

PBM-4K-H (HDR) Series

Screen Sizes: 10" 17" 21" 24" 32" 47" 55"

plura
Re-Imagine Beyond Technology™

THE NEW PBM-4K-H AFFORDABLE AND COMPREHENSIVE SERIES



The PBM-4K-H series is our latest portfolio of 4K monitors that is 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 10 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.

Ember+ Support



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

PBM-4K-H Series - Product Highlights:

- 1 x HDMI 1.4
- 1 x 12G, 6G, 3G, 1.5G
- 1 x 3G, 1.5G
- 1 x SFP Slot supporting Multiple 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 and Peaking Filter / Focus Assist
- Video Range test with adjustable Y & C values
- Display LTC & DVITC time code with line select

Please note that the technical details shown here are provisional specifications (as of June 2020)
The information is subject to change without notice.

PBM-4K-H (HDR) PROMINENT FEATURES

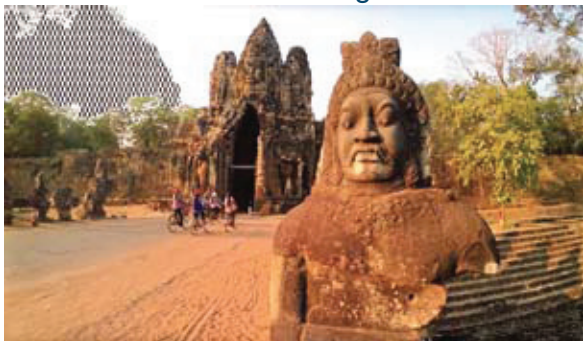
Plura PBM-4K-H series brings the exceptional built in feature set Plura monitors are known for, maintaining quality and performance to give broadcast & production facilities an edge in Ultra HD monitoring.

Markers



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

Video Range



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

Waveform / Vector



Display Advanced Waveform & Vector Scope simultaneously with line select

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 **

Focus Assist



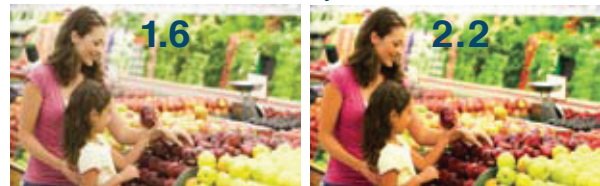
A focus-assist feature is important for focusing cameras.

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.

Gamma Adjustment

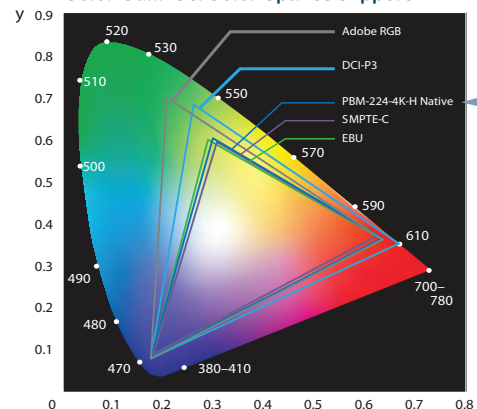


PBM-4K H series provides different Gamma adjustment settings, The monitor is capable to select Gamma settings between (0.8 - 3.0)

Wide Color Gamut & Color Spaces support

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

Color Gamut & Color Spaces support



PBM-4K-H Series Specifications

The PBM-4K-H Series comes in multiple sizes: 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 IP & Fiber 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-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 INPUT 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)	1920x1080P (60/59.94/50/30/29.97/25/24/23.98/30sf/29.97sf/25sf/24sf/23.98sF) / 1080i (60/59.94/50)							
	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							
AUDIO INPUT	UHD HDMI 1.4	480P/720P/1080P/2160P-30HZ							
	SDI Audio Input	Embedded HD/SD-SDI Audio							
AUDIO OUTPUT	HDMI Audio Input	Embedded Audio							
	Speaker Output	Internal Speaker (Stereo) 3W + 3W							
	Ear-phone Output	1EA, L/R Stereo, 3.5mm pin jack							
I/O PORT	GPI	RJ-45 8 Pin (Programmable for General Purpose Input)							
	ETHERNET	ETHERNET System Control Ember+ Compliant							
	USB	Firmware upgrade							
	RS232	D-sub 9 pin female /Serial Commands Control							
LCD	Size	10" Diagonal	17" Diagonal	21" Diagonal	24" Diagonal	32" Diagonal	47" Diagonal	55" Diagonal	
	Aspect Ratio	16 : 10	16 : 9		16 : 10		16 : 9		
	Resolution	1920 X 1200	1920 X 1080	1920 X 1080	1920 X 1200	1920 X 1080	1920 X 1080	1920 X 1080	
	Display Color	16.7 MILLION Colors							1.073 Billion Colors
	Brightness	400cd/m2	350cd/m2	1000cd/m2	400cd/m2	350cd/m2	450cd/m2	600cd/m2	
	Contrast Ratio	600:1 (Typical)	1000:1 (Typical)	2500:1 (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=7.5ms / Tf=7.5ms	Tr=8ms / Tf=6ms	Tr= 6 ms / Tf= 6 ms	Tr= 6 ms / Tf= 6 ms	
	Viewing Angle (deg)		Horizontal: 178 (Typ.) Vertical 178 (Typ.)						
POWER REQUIREMENTS		DC 12V/5A	AC 100V~240 V (60/50 Hz)						
POWER CONSUMPTION		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 & packing)		1.814 Kg - 4.0. lbs	4.50 Kg - 10.0. lbs	6.4 Kg - 14.1 lbs	9.9 Kg - 22.0 lbs	16.6 Kg- 30 lbs	20.4 Kg- 45.0 lbs	30.0 Kg- 66 lbs	
DIMENSION (W*H*D*) w/o Box & Stand		240 X 189 X 55.6 mm	450 X 310 X 75.2 mm	509 X 353 X 81.7mm	561 X 384 X 81.7mm	737 x 461 x 70 mm	1109 x 664 x 74.2 mm	1245 x 721 x 76 mm	
		9.44 x 7.44 x 2.2 inch	17.7 x 12.2 x 2.96 inch	20.0 X 13.9 x 3.2 inch	22.0 X 15.1 x 3.2 inch	29.0 x 18.1 x 2.7 Inch	43.6 x 25.3 x 2.9 Inch	49 x 28.4 x 3 Inch	
PACKAGING DIMENSION		330 x 381 x 254 mm	550 x 435 x 220 mm	550 x 435 x 220 mm	600 X 523 X 220 mm	932 x 630 x 272 mm	1250 x 805 x 295 mm	1475 x 975 x 305 mm	
		13 x 15 x 10 inch	21.7 X 17.2 X 8.7	21.7 X 17.2 X 8.7	26 X 20.6 X 8.7 inch	36.7 x 24.8 x 10.7 Inch	49.2 x 31.7 x 11.6 Inch	58.0 x 38.25 x 12.0 Inch	
ACCESSORY		Power Cord							
OPTIONS		Rack Mount / Wall Mount				Wall Mount			

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Connectivity



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