

Picturall Pro Mark II

Ref. MSP16-MKII-R1



Mission critical 16K media server with up to sixteen 4K60 10-bit outputs. Engineered for the support of massive events and installations from one single server unit



Outstanding playback performance

Picturall Pro Mark II is a high-performance modular media server designed to playback huge video content for large scale installations and events. With the ability to drive up to 16x 4K@60Hz 10-bit pixel accurate outputs from a single server unit and to playback media up to 16K resolution or uncompressed file sequences up to 8K@60Hz 10-bit, the **Picturall Pro Mark II** media server is the true powerhouse in massive LED video wall installations and large corporate events.

Rock-solid reliability

Built on Analog Way's long experience in ruggedized image processing hardware, the Picturall series of media servers has been designed to provide a robust, heavy-duty platform and deliver optimized uptimes and durability for any mission critical applications. **Picturall Pro Mark II** is based on the rock-solid software Linux engine by Picturall renowned for its extreme reliability, which is a result of 15 years of R&D development and field experience.

Powerful features

Picturall Pro Mark II offers all the tools you need to creatively integrate the solution that your customer has envisioned. Features like automatic show start, custom resolutions and virtual displays, parallel cue lists, cue tracking, timecode-based cue triggering, cue scheduling, real-time effects, dynamic HTML graphics, crossfades between clips as well as multi-user control, give you flexibility in programming and control.

Easy setup, easy control

The **Picturall Commander** software is an intuitive, elegant and powerful user interface to configure and control the Picturall series of media servers. **Picturall Pro Mark II** offers IP (Ethernet) and ArtNet interfaces which enable easy integration with any third-party control systems. **Picturall Pro Mark II** is also compatible with various remote control software such as Universe or Companion.



Advanced media processing

Picturall Pro Mark II has been designed to offer the best image quality and to process a wide variety of network streams and media including:

- AWX, AWX HQ and AWX alpha (proprietary high-performance codec with unlimited media width and height) - free encoder plugin available for Adobe Creative Cloud
- HAP, HAP-Q, HAP Alpha and HAP-Q Alpha
- Apple™ ProRes (any version including ProRes 4444)
- NotchLC™ (10-bit video)
- Newtek™ NDI 5.0 live video streaming (input/output)
- SPX for titles, countdowns, and other animated HTML graphics
- MPEG1, MPEG2, MPEG4, MJPEG
- H.264, H.265
- JPG, TGA, TIFF, BMP, GIF, PNG with alpha channel
- Uncompressed image sequences (TGA, DPX, BMP)



Picturall Pro Mark II at a glance

- ▶ Modular design with extensive I/O capability
- ▶ Heavy-duty ruggedized 4RU chassis
- ▶ Up to 16x 4K@60Hz 10-bit outputs
- ▶ Up to 24 inputs (HDMI 1.4, HDMI 2.0, 3G-SDI)
- ▶ Uncompromised playback performance up to 16K
- ▶ Flexible integration with 3rd party control systems
- ▶ Rock-solid media server Linux software engine
- ▶ 3-year standard warranty

	Twin Compact Mark II	Quad Compact Mark II	Quad Mark II	Pro Mark II
Outputs	2	4	4	4 (up to 16)
Inputs	Up to 8	Up to 8	Up to 24	Up to 24
Network	2x 1Gb/s	2x 10Gb/s	2x 10Gb/s	2x 10Gb/s
Storage	480 GB SSD	1 TB NVMe	1TB NVMe	2 TB NVMe
Storage options	Up to 8TB	Up to 8TB	Up to 8TB	Up to 32TB
Chassis	2U	2U	4U	4U

Picturall Pro Mark II

Flexible input and output configurations

Picturall Pro Mark II features seven slots for up to seven combined input/output cards. It can be equipped for example with up to 4 output cards, each with 4 DisplayPort 1.2 outputs, for a total of 16x 4K@60 10-bit outputs. A Genlock option is also available to ensure pixel accurate synchronization of your all output/displays. Vioso™ camera calibration tools can be used to create playback canvas of various shapes, from curves to a dome. Depending on selected output configuration, up to six low-latency input cards can be installed allowing to capture either 24x 1080p@60Hz or 6x 4K@60Hz sources. A wide selection of input interfaces is available, supporting one or more channels of 3G-SDI, HDMI 1.4 or HDMI 2.0, and offering professional connectivity for even greater reliability. **Picturall Pro Mark II** can also receive several network video streams (RTSP, RTMP, SRT and UDP) and is compatible with Newtek™ NDI live video streaming (input/output). It can also display HTML-based web content with full JavaScript support.



Multi-channel audio processing

Picturall Pro Mark II offers synchronized multi-channel audio playback and supports real-time audio de-embedding and routing from HDMI or SDI sources, network streams and web sources. **Picturall Pro Mark II** features several optional audio interfaces, including one with 2 balanced XLR inputs and 2 balanced XLR outputs, as well as a 32-channel Dante™ audio interface delivering instant access to any audio devices on the network. **Picturall Pro Mark II** is also compatible with a wide variety of 3rd party multi-channel USB interfaces.



Faster networking

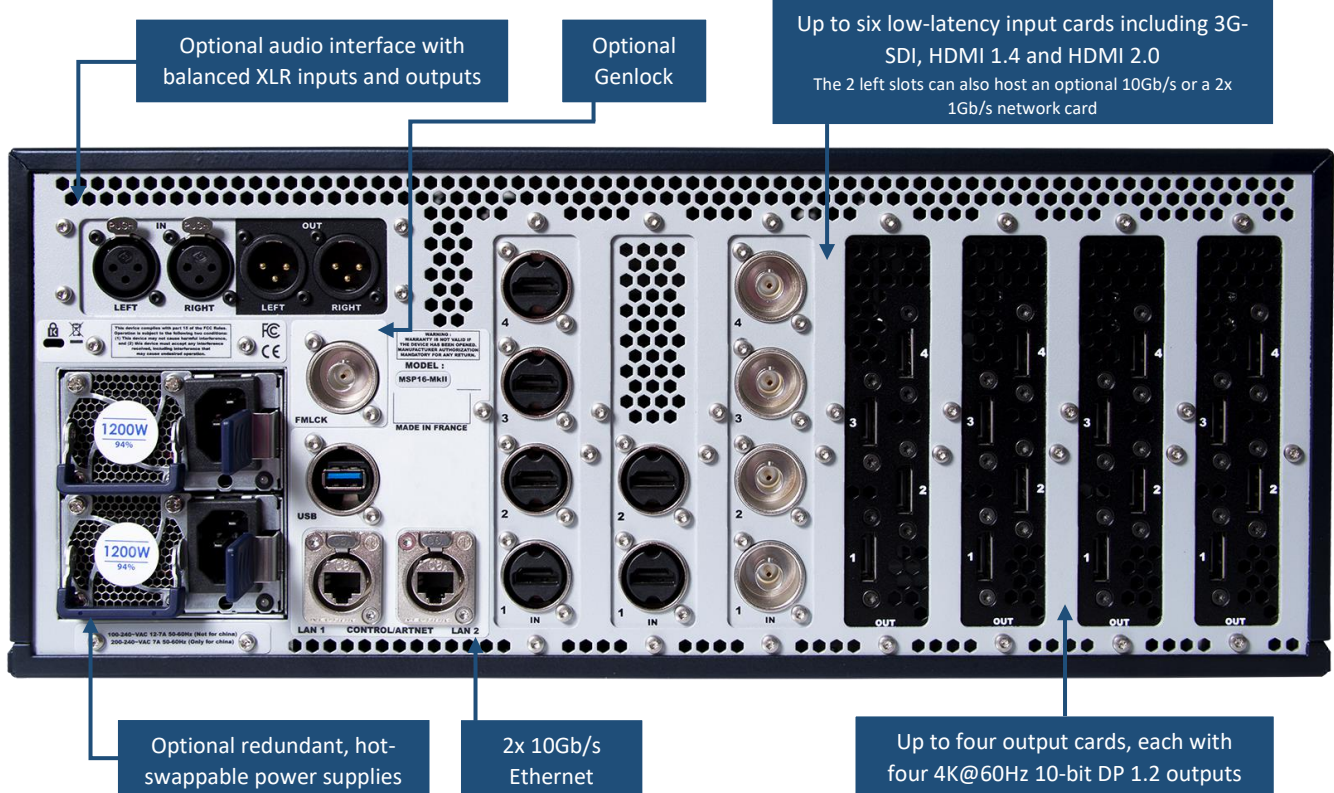
Picturall Pro Mark II offers high network bandwidth with two standard 10Gb/s Ethernet ports for faster transmission of massive media files and for more networked video streams (H264, NDI...). Two additional 1Gb/s ports and/or one additional 10Gb/s port can be optionally installed for even more flexibility with your network configuration.

High-performance storage

Picturall Pro Mark II comes with two 1TB NVMe™ read-intensive professional drives as standard (2TB total), offering consistent performance and reliability for demanding 24x7 environments. Built with PCIe® Gen4 x4 interface, the drives can deliver a read rate of up to 10.5 GB/s in RAID 0 configuration. Several storage options are available from 4TB up to 32TB, capable of storing several hours of uncompressed 8K video content.

Compatible with DPH104 image processor

Picturall Pro Mark II is compatible with Analog Way **DPH104** image processor able to convert one 4K DisplayPort output to four 1080p HDMI outputs. It is therefore possible to drive up to 64 perfectly synchronized full HD outputs from a single **Picturall Pro Mark II** server.

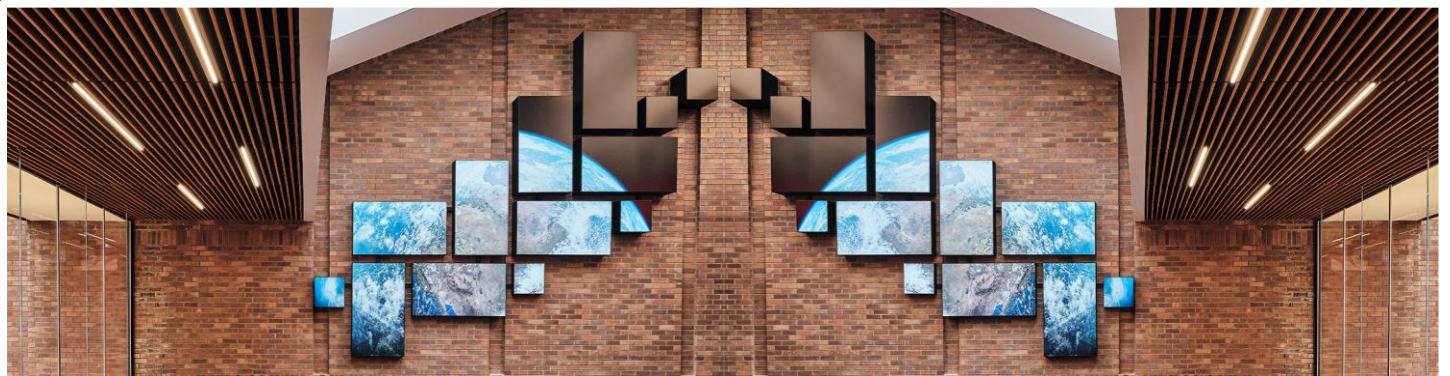




Picturall Pro media servers help Rent Event Tec drive LED videowalls for "BioHackers" streaming TV series (Germany)



Picturall Pro media server drives award-winning entrance experience at new St. Louis aquarium (USA)



Picturall Pro media server drives lobby video exhibit at W.L. Gore's Capabilities Center (USA)

Picturall Pro Mark II

KEY FEATURES

- Runs on custom and optimized Linux operating system
- Four 4K@60Hz 10-bit outputs
- Up to 24 inputs (HDMI 1.4, HDMI 2.0, 3G-SDI) with Neutrik connectors
- Pixel accurate synchronization between all outputs
- Custom output resolutions and virtual display feature for LED walls
- Programmable outputs and layers positioning, rotation, color correction, warping, blending and more...
- Soft-edge blending of multiple projectors
- EDID support
- Unlimited media width and height with AWX codec (limited only by hardware performance)
- Typical playback of up to 66 layers of 1080p@60Hz video or 18 layers of 4K@60Hz video or 6 layers of 8K@60Hz video or 1 layer of 16K@60Hz video (with AWX codec)
- Uncompressed playback up to 8K@60Hz 10-bit
- Apple™ ProRes authorized product
- Support for Vioso™ camera-based projection surface calibration (option)
- Display and control animated lower thirds, countdowns, headlines, titles, and other animated graphics with SPX graphics overlays
- HTML browser input for layers
- Support for Newtek™ NDI (version 5) live video streaming (input / output)
- Support for RTSP, RTMP, SRT and UDP network streams
- Flexible cue-based show programming with cue tracking feature
- Supports external LTC and MTC signal controlled cue triggering (external USB audio card or optional XLR stereo input/output interface required)
- Supports server internal timecode formats: system wallclock, timecode generator, media playback
- Supports scheduling for single and repeating events based on time and date
- Sync layer timecode with another Picturall server over network
- Support for multiple simultaneous audio cards and audio output channel mapping
- Support for single-layer crossfades on every layer
- 36 real-time effects including comprehensive keying options
- Back up and synchronize the show to one or more Picturall media servers
- Automatic show start on boot
- Use the included Picturall commander software for complete control of your event
- Flexible integration with 3rd party control systems
- Multi-user control
- Ruggedized, rack mountable 4RU chassis
- Easy access to front fans and filter for swift cleaning

Dimension (in Rack Units - RU) <ul style="list-style-type: none">▶ 4RU	Warranty <ul style="list-style-type: none">▶ 3-year warranty on parts and labor back to factory▶ Extendable to 5 years
Dimensions (without rack ears and rear rack mount) <ul style="list-style-type: none">▶ W 17.30" x H 6.97" x D 25.39"▶ L 440 mm x H 177 mm x P 645 mm	Single Power supply <ul style="list-style-type: none">▶ 100-240 VAC 50/60Hz 12,6-6A▶ Max consumption:660W
Dimensions (with handles) <ul style="list-style-type: none">▶ W 18.97" x H 6.97" x D 27.32"▶ L 482 mm x H 177 mm x P 694 mm	Dual redundant power supply (option) <ul style="list-style-type: none">▶ 100-240 VAC 12-7A 50-60Hz (not for china)▶ 200-240 VAC 7A 50-60Hz (only for china)▶ Max consumption: 660W
Weight without accessories <ul style="list-style-type: none">▶ 24.5 kg / 52.91 lbs	Safety Compliance <ul style="list-style-type: none">▶ IEC/UL/EN 62368-1▶ CSA22.2#62368-1
Shipping weight accessories included <ul style="list-style-type: none">▶ 30.3 kg / 66.12 lbs	Supplied with <ul style="list-style-type: none">▶ 1 x Power supply cord▶ 1 x Remote Control Software▶ 1 x Rackmount kit▶ 1 x Ethernet cross cable (for device control)▶ 1 x User manual (PDF)▶ 1 x Quick start guide including safety instructions
Operating conditions <ul style="list-style-type: none">▶ Temperature: 0 to 40°C (32 to 104°F)▶ Humidity: 10% to 80%, non-condensing	
Noise (@1,6m height @25°C) <ul style="list-style-type: none">▶ Front: 55 DBa@1m - Rear: 54 DBa@1m	
Thermal dissipation <ul style="list-style-type: none">▶ 2253 BTU/hr	

 Specifications subject to change without prior notice

OUTPUTS

- Up to 16 DisplayPort 1.2 outputs
- Output resolution up to 4096 x 2160@60Hz 10-bit
- Full 4:4:4 color sampling
- Streaming NDI output with alpha channel (up to 10 Gb/s)
- Compatible with DPH104 image processor and with EXT-DP12-OPT DisplayPort over Fiber extender
- Optional Genlock & Framelock

SUPPORTED MEDIA FORMATS

- AWX, AWX HQ and AWX alpha (proprietary high-performance codec) - free plugin available for Adobe CC HAP, HAP-Q, HAP Alpha and HAP-Q Alpha
- Apple™ ProRes (any version including ProRes 4444)
- NotchLC™ (NotchLC is a product of 10bitFX Limited - www.notch.one)
- MPEG1, MPEG2, MPEG4, MJPEG
- H.264, H.265
- JPG, TGA, TIFF, BMP, GIF, PNG with alpha channel
- Uncompressed image sequences (TGA, DPX, BMP)
- HTML-based web content with full Java script support

MEDIA STORAGE

- 2x 1TB read-intensive PCIe-NVMe drives - 2TB RAID 0 (read rate: 10.5 GB/s) or 1TB RAID 1 (read rate: 5.2 GB/s)
- 4TB, 8TB, 16TB and 32TB storage options available based on 2 larger capacity PCIe-NVMe drives

AUDIO

- Multi-channel audio playback and routing (up to 32 ch.)
- Real-time audio de-embedding from HDMI & SDI sources, network streams and web sources
- Optional audio interface with 2 balanced XLR inputs and 2 balanced XLR outputs
- Optional 32 channels Dante™ audio interface
- Support optional multichannel audio interfaces via USB
- Audio formats: wav, mp2, aac

INPUTS AND NETWORK STREAMS

- Up to six optional low latency input cards (seven combined input/output cards): 2x HDMI 1.4, 4x HDMI 1.4, 1x HDMI 2.0, 2x HDMI 2.0, 2x 3G-SDI, 4x 3G-SDI
- Network streams (RTSP, RTMP, SRT and UDP)
- Newtek™ NDI 5.0 live video streaming

CONTROL

- Picturall Commander user interface software
- TCP/IP, ArtNet

NETWORKING

- 2x 10Gb/s Ethernet (system requires at least 1GB network to maintain a stable connection)
- Option: 2x 1Gb/s and/or 1x 10Gb/s

SYSTEM

- 256GB NVMe system drive with optimized Linux OS
- 24-Core CPU (2.8GHz) - 64GB DDR4 RAM - PCIe gen. 4.0
- 3 x USB 3.0 (2 in the front, 1 in the rear)