1) Full screen WFM & Vector Scope for effective operations 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

8

ASP-100 — Auto Setup Probe

The ASP-100 is an auto setup probe that allows automatic white balance adjustment for a selected color temperature and measurements of color temperature and luminance on the HEM Series of OLED Monitors.

For HEM Series Monitors

Simply connect the ASP cable to USB interface

Monitor	Integrated Rev# of ASP-100
HEM-1770WR	after Rev2
HEM-2570W	after Rev2

Features

(1) Automatic white balance adjustments by color temperature file
The probe automatically adjusts white balance at multiple luminance levels to one of 4 user selectable color temperature files (6500K, 9300K, and 2 user files).
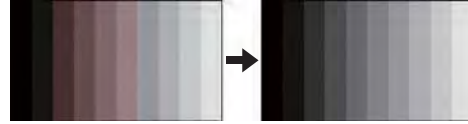
(2) Measurement Mode
This Mode allows measurement of color temperature on the monitor, storing the measured data and making adjustments on multiple monitors for same color temperature.

(3) PC-free operation
Automatic adjustment software is programmed in a monitor. Simply connect the ASP cable to the monitor USB connector. No personal computer is required.

Specifications

ASP-100		
	Auto setup	: 6500K, 9300K, User files (2 files)
	Measurement	: Luminance and chromaticity (x, y)
	Size	: 71(W)✕111(H)✕35(D)mm
	Weight	: 100g
	Interface	: USB2.0

Remote Controller

SRC-400
Serial Remote Controller

RCT-30A
Infrared Remote Controller

Auto Setup Probe

ASP-100
Auto Setup Probe Unit

Rackmount Adaptor

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

DR-960
9-inch Rack-mount Adaptor

BP-960
Blank Panel for DR-960

Stand

STD-1770
Stand

STD-1770T
Tilt Stand

STD-1760
Stand

STD-1760T
Tilt Stand

STD-1722M
VESA Arm Stand

STD-960T
Tilt Stand

STD-960
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)

Handle

GR-1770
Handle

GR-904
Handle

Carrying Case/Hood

CC-1760
Hard Carrying Case

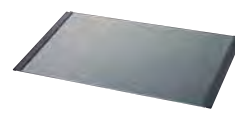CC-5013/7012
Hard Carrying Case

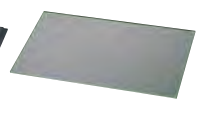SO-016
Soft Carrying Case

MH-1750
Collapsible Hood

MH-904
Collapsible Hood

PP-1760
LCD Protection Cover

PP-960
LCD Protection Cover

Model	Description	HEM-2570W	HEM-1770WR	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
Video/Audio Module									
SP-70	SFP I/F Module	●	●						Expansion module to equip the SFP I/F module. Two SFP modules can be equipped. *can not co-reside with CM-70
CM-70	Analog RGB/YPbPr/PC Input Module	●	●						1ch Y, P_B, P_R or RGB Input, 1ch loop through EXT SYNC, 1ch Analog PC Input. *can not co-reside with SP-70
Auto Setup Probe									
ASP-100	Auto Setup Probe Unit	●	●						*1
Rackmount Adaptor									
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 Pane l(Tilt type)					●			for DR-960T (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
RS-2450T	Rackmount Adaptor			●					Fixed Tilt Angle Type (Made to order item)
Stand									
STD-1760	Monitor Stand				●				
STD-1760T	Stand with Tilt Mechanism				●				Tilt (Axis:Center of Monitor):Up 15 degree/Down 15 degree
STD-1770	Monitor Stand		●						
STD-1770T	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-1770	Handle		●	●	●				New: GR-1720 Handle for HQLM-1720WR is available
GR-904	Handle					●			
LCD Protection Cover									
PP-1770	Protection Cover for HEM-1770WR		●						Anti-Refelection Coating
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-2570H	Folding Hood (Hard Type)	●							(Made to order item)
MH-2570	Folding Hood	●							(Made to order item)
MH-1750	Folding Hood		●		●				
MH-904	Folding Hood					●			
Carrying Case									
CC-E25	Hard Carrying Case	●							(Made to order item)
CC-E17	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)

Note

*1: Please refer page9 regarding integrated software for each monitors and Rev# for ASP-100.

Left Table

		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	0.1704×0.1704 mm	0.09945×0.09945 mm
	Viewing Angle	178° (up&down, left&right) CR≥10		
	Number of Display Colors	1.07 billion colors		16.78 million colors
	Contrast Ratio	1,000,000:1 (typical)	1500：1 (typical)	800:1 (typical)
	Brightness (panel)	1,000cd/m²	350cd/m²	450cd/m²
	Display Size	17:9 W698×H368mm		16:9 W382×H215mm
Rating & Performance	Color Space	ITU-R BT.2020* / BT.709 / DCI-P3 D65* / DCI-P3/ ACES*/ Adobe RGB S-Gamut, S-Gamut3.Cine,Panel *Color space can not be fully displayed.		
	Color Temperature Setting	D65 / D93 / USER setting (Files 1 to 8)		
	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)(10 to 85% humidity**)	0°C to +40°C (32°F to +104°F)(20 to 85% humidity**)	
	Storage Temperature	-10°C to +50°C (14°F to +1 22°F)(10 to 85% humidity**)	-20°C to +60°C (-4°F to +1 40°F)(5 to 85% humidity**)	-20°C to +60°C (-4°F to +1 40°F)(20 to 85% humidity**)
	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	30kg (66.14lbs)	14.5kg (31.96lbs)	8.5kg (18.74lbs)
Input & Output Signals	12G-SDI	2 BNC inputs / 2 BNC outputs (Active Loop Through) Max.70m with 5.5C UHD cable		
	3G-SDI	5 BNC inputs (2 shared with 12G-SDI) / 5 BNC outputs (2 shared with 12G-SDI) (Active Loop Through)		
	HDMI	1 input (HDCP2.2)		
	Audio Display	Embedded Audio Level Meter Display (8ch)		
	Speaker	Rating Output: 1W+1W or more		
	Analog Audio Output	Available (Stereo)		
	5.1ch Surround Down-mix Output	Available		
	Headphone Output	Available		

(** non-condensing)

Right Table

		HEM-2570W	HEM-1770WR
Display Panel	Type of Panel	OLED	
	Number of Pixel — Effective Number of Pixel	Full HD (16:9) 1920×1080	
	Number of Pixel — Number of Pixel in 16:9	1920×1080	
	Display Size (Diagonal) — Display Size(Viewing Area)	24.5"	16.5"
	Display Size (Diagonal) — in 16：9	24.0"	16.5"
	Brightness (Specification of Panel)	250cd/m² (Max Brightness)	
	Contrast Ratio (typical)	5000:1 (*1)	
	Display Color	1.07 billion colors / 10bit	
	View Angle (up & down, left & right typical)	178°	
Rating & Performance	Power Requirement — AC	AC100-120V / AC200-240V	
	Power Requirement — DC	—	DC12V (10.5-18V)
	Power Consumption (max) — AC (Standard Spec)	135W	81W
	Power Consumption (max) — DC (Standard Spec)	—	76W / 6.3A
	Dimensions W×H×D mm (inch)	585×398×102.8 (23.1×15.7×4.1)	428×301×98 (16.9×11.9×3.9)
	Rack-mountable Space	9U	7U
	Weight kg(lbs)*Excluding stand	Approx 11.4kg (25.13 lbs)	Approx 7.5kg (16.53 lbs)
	Supporting Formats — SDTV	480i / 59.94, 575i / 50, 480p / 59.94	
	Supporting Formats — 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	
Video	Input/Output — HD/SD-SDI	● 2 Inputs, 1 Output	
	Input/Output — 3G-SDI	● (*2)	
	Input/Output — VBS	● 2 Inputs/Outputs (TH)	
	Input/Output — RGB/YPbPr	▲ 1 Input (CM-70)	
	Input/Output — Analog PC	▲ 1 Input (CM-70)	
	Input/Output — DVI-D	● 1 Input	
	Input/Output — HDMI	▲ 1 input (SP-70+SPF HDMI Module)	
	Input/Output — External Sync	▲ 1 Input (CM-70)	
Audio	Input — Analog Audio Input	● (RCA×2)	
	Output — Embedded Analog 2ch Output	● (RCA×2)	
	Display — Embedded Audio Level Meter Display	● (8ch)	
	Speaker — Rating Output	1W+1W	
	Speaker — Analog Audio Output	● (Stereo)	
	Speaker — Embedded Digital Audio Output	● (Stereo)	
	5.1ch Surround Down-mix Output	●	
	Headphone Output	●	
Command Control	Parallel Remote	●	
	Serial Remote (RS-485)	●	
	USB Mouse	●	
	Infrared rays Remote (Controlled by RCT-30A)	●	
Function	Display — Built-in Test Signal	● (7 types)	
	Display — 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	
	Display — User Marker	● (10 Markers)	
	Display — User Marker (Number of Scene)	10	
	Display — 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%	
	Display — WFM Display	●	
	Display — Time Code	● (VITC, HD-SDI)	
	Display — Vector	●	
	Display — 2 Screen Display	Still Imege & Moving Picture	
	Display — Full Screen Capture Display	● (1920×1080)	
	Display — Video & TEST Signal Mix	●	
	Display — Zoom Function	●	
	Display — Dot by Dot Display	●	
	Others — Operating Time Display	●	
	Others — Color Temp Memory	● 6500K / 9300K / 8 User Settings	
	Others — Color/Mono Switching	●	
	Others — VBS COMB Filter	● (TRAP/2D/3D)	
	Others — APT	● (ON/OFF, Frequency)	
	Others — R/G/B Screen Display ON/OFF	●	● (MENU)
	Others — Scan Selection	NORMAL / UNDER	
	Others — Aspect Selection	4:3/16:9 (SDTV)	
	Others — I/P Conversion Mode	FIELD / FRAME / INTERLACE	
	Others — External Memory	● (USB)	
	Others — Saving Still Image (in USB)	● (Maximum 100 Frames)	
	Others — Function Key	● 4	
	Others — LED Alarm Display	● (ABL/OVER RANGE)	
	Others — SDI Channel Lock Setting	●	
	Others — USB Memory Version-up	●	
	Others — Closed Caption	● *3	

● : Standard, ▲ : Option
*1 EIAJ ED-2810 dark place, partial lighting contrast   *2 SMPTE425M-A/B, YPBPR, 4:2:2

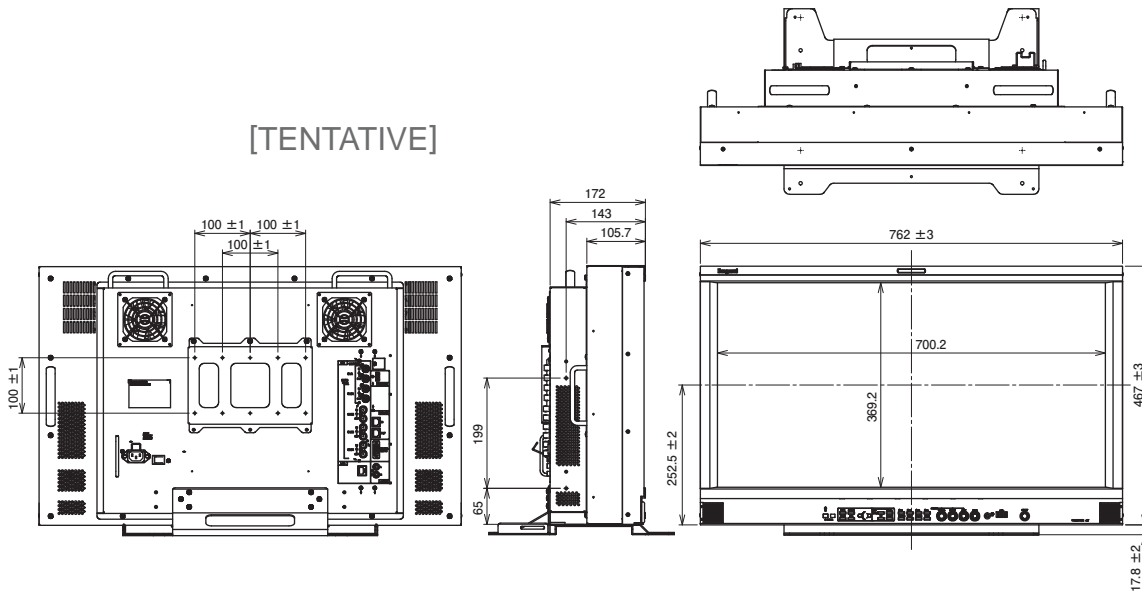|		HLM-2460W	HLM-1760WR	HLM-960WR	HLM-5013WR	HLM-7012WR
Display Panel	Type of Panel	LCD / LED Backlight				
	Number of Pixel — Effective Number of Pixel	Full HD (16:9)			WVGA (15:9) 800×480	
	Number of Pixel in 16:9	1920×1200	1920×1080		800×450	
	Display Size (Diagonal) — Display Size(Viewing Area)	24.0"	16.5"	9"	5.0"	7.0"
	in 16:9	24.0"	16.5"	9"	4.9"	6.9"
	Brightness (Specification of Panel)	400cd/m^2	450cd/m^2	400cd/m^2	180cd/m^2	290cd/m^2
	Contrast Ratio (typical)	1500:1		700:1	500:1	1000:1
	Display Color	1.07 billion colors / 10bit		16.77 million colors (RGB 8bit FRC)	16.77 million colors / 8bit	
	View 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)	107W	40W	28W	1.7A	
	DC (Standard Spec)	—	36W / 3.2A	27W / 2.4A	34W	30W
	Dimensions W×H×D mm (inch)	562×398×86 (22.1×15.7×3.4)	428×301×80 (16.9×11.9×3.2)	222.4×173×69.5 (8.8×6.8×2.8)	481×88.1×56.2 (18.88×3.5×2.22)	481×132.6×56.2 (18.88×5.25×2.22)
	Rack-mountable Space	9U	7U	4U	2U	3U
	Weight kg(lbs) *Excluding stand	Approx 9.3kg (20.5 lbs) without stand	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/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	
Video	Input/Output — HD/SD-SDI	● 2 Inputs, 2 Output (or 4 Inputs, 0 Output) (*2)			● 2 Inputs, 1 Output (*3)	
	3G-SDI					
	VBS	● 1 Input/Output (TH)			—	
	HDMI	● 1 (HDCP)			—	
Audio	Input — Analog Audio Input	● (st min 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	● (capable with further upgrading)			—	
	Parallel Remote	●				
	Serial Remote (RS-485)	●			—	
	TSL (V3.1)	●	● (V5.0:capable with further upgrading)		—	
	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	● (12 Markers)			—	
	User Marker (Number of Scene)	10			—	
	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	●				
	2 Screen Display	Still Imege & Moving Picture, P in P, Side by Side, Wipe			—	
	Full Screen Capture Display	● (1920×1080)			—	
	IMD (In Monitor Display)	●			—	
	Video & TEST Signal Mix	●			—	
	Zoom Function	●			—	
	Dot by Dot Display	●			—	
	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	●	● (future)			

● : Standard, ▲ : Option

*1 EIAJ ED-2810 dark place, partial lighting contrast *2 SMPTE425M-A/B, YPBPR, 4:2:2 *3 Supports after MPU(Ver 01.04) and FPGA(Ver 02)
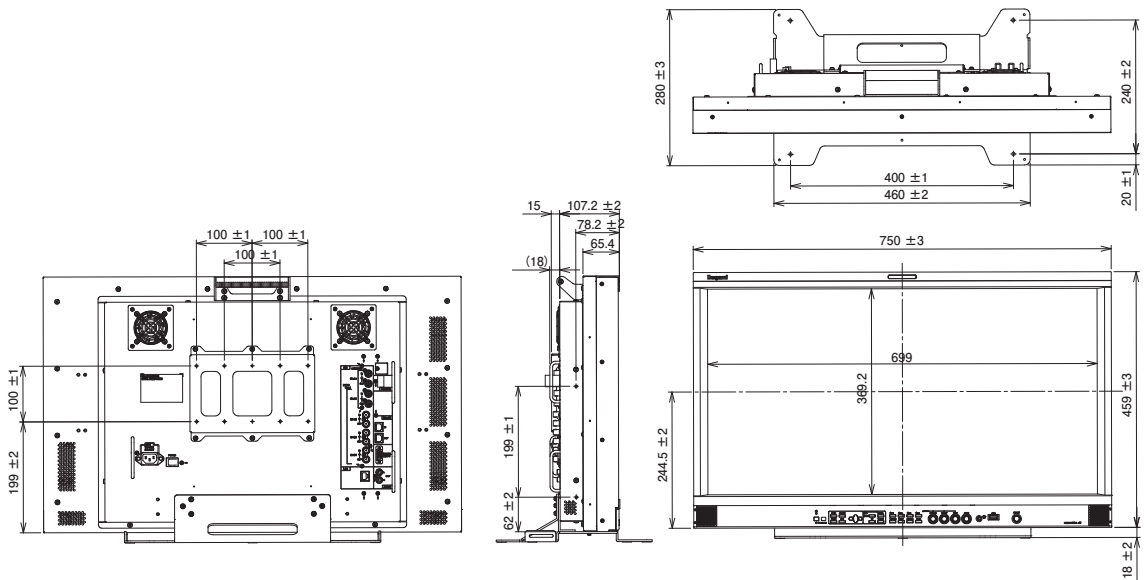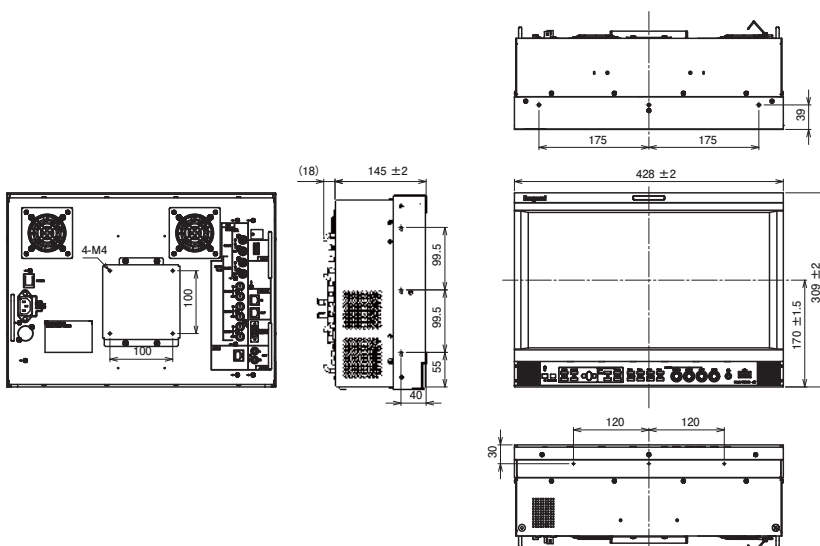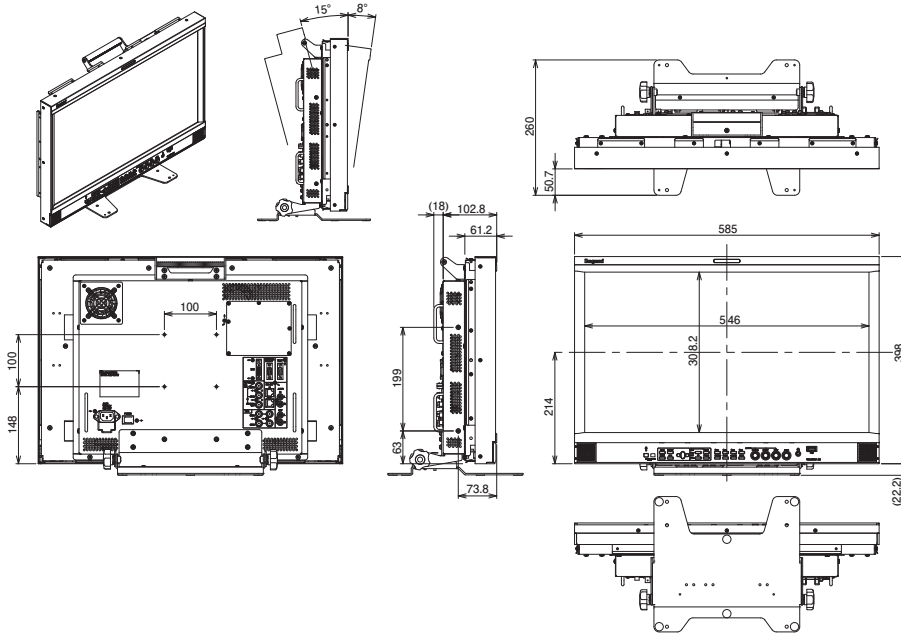
Dimensions

HQLM-3125X

[TENTATIVE]

100 ±1 100 ±1
100 ±1
100 ±1
199
65
172
143
105.7
252.5 ±2
199
762 ±3
700.2
369.2
467 ±3
17.8 ±2

HQLM-3120W

280 ±3
240 ±2
400 ±1
460 ±2
20 ±1
100 ±1 100 ±1
100 ±1
100 ±1
199 ±2
15
107.2 ±2
78.2 ±2
65.4
(18)
199 ±1
62 ±2
750 ±3
699
369.2
459 ±3
244.5 ±2
18 ±2

HQLM-1720WR

175 175
39
4-M4
100
100
(18)
145 ±2
99.5
99.5
55
40
428 ±2
309 ±2
170 ±1.5
120 120
30

Unit:mm

13

HEM-2570W

HEM-1770WR
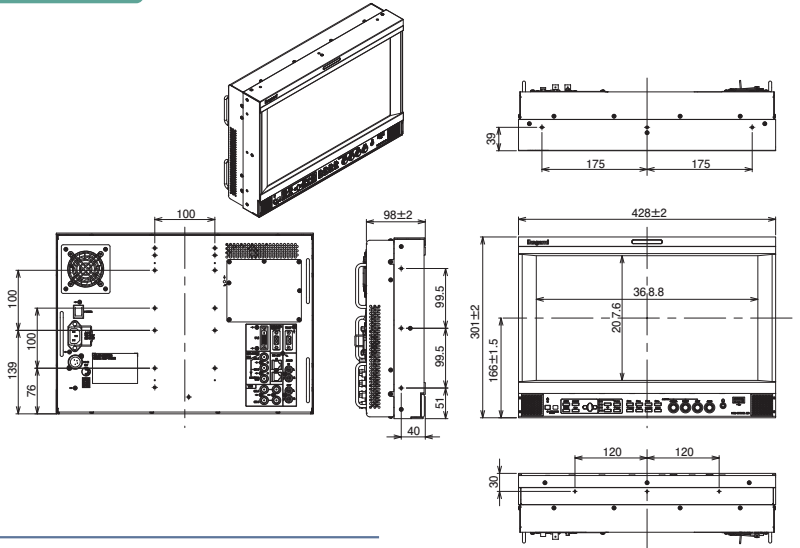
HLM-2460WR
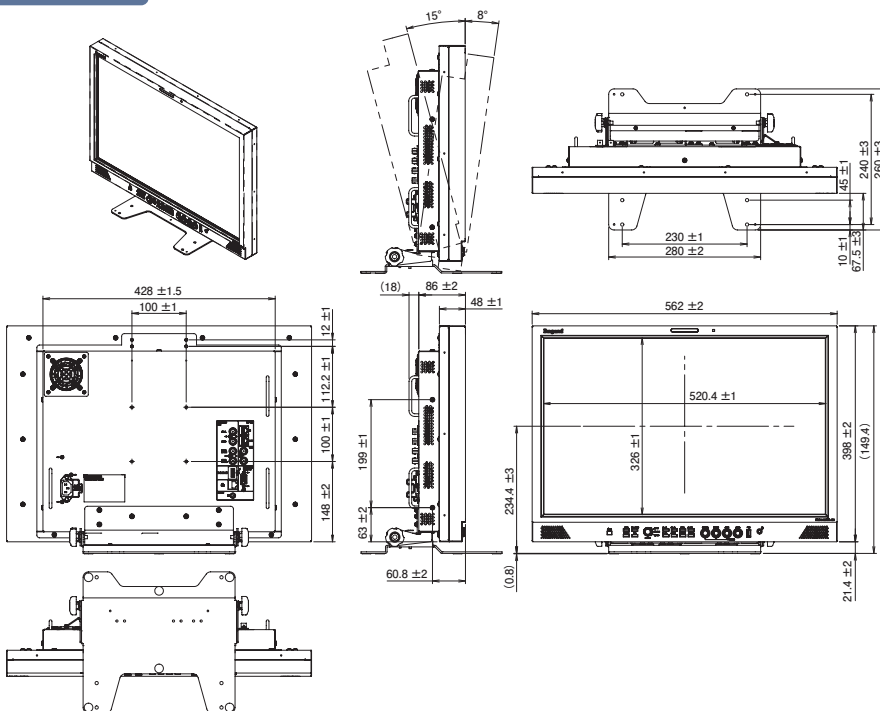
Unit:mm

Dimensions

HLM-1760WR
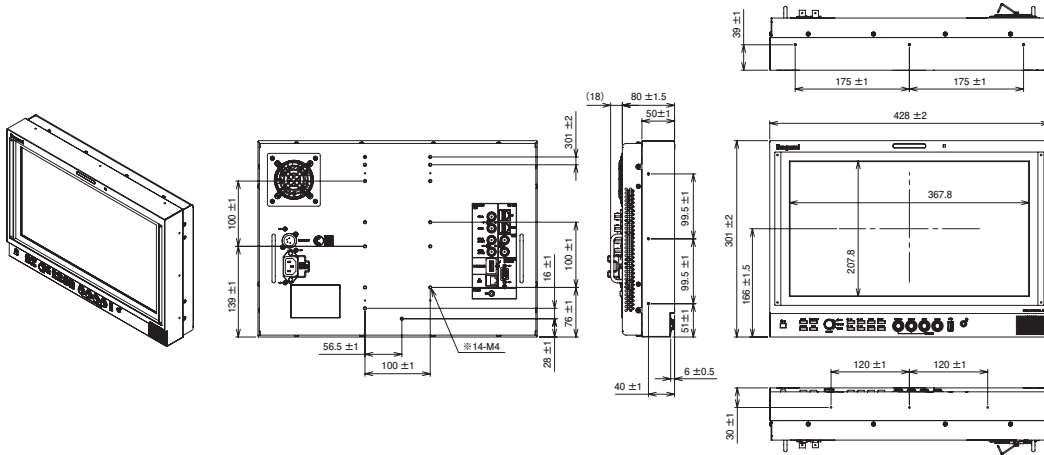
HLM-960WR
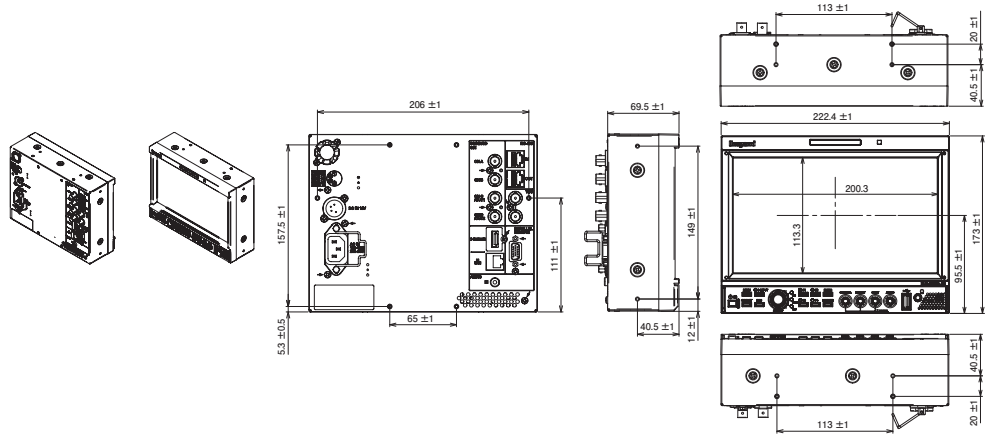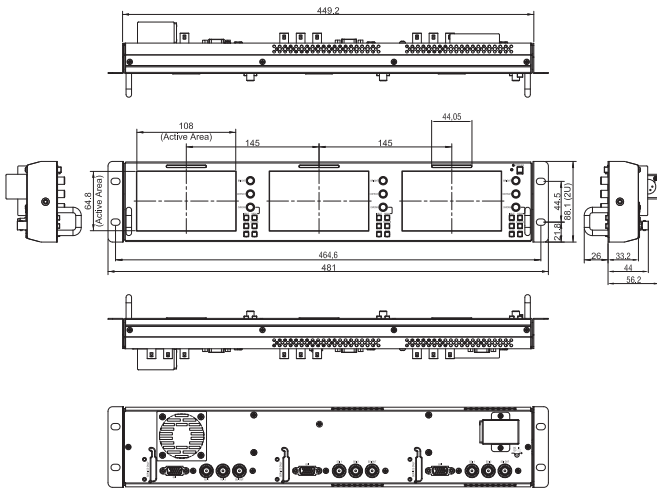
HLM-5013WR

HLM-7012WR
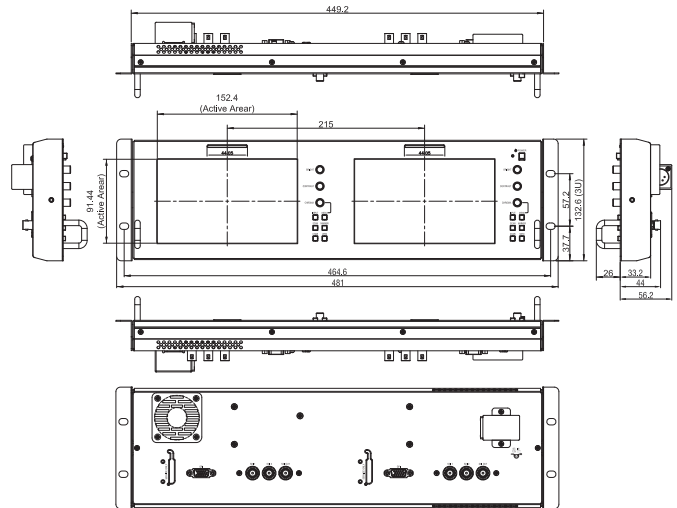
Unit:mm

HDMI is a registered trademark of HDMI Licensing, LLC.

U125L186-SI-F1.5 Printed in Japan

ISO 9001 ISO 14001

Certified JQA-0755 Certified JQA-EM3888