



HLM-920WR 9-inch HDTV/SDTV Multi-format LCD Color Monitor

RoHS

High-End Broadcast LCD Monitor



The HLM-920WR employs a 9-inch wide screen LCD panel, with HDTV/SDTV multi-format SDI and VBS inputs as standard. It achieves compact, light weight, low power consumption, and also rack mountable in a 2-monitor configuration, suitable for use in all kinds of locations such as monitor wall, OB truck, etc.

9-inch Wide	WVGA (800×480 pixel)	Viewing Angle 170degree(H/V)	Contrast Ratio 350:1	26W		
VBS Input	Y, P _b , P _r /RGB Input	HD/SD-SDI Input	Embedded AES/EBU Output	Embedded Analog Audio Output	Embedded Audio Meter	Analog Audio Input
4:3/16:9	Remote (Parallel)	Remote (Serial)	Marker	Shadow	Test Signal Generator	10-Color temperature-memory
Speaker	VITC Display	WFM Monitoring Display	Split Screen	Dot-by-Dot Display		
221×173×130.5mm (8.4×6.9×5.1 inches)		4RU	2.2kg (4.85lbs)			

HLM-920WPA 9-inch HDTV/SDTV Multi-format LCD Color Monitor

RoHS

High-End Broadcast LCD Monitor



The HLM-920WPA employs a 9-inch wide screen LCD panel, with HDTV/SDTV multi-format SDI and VBS inputs as standard. It achieves compact, light weight, low power consumption, specifically suitable for field use with AC/DC input (for battery operation with V-mount or Anton Bauer mount).

9-inch Wide	WVGA (800×480 pixel)	Viewing Angle 170degree(H/V)	Contrast Ratio 350:1
AC: 27W DC: 21W	AC Input	DC Input	Battery
VBS Input	Y, P _b , P _r /RGB Input	HD/SD-SDI Input	Embedded AES/EBU Output
Embedded Analog Audio Output	Embedded Audio Meter	Analog Audio Input	
4:3/16:9	Remote (Parallel)	Remote (Serial)	Marker
Shadow	Test Signal Generator	10-Color temperature-memory	Speaker
VITC Display	WFM Monitoring Display	Split Screen	Dot-by-Dot Display
221×173×123mm (8.4×6.9×4.9 inches)		4RU	2.3kg (5.07lbs)



HLM-910R 8.4-inch HDTV/SDTV Multi-format LCD Color Monitor

RoHS

High-End Broadcast LCD Monitor



HLM-910R employs 8.4-inch specified LCD panels and achieves space-saving, light weight and low power consumption, and also mounted in a 19-inch rack with a 2-monitor configuration. The HDTV/SDTV multi-format LCD color monitors have been designed taking into compatibility with any HDTV formats, as well as, active use of all kinds of spaces such as sub-control rooms, monitor wall, transmission control desks, OB Truck, signal monitoring and adjustment for video equipment installed in any broadcasting facilities.



- | | | | | | | | | | | | | | |
|---|--|--|--------------------------------|-------------------------------------|------------------------------|------------------------------------|----------------|---------------------|-------------------------------|--|--|--|--|
| 8.4-inch | XGA
(1024×768 pixel) | Viewing Angle
170degree(H/V) | Contrast Ratio
400:1 | 26W | | | | | | | | | |
| VBS Input | Y, P_b, P_r/RGB Input | HD/SD-SDI Input | Embedded AES/EBU Output | Embedded Analog Audio Output | Embedded Audio Meter | Analog Audio Input | | | | | | | |
| 4:3/16:9 | Remote (Parallel) | Remote (Serial) | Marker | Shadow | Test Signal Generator | 10-Color temperature-memory | Speaker | VITC Display | WFM Monitoring Display | | | | |
| W216×H176×D107mm
(W8.5×H6.9×D4.2inches) | 4RU | 2.4kg
(5.29lbs) | | | | | | | | | | | |

HLM-910P 8.4-inch HDTV/SDTV Multi-format LCD Color Monitor

RoHS

High-End Broadcast LCD Monitor



HLM-910P employs 8.4-inch specified LCD panels and achieves space-saving, light weight and low power consumption, and also mounted in a 19-inch rack with a 2-monitor configuration. The HDTV/SDTV multi-format LCD color monitors have been designed taking into compatibility with any HDTV formats, as well as, active use of all kinds of spaces such as sub-control rooms, monitor wall, transmission control desks, OB Truck, signal monitoring and adjustment for video equipment installed in any broadcasting facilities. HLM-910P is suitable for portable monitor, being available for DC input and for battery operation with V-mount or Anton mount.



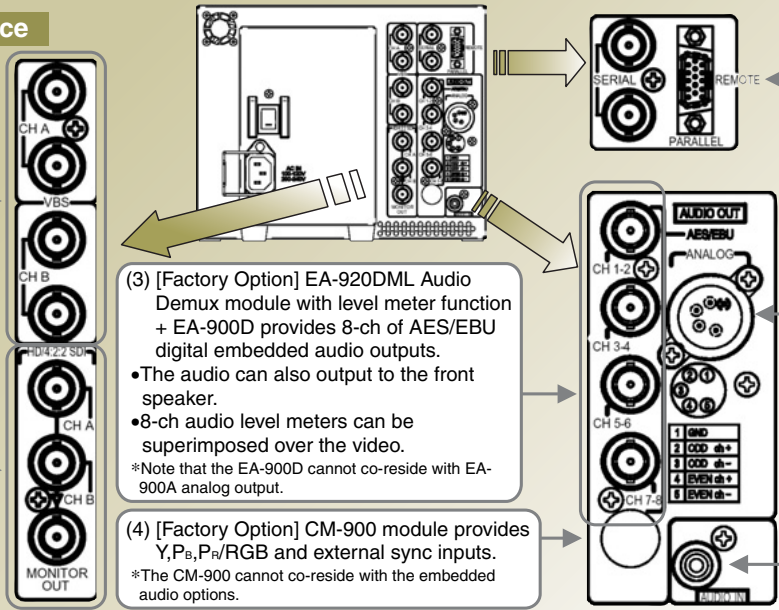
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|--|--|--|--------------------------------|-------------------------------------|------------------------------|------------------------------------|----------------|---------------------|-------------------------------|--|--|--|--|
| 8.4-inch | XGA
(1024×768 pixel) | Viewing Angle
170degree(H/V) | Contrast Ratio
400:1 | AC: 27W
DC: 23W | AC Input | DC Input | Battery | | | | | | |
| VBS Input | Y, P_b, P_r/RGB Input | HD/SD-SDI Input | Embedded AES/EBU Output | Embedded Analog Audio Output | Embedded Audio Meter | Analog Audio Input | | | | | | | |
| 4:3/16:9 | Remote (Parallel) | Remote (Serial) | Marker | Shadow | Test Signal Generator | 10-Color temperature-memory | Speaker | VITC Display | WFM Monitoring Display | | | | |
| W216×H176×D99mm
(W8.5×H6.9×D3.9inches) | 4RU | 2.1kg
(4.63lbs) | | | | | | | | | | | |

Evolutional Feature for HLM-910R/P, HLM-920WR/WP Multi-format LCD Monitors

● Versatile Interface

(1) VBS inputs:
2ch, each with loop through, NTSC/PAL auto detect.

(2) Multi-format HD/SD-SDI (4:2:2) inputs:
2ch, 1ch monitor output, follows channel selection.



(3) [Factory Option] EA-920DML Audio Demux module with level meter function + EA-900D provides 8-ch of AES/EBU digital embedded audio outputs.
 •The audio can also output to the front speaker.
 •8-ch audio level meters can be superimposed over the video.
 *Note that the EA-900D cannot co-reside with EA-900A analog output.

(4) [Factory Option] CM-900 module provides Y, P_b, P_r/RGB and external sync inputs.
 *The CM-900 cannot co-reside with the embedded audio options.

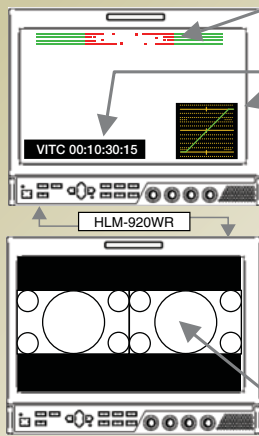
(5) Remote control interface:
Serial remote signal input and Parallel remote signal input.

(6) [Factory Option] EA-920DML Audio Demux module with EA-900A provides 2 channels of analog embedded audio outputs.
 •The output channels can be chosen by menu among ch1/2, 3/4, 5/6, 7/8.
 •The audio can also output to the front speaker.
 *note that EA-900A cannot co-reside with EA-900D digital output.

(7) Analog Audio input:
The audio signal outputs to the front speaker for audio monitoring.

● Versatile Functions

(1) With the EA-920DML Audio Demux module (Factory option)
 •Level meters for 8 channels of embedded audio can be superimposed over the video, providing space and cost savings for monitoring the video and the audio at the same time.
 •The contrast, position, and indicating channels can be set by menu.
 •Auto detect multi-format HD/SD-SDI input
 •Embedded audio can be monitored with the built-in speaker
 •Either EA-900A or EA-900D is available for embedded audio outputs



(2) WFM monitoring and VITC Time Code display function
 •Waveform can be displayed for the input signal
 •HD-SDI signal with VITC Time Code display is available
 *Factory order option for HLM-910R/P.

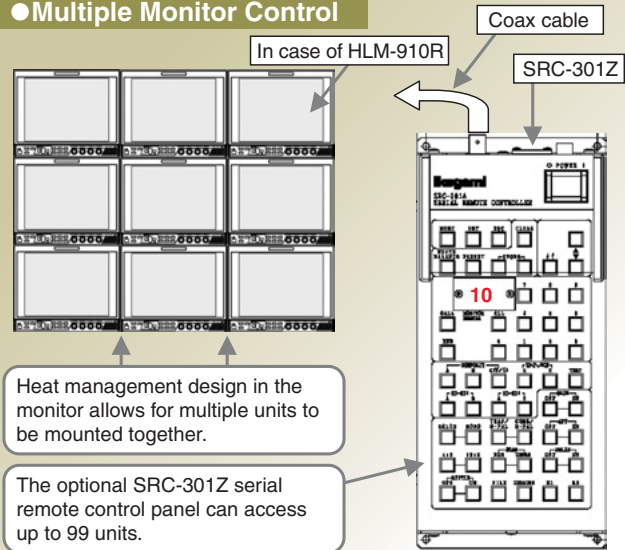
(3) Internal test signals
 •100% WINDOW signal
 •Grayscale test signal
 •ARIB(STD-B28) color bars

(4) Marker Display
 •Various safety markers and Cross hatch
 •Various area markers with Shadow functions

(6) Dot-by-Dot display
 •This function for 1:1 scan without scaling
 *available only for HLM-920WR/WP

(5) Split screen mode
 •This function allows for comparing a captured still image and a camera live image.
 *available only for HLM-920WR/WP

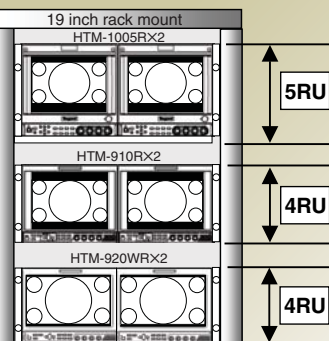
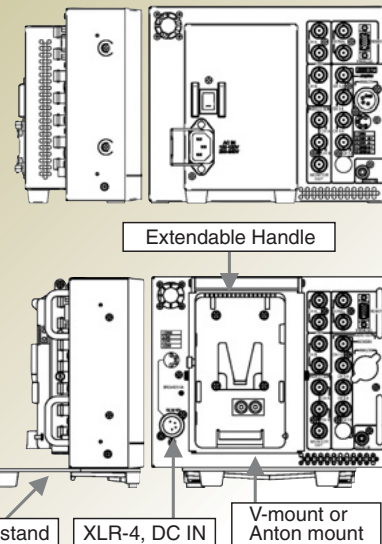
● Multiple Monitor Control



● Two models are available

(1) HLM-910R/920WR:
 • Designed for rack mount applications.
 • AC power supply is integrated for simple and clean installation.
 • 100 to 120 VAC or 200 to 240 VAC.

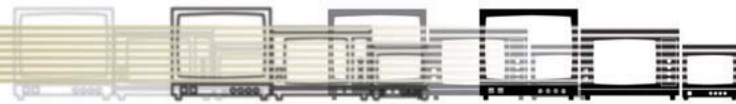
(2) HLM-910P/920WPA:
 • Portable design for field applications
 • Battery operation
 • AC operation is possible with XLR-4 plug, 12VDC power supply.



● Rack mounting saves space

Designed for a compact size of 4RU high, the HLM-910R/HLM-920WR can maintain almost the same picture size as a conventional 10-inch CRT monitor.

HLM Series



HLM Series Option

○: Standard / ●Option

Model	Description	HLM-3250W	HLM-2450W	HLM-1711WR	HLM-1510R	HLM-920WR	HLM-920WP	HLM-910R	HLM-910P	Remarks
Remote Controller										
SRC-301Z	Serial Remote Controller	●	●	●	●	●	●	●	●	Controls up to 99 motions with loop through connection
RCT-30A	Infrared Remote Controller	●	●	●	●					
Video/Audio Module										
CM-240	Analog Component and PC Input Module	●	●							1ch Y, P _B , P _R /RGB, 1ch Analog PC Input, 1ch EXT Sync *1
EA-240A	Embedded Analog Audio Output Module	●	●							2ch (ch: Menu Select) Embedded Analog Output (XLR 5pin)*1
EA-240D	Embedded AEX/EBU Audio Output Module	●	●							8ch Embedded AES/EBU Output *1
D3G-240A	3G-SDI Support Multi-format HD-SDI Input Module (incl. Analog Audio Output)	●	●							2ch Input and 1ch Loop-through, 2ch (ch: Menu Select) Embedded Analog Output (XLR 5pin)**2
D3G-240D	3G-SDI Support Multi-format HD-SDI Input Module (incl. AES/EBU Audio Output)	●	●							2ch Input and 1ch Loop-through, 8ch Embedded AES/EBU Output **1*2
EA-171DML	Audio Demux Module with Audio Level Meters			●	●					Embedded Audio Output, 8ch Audio Level Meters *4
CM-171	Analog Component Input Module			●	●					1ch Y, P _B , P _R or RGB Input, 1ch loop through EXT SYNC, cannot co-reside with PC-171 *4
PC-171	PC Input Module			●	●					1ch PC Analog RGB, 1ch DVI-D, cannot co-reside with CM-171 *4
EA-900A	Embedded Audio Analog Output Module			●	●	●	●	●	●	XLR-5 pin, 2ch Embedded Analog Audio Outputs, EA-171DML or EA-920DML required *4
EA-900D	Embedded AES/EBU Output Module			●	●	●	●	●	●	BNC, 8ch Embedded AES/EBU Outputs, EA-171DML or EA-920DML required *4
EA-920DML	Audio Demux Module with Audio Level Meters					●	●	●	●	Embedded Audio Output, 8ch Audio Level Meters *4
CM-900	Analog Component Input Module					●	●	●	●	1ch Y, P _B , P _R or RGB Input, 1ch loop through EXT SYNC, cannot co-reside with the Embedded Audio Module *4
WF-910	WFM/VITC Indication Function					○	○	●	●	Supports VITC embedded to HD-SDI Signal (ARIB STD-B4 Ver 2.0) *4
Rackmount Adaptor										
RS-2450T	Rackmount Adaptor		●							Fixed Tilt Angle Type
RS-1710	19-inch Rack Mount Adaptor		●							Fixed type, 7RU height
RS-1710T	19-inch Rack Mount Adaptor with Tilt Mechanism		●							4-Step Angle, 7RU height
RS-1510	19-inch Rack Mount Adaptor				●					Fixed type, 6RU height
RS-1510T	19-inch Rack Mount Adaptor with Tilt Mechanism				●					4-Step Angle, 7RU height
DR-910	Dual Rack Mount Adaptor							●	●	4RU Height
BP-900	Blank Panel for DR-910							●	●	
WR-900L	WFM Rackmount Adaptor							●		For HLM-920WR + Leader LV5750, 4RU Height
WR-900L3	WFM Rackmount Adaptor							●		For HLM-920WR + Leader LV5700A/5710A/5800, 4RU Height
WR-900C	WFM Rackmount Adaptor							●		For HLM-920WR + Tektronics WFM700 Series, 4RU Height
DR-920	Dual Rack Mount Adaptor					●	●			4RU Height
BP-920	Blank Panel for DR-920					●	●			
WR-920L	WFM Rackmount Adaptor					●				For HLM-920WR + Leader LV5750, 4RU Height
WR-920L3	WFM Rackmount Adaptor					●				For HLM-920WR + Leader LV5700A/5710A/5800, 4RU Height
WR-920C	WFM Rackmount Adaptor					●				For HLM-920WR + Tektronics WFM700 Series, 4RU Height
STAND										
STD-240T	Stand with Tilt Mechanism		●							Tilt(Axis: Center of Monitor): Up 45 degree / Down 8 degree *3
STD-1517	Stand			●	●					
STD-1517T	Stand with Tilt Mechanism			●	●					Tilt: Up 15 degree / Down 15 degree
STD-1710T	Stand with Tilt Mechanism			●	●					Tilt (Axis: Center of Monitor): Up 90 degree / Down 10 degree *3
STD-1722	VESA Arm Stand			●	●					For VESA Mount, VM-1510R required for HLM-1510R
VM-1510R	VESA Mount Adaptor				●					For VESA Mount
STD-900	Stand					●	○	●	○	Tilt Angle: Up 14 degree, Standard for HLM-920WP/910P
STD-920T	Stand with Tilt Mechanism					●	●	●	●	Tilt Angle: Up 10 degree / Down 10 degree
AT-900	Tripod Mount Plate					●	●	●	●	1/4 & 3/8 inch hole plate
GR-900	Handle					●		●		
Hood										
MH-900	Folding Hood								●	
MH-920	Folding Hood					●				
Carrying Case										
CC-900	Hard Carrying Case								●	
CC-920	Hard Carrying Case					●				
SC-900	Soft Carrying Case								●	
SC-920	Soft Carrying Case					●				

Note

- *1: Either one optional module can be installed. Up to 4ch SDI input is available in case to install D3G-240A or D3G-240G.
- *2: Factory Option(Under development in April, 2009)
- *3: Standard Tilt Stand has a tilt mechanism with axis at bottom of monitor (up 15 degree and down 8 degree).
- *4: Factory Option

HLM Series Specifications



Model	Image	Display Size (Viewing Area)	Rack-mountable Space	Resolution Number of Pixel (Max Brightness)	Input Signal						DC Input	Tally		Power Consumption*3	Dimensions mm (inch)	Weight kg (lbs)	Feature	
					VBS	Y, P _b , P _r /RGB	DVI-D	HD/SD-SDI	PC Picture Input	Embedded Audio		Analog Audio	R					G
HLM-3250W		32" Full-HD	×	1920 × 1080	○ 2	△ 1	○ 1	○ 2	△ 1	○ 2	○ 2	×	○	○	145 W	W776 (30.6) × H498 (19.6) × D110 (4.3)	16.3kg (35.94 lbs) Excluding Stand	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/60, 59.94 • 1080p/50 • 1080p/30, 29.97 • 1080p/25 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p-60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-2450W		24" Full-HD	10RU	1920 × 1200	○ 2	△ 1	○ 1	○ 2	△ 1	○ 2	○ 2	×	○	○	98W	W562 (22.1) × H396 (15.6) × D90 (3.5)	9.0kg (19.8 lbs) Excluding Stand	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/60, 59.94 • 1080p/50 • 1080p/30, 29.97 • 1080p/25 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p-60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-1711WR		17" Wide	7RU	1280 × 768	○ 2	△ 1	△ 1	○ 2	△ 1	△ 2	○ 1	×	○	○	50W	W428 (16.9) × H305 (12.0) × D80 (3.1)	7.5kg (16.53 lbs)	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p/60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-1510R		15"	6RU	1024 × 768	○ 2	△ 1	△ 1	○ 2	△ 1	△ 2	○ 1	×	○	○	38W	W370 (14.6) × H266 (10.5) × D75 (3.0)	5.8kg (12.79 lbs)	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p/60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-920WR		9" Wide	4RU	800 × 480	○ 2	△ 1	×	○ 2	×	△ 2	○ 1	×	○	○	26W	W221 (8.4) × H173 (6.9) × D130.5 (5.1)	2.2kg (4.85 lbs)	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p/60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-920WP		9" Wide	4RU	800 × 480	○ 2	△ 1	×	○ 2	×	△ 2	○ 1	○	○	○	AC 27W DC 21W	W221 (8.4) × H173 (6.9) × D123 (4.9)	2.3kg (5.07 lbs)	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p/60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-910R		8.4"	4RU	1024 × 768	○ 2	△ 1	×	○ 2	×	△ 2	○ 1	×	○	○	26W	W216 (8.5) × H176 (6.9) × D107 (4.2)	2.4kg (5.29 lbs)	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p/60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50
HLM-910P		8.4"	4RU	1024 × 768	○ 2	△ 1	×	○ 2	×	△ 2	○ 1	○	○	○	AC 27W DC 23W	W216 (8.5) × H176 (6.9) × D99 (3.9)	2.1kg (5.07 lbs)	<ul style="list-style-type: none"> • 1080i/60, 59.94 • 1080i/50 • 1080p/30, 29.97 • 1080psF/30 • 1080p/25 • 1080psF/25 • 1080p/24, 23.98 • 1080psF/24, 23.98 • 1035i/60, 59.94 <ul style="list-style-type: none"> • 720p/60, 59.94 • 720p/50 • 720p/30, 29.97 • 720p/25 • 720p/24, 23.98*1 • 480i/59.94 • 480p/59.94*2 • 575i/50

△ Option

*1 Available with SDI Input only *2 Available with RGB/Y, P_b, P_r Input only *3 Maximum Power Consumption at Standard Configuration

HLM Series Options



Remote Controller



SRC-301Z
Serial Remote Controller



RCT-30A
Infrared Remote Controller

Rackmount Adaptor



RS-1710T
HLM-1711WR
19-inch Rack-mount Adaptor



RS-1510
HLM-1510R
19-inch Rack-mount Adaptor



DR-920
HLM-920WR/920WP
Dual Rack-mount Adaptor



DR-910
HLM-910R/910P
Dual Rack-mount Adaptor



BP-900
HLM-910R/910P
Blank Panel for DR-910



WR-900L
HLM-910R
WFM Rack-mount Adaptor

Stand



STD-1722
HLM-1711WR, 1510R/V
VESA Arm Stand



STD-1517T
HLM-1711WR, 1510R/V
Stand with tilt mechanism



VM-1510R
HLM-1510R
VESA Mount Adaptor



STD-900
HLM-920WR, 910R
Stand



STD-920T
HLM-920WR/WP, 910R/P
Tilt Stand

Handle



GR-900
HLM-920WR/910R
Handle

Carrying Case



SC-900
HLM-910P
Soft Carrying Case



MH-900
HLM-910P
Collapsible Hood



CC-900
HLM-910P
Hard Carrying Case