PBM-4K-H (HDR) Series

Screen Sizes: 9” 10” 17” 21“ 24” 32” 47” 55”

3Gb/s HDR 4K ULTRA HD 12G-SDI EMBER+ IP 2110 SFP+

PBM-4K-H Series - Product Highlights:

The PBM-4K-H series is our latest portfolio of 4K monitors that are capable to decode and preview a wide range of signal standards in 4K, UHD, FHD and HD standards. The PBM-4K-H was introduced in alignment with increased industry demand for an affordable yet comprehensive 4K monitor series. The PBM-4K-H series is available in multiple sizes from 9 up to 55 inches, the Plura PBM-4K-H series bring the exceptional built-in feature set Plura monitors are known for, maintaining quality and performance to give production facilities an edge in Ultra HD monitoring.

The Plura PBM-4K-H is a comprehensive tool for all UHD/4K, 3G broadcast systems and all other wide-range industries. The PBM-4K-H Series was designed and engineered for simple operation and future flexibility. The platform is built around FHD panel display and powerful FPGA chipset. The core of this platform is based on fully programmable architecture. Future proof expansion (i.e. additional features and functionalities can and will be implemented in the field via the Ethernet interface). The PBM-4K-H Series offers Ember+ compliant control system capabilities, i.e. can be controlled by Lawo-VSM, BFE-Core or any other Ember+ compliant control system.

- 1 x HDMI 1.4 port
- 1 x 12G, 6G, 3G, 1.5G port
- 1 x 3G, 1.5G port
- 1 x SFP Slot supporting Multiple Fiber & Coaxial I/O Standards
- Supports up to 4096 x 2160 resolutions
- HDR (High Dynamic Range) capabilities
- PQ (SMPTE ST 2084) & HLG (Hybrid Log Gamma)
- Ember+ Compliant, Ethernet & RS 232 Remote Control
- RGB 12 Bit Digital Signal Processing
- 178° Viewing Angle Display• Gamma Selectable (0.8 – 3.0)
- Color Temperature – User, VAR, Adjustable (9300K to 3200K)
- (ICAC) - Plura Intelligent Connection for Alignment & Calibration
- 3D LUT (ITU-R, BT.2020, D-Cinema, BT.709)
- Camera S-Log LUT gamma curve optimization support
- Display Advanced Waveform & Vector Scope simultaneously with line select
- Various and User defined Markers Display Safe Area in HD and SD
- Programmable 3 User Front Pushbutton Controls & GPI
- Closed Caption (608/708) – North American Market
- Teletext 801 & Subtitle OP-47- Australia & N.Z. Market
- Cutting edge De-interlacing and Scaling Technology
- Fast Response Time for high motion video
- Internal Monitor Display (IMD)
- Pixel to Pixel Mode, Tally, DC Operation
- False Color, Peaking Filter and Focus Assist
- Video Range test with adjustable Y & C values
- Display LTC & DVITC time code with line select
- Embedded Audio Input and Digital Audio Decoding
- Internal Pattern Generator and Wall Control System

EMBER+ SUPPORT

SDR HDR

The PBM-4K-H series offers HDR Display capabilities supporting PQ (ST-2084) & HLG standards.

sales@plurainc.com

PBM-4K-H (HDR) PROMINENT FEATURES

Plura PBM-4K-H series brings the exceptional built in feature set Plura monitors are known for, maintaining quality and performance to give broadcast & production facilities an edge in Ultra HD monitoring.

Markers

Various and User defined Markers Display, Safe area in HD and SD.

Focus Assist

A focus-assist feature is important for focusing cameras.

Video Range

This function displays Luma (Y) & Chroma (C) out of range levels outside the user defined range.

False color

False color function refers to a group of color rendering methods used to display images in color which were recorded in the visible or non-visible parts of the electro-magnetic spectrum. A false-color image is an image that illustrates an object in colors that differ from those a photograph (a true color image) would show.

Waveform / Vector

Display Advanced Waveform & Vector Scope simultaneously with line select

Gamma Adjustment

PBM-4K H series provides different Gamma adjustment settings, The monitor iscapable to select Gamma settings between (0.8 - 3.0)

Camera S-Log Gamma Curve optimization support

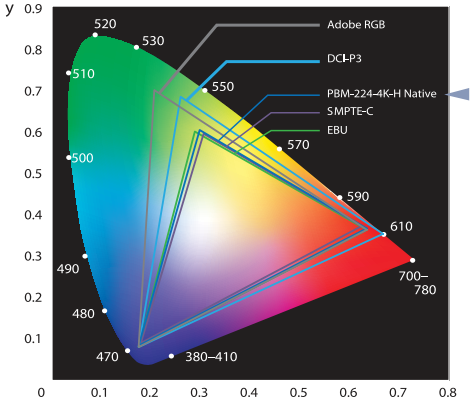
S-Log is a gamma curve with a wide dynamic range optimized under the assumption that grading will be performed in the post-production process. PBM-4K-H series supports multiple camera S-Log LUT

- SLog3 To LC-709
- Slog3 To LC-709 TypeA
- Slog3 To Slog2-709
- Slog3 To Cine+709
- Slog2 To LC-709
- Slog To LC-709 TypeA
- Slog2 To Slog2-709
- Slog2 To Cine+709
- User defined Log LUT

Wide Color Gamut & Color Spaces support

PBM-4K-H is built with intelligent connections for calibration alignment, adjustable colormetry and gamma correction capabilities. The PBM-4K-H series can reproduce 3D LUT (ITU-R, BT.2020, D-Cenima, BT.709) color spaces.

Color Gamut & Color Spaces support

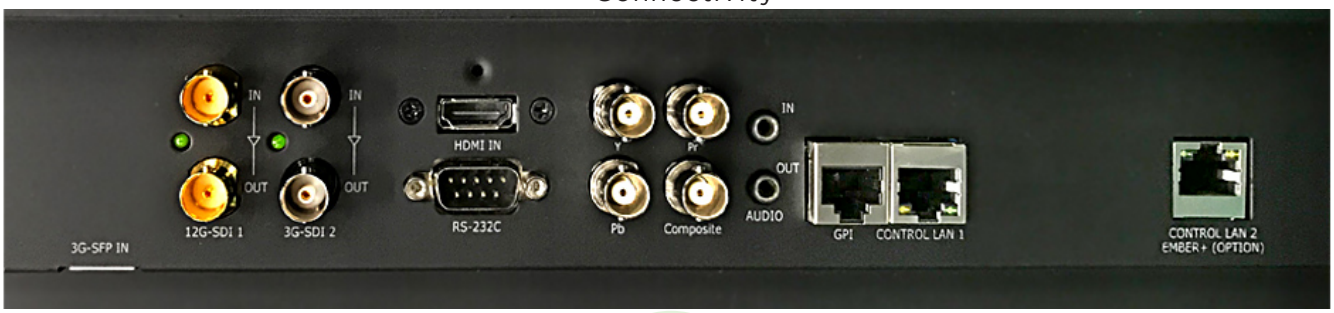


PBM-4K-H Series Specifications

The PBM-4K-H Series comes in multiple sizes: 9", 10", 17", 21", 24", 32", 47" & 55", all sizes offer the extensive and well known Plura prominent features. The Plura PBM-4K-H Series will support SMPTE 2082 and other earlier industry standards, 12G/3G/HD-SDI inputs with active loop, 1 x SFP slot to support multiple Fiber & Coaxial I/O Standards, 1x HDMI 1.4, in addition to all other legacy I/O. PBM-4K-H Series will suit many studio and/or mobile production workflows in an affordable capacity for a wide range size of 4K monitor solutions. This series adopts the exceptionally slim form factor that many users enjoy and demand.

	FUNCTION	PBM-209-4K-H	PBM-210-4K-H	PBM-217-4K-H	PBM-221-4K-H	PBM-224-4K-H	PBM-232-4K-H	PBM-247-4K-H	PBM-255-4K-H
INPUT	SDI Input	1EA, Serial Digital, 12G/3G/HD-SDI BNC Jack/ 1EA, Serial Digital, 3G/HD-SDI BNC Jack							
	SFP Port	1EA, SFP Optical and/or Electrical							
	HDMI	1EA, HDMI, 19pin Female							
OUTPUT	SDI Output	1EA, Serial Digital, 12G/3G/HD-SDI BNC Jack/ 1EA, Serial Digital, 3G/HD-SDI BNC Jack							
DIGITAL MEDIA FORMAT	SMPTE-ST 2082M	3840x2160 (23.98/24/25/29.97/30/50/59.94/60p)							
	SMPTE-428.1M	2048x1080P (24/25)							
	SMPTE-425M AB (3G)	1920x1080i (60/59.94/50/30/29.97/25/24/23.98/30sf/29.97sF/25sF/24sF/23.98sF) / 1080P (60/59.98/50)							
	SMPTE-260M	1920x1035i (60/59.94)							
	SMPTE-274M/292M	1920x1080i (60/59.94/50)							
		1920x1080P (30/29.97/25/24/24sF/33.98/23.98sF)							
	SMPTE- 296M	1280x720P (60/59.94/50)							
	SFP	3G/1.5G							
	UHD HDMI 1.4	480P/720P/1080P/2160P-30HZ							
AUDIO INPUT	SDI Audio Input	Embedded HD/SD-SDI Audio							
	HDMI Audio Input	Embedded Audio							
AUDIO OUTPUT	Speaker Output	Internal Speaker (Stereo) 3W + 3W							
	Ear-phone Output	1EA, L/R Stereo, 3.5mm pin jack							
I/O CONTROL PORT	GPI	RJ-45 8 Pin (Programmable for General Purpose Input)							
	ETHERNET	RJ-45 8 pin Ethernet port, 100Mbps, supported for F/W update & wall control applications & RJ-45 8 pin Ethernet port, 100Mbps, supported for Ember+ control							
	USB	Firmware Upgrade							
	RS232	D-sub 9 Pin Female/Serial Commands Control							
LCD	Size	9" Diagonal	10" Diagonal	17" Diagonal	21" Diagonal	24" Diagonal	32" Diagonal	47" Diagonal	55" Diagonal
	Aspect Ratio	16 : 9				16 : 10	16 : 9		
	Resolution	1280 X 720	1920 X 1080	1920 X 1080	1920 X 1080	1920 X 1200	1920 X 1080	1920 X 1080	1920 X 1080
	Display Color	16.7 MILLION Colors							
	Brightness	1000cd/m2	700cd/m2	350cd/m2	250cd/m2	400cd/m2	350cd/m2	450cd/m2	600cd/m2
	Contrast Ratio	1000:1 (Typical)	1000:1 (Typical)	1000:1 (Typical)	1000:1 (Typical)	1000:1 (Typical)	1000:1 (Typical)	4000:1 (Typical)	4000:1 (Typical)
	Response Time	Tr=7ms/Tf=7ms	Tr=7ms/Tf=7ms	Tr=7ms/Tf=7ms	Tr=7ms/Tf=7ms	Tr=7.5ms/Tf=7.5ms	Tr=8ms/Tf=6ms	Tr=6ms/Tf=6ms	Tr=6ms/Tf=6ms
	Viewing Angle (deg)	Horizontal: 178 (Typ.) Vertical 178 (Typ.)							

POWER REQUIREMENT	DC 12V/A	DC 12V/A	AC 100V - 240V (60/50 Hz)					
POWER CONSUMPTION	0.5A-1.0A (12W)	0.5A-1.0A (12W)	0.65A-0.34A (65W)	1.0A-0.5A (100W)	1.0A-0.5A (100W)	1.4A-0.6A (140W)	2.2A-1.1A (230W)	2.2A-1.1A (230W)
OPERATING TEMPERATURE	0˚C ~ 40˚C (32˚~ 104˚F)							
OPERATING HUMIDITY	10%RH ~ 85%RH (Non Condensed)							
STORAGE TEMPERATURE	-10˚C ~ 80˚C (14˚~176˚F)							
STORAGE HUMIDITY	10%RH ~ 85%RH (Non Condensed)							
WEIGHT (w/o STAND & PACKAGING)	1.58Kg - 3.5lbs	1.814Kg - 4.0lbs	4.5Kg - 10.0lbs	6.4Kg - 14.1lbs	9.9Kg - 22.0lbs	16.6Kg - 30lbs	20.4Kg - 45.0lbs	30.0Kg - 66lbs
DIMENSION (WxHxD) (W/O STAND & PACKAGING	240x175x87.6mm	256.6x185x104mm	442x310x81mm	502x350x81mm	552x413x82mm	732x443x84.6mm	1071.8x631x104mm	1245x721x76mm
	9.44x6.88x3.44inch	10.10x7.28x4.1inch	17.4x12.2x3.18inch	19.76x13.77x3.18inch	21.73x16.26x3.22inch	28.8x17.44x3.33inch	42.19x24.84x4.1inch	49x28.4x3inch
PACKAGING DIMENSION (WxHxD)	330x381x254mm	330x381x254mm	550x435x220mm	550x435x220mm	600x523x220mm	932x630x272mm	1250x805x295mm	1475x975x305mm
	13x15x10inch	13x15x10inch	21.7x17.2x8.7inch	21.7x17.2x8.7inch	26x20.6x8.7inch	36.7x24.8x10.7inch	49.2x31.7x11.6inch	58.0x38.25x12.0inch
WORKING TEMPERATURE	Power Cord & Desk Stand							
WORKING HUMIDITY	Rack Mount / Wall Mount					Wall Mount		

Please note that the technical details shown here are provisional specifications (as of Dec 2021) The information is subject to change without notice.

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