# Picturall Pro Ref. MSP16-R1 / MSP16-R2



# Mission critical 8K modular media server. Engineered for the support of massive events and installations from one single server unit



# Massive playback capabilities

**Picturall Pro** is a high-performance modular media server designed to playback huge video content for large scale installations and events. With flexible input and output options, the ability to playback media beyond 8K resolution and to drive up to 16x 4K@60Hz 10-bit pixel accurate outputs from a single server unit, the **Picturall Pro** 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** is based on the rock-solid software Linux engine by Picturall renowned for its extreme reliability, which is a result of 10 years of R&D development and field experience.

# **Powerful features**

**Picturall Pro** 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, crossfades between clips as well as multi-user control gives you flexibility in programming and control.

# Flexible setup and 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** offers IP (Ethernet), RS232 and ArtNet interfaces which enable easy integration with any third-party control systems. **Picturall Pro** is also compatible with various remote control software such as Universe or Companion.





# Advanced media processing

**Picturall Pro** 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<sup>™</sup> ProRes (any version including ProRes 4444)
- NotchLC™
- MPEG1, MPEG2, MPEG4, MJPEG
- H.264, H.265 (including network streams)
- Newtek™ NDI 4.5 live video streaming
- JPG, TGA, TIFF, BMP, GIF, PNG with alpha channel
- Uncompressed image sequences (TGA, DPX, BMP)











# Picturall Pro at a glance

- ► Modular design with extensive I/O capability
- ► Heavy-duty ruggedized 4RU chassis
- ▶ Up to sixteen 4K@60Hz 10-bit outputs
- ▶ Beyond 8K playback performance
- ► Flexible integration with 3<sup>rd</sup> party control systems
- ► Rock-solid media server Linux software engine
- ► 3-year standard warranty

Playback performance (AWX and AWX HQ)	Twin & Twin Compact	Quad & Quad Compact	Pro <sup>[1]</sup>	Pro <sup>[2]</sup>	Pro <sup>[3]</sup>
HD@60 media layers	8	12	16	26	48
HD@60 HQ media layers	3	4	6	14	18
4K@60 media layers	2	3	4	6	12
4K@60 HQ media layers	0	1	2	4	5
8K@60 media layers	0	0	1	2	3
8K@60 HQ media layers	0	0	0	1	1



**17** million pixel LED videowall driven by Picturall Pro and Aquilon Annual Summit of Experts (Paris, France) - Brill Audio Visual Ltd



**Projection mapping driven by Picturall Pro**Plaza de Toros in Colonia (Uruguay) - Congress Rental



**27** million pixel LED videowall driven by Picturall Pro and Aquilon The Comcast Experience (USA)



### **KEY FEATURES**

Runs on custom and optimized Linux operating system

Designed for mission critical 24/7 applications

Up to 16x 4K@60Hz 10-bit outputs in one MSP16-R2 chassis or up to 8x 4K@60Hz 10-bit outputs in one MSP16-R1 chassis

Up to 16 inputs (HDMI 1.4, HDMI 2.0, 3G-SDI, DVI)

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 and blending

Soft-edge blending of multiple projectors

**EDID** support

Unlimited media width and height with AWX codec (limited only by hardware performance)

Uncompromised video playback performance: up to 12 layers of 4K@60Hz video or 3 layers of 8K@60Hz video (with AWX codec and the performance+ storage option)

NotchLC™ playback up to 4x 4K@60Hz or 1x 8K@60Hz (with Excellent quality setting and Performance+ storage option)

Uncompressed playback up to 2 layers of 4K@60Hz (with the Performance+ storage option

Apple™ ProRes authorized product

HTML browser input for layers

Support for Newtek™ NDI (version 4.5) live video streaming

Support for H.264 and H.265 network streams

36 real-time effects including comprehensive keying options

Use the included Picturall commander software for complete control of your event

Flexible integration with 3rd party control systems

Flexible cue-based show programming with cue tracking feature

Supports external LTC / MTC signal controlled cue triggering (ext. USB audio card required)

Supports server internal timecode formats: system wallclock, timecode generator, media

Supports scheduling for single and repeating events based on time and date

Support for single-layer crossfades on every layer

Automatic show start on boot

Multi-user control

- Redundant, hot-swappable power supplies (MSP16-R2)
- Single power supply (MSP16-R1)

Ruggedized, rack mountable 4RU chassis

Easy access to front fans and filter for swift cleaning

Dimension (in Rack Units - RU)

Dimensions (without rack ears and rear rack mount)

- ► W 17.28" x H 6.96" x D 20.31"
- ► L 439.5 mm x H 177 mm x P 516 mm

**Dimensions** (with handles)

- ▶ W 18.98" x H 6.96" x D 22.48"
- ► L 482 mm x H 177 mm x P 571 mm

Weight without accessories

Shipping weight accessories included

▶ 25 kg / 55.11 lbs

Operating conditions

- Temperature: 0 to 40°C (32 to 104°F)
- ► Humidity: 10% to 80%, non-condensing

Noise (@1,6m height @25°C)

- ► Front: 55 DBa@1m
- ► Rear: 54 DBa@1m

### Warranty

- ▶3-year warranty on parts and labor back to factory
- ► Extendable to 5 years

Thermal dissipation

▶ 1706 BTU/hr

- Single Power supply (MSP16-R1)
  ► 100-240 VAC 50/60Hz 12,6-6A
- ► Max consumption: 450 W

Dual redundant power supply (MSP16-R2)

- ► 100-240 VAC 12-7A 50-60Hz (not for china)
- ► 200-240 VAC 7A 50-60Hz (only for china)
- ► Max consumption: 600 W

Safety Compliance

- ► IEC/UL/EN 62368-1
- ► CSA22.2#62368-1

- ▶ 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

### OUTPUTS

-Up to 16 x DisplayPort 1.2 outputs (MSP16-R2)

-Up to 8 x DisplayPort 1.2 outputs (MSP16-R1)

Output resolution up to 4096 x 2160@60Hz 10-bit

Full 4:4:4 color sampling

Optional Genlock & Framelock card

# SUPPORTED MEDIA FORMATS

AWX, AWX HQ and AWX alpha (proprietary highperformance codec) - 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™ (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

# **PERFORMANCES**

Up to 200 layers

Typical playback of up to 48 layers of 1080p@60Hz video or 12 layers of 4K@60Hz video or 3 layers of 8K@60Hz video (with AWX codec and the Performance+ storage option)

Uncompressed playback up to 2 layers of 4K@60Hz (with the Performance+ storage option)

Canvas size up to 128K pixels across

# **MEDIA STORAGE**

1TB SSD - Speed 1000 MB/S

Optional 2TB and 4TB drive - Speed 1000 MB/S

Optional 4-8TB Performance drive - Speed 1600 MB/S

Optional 4-8TB Performance+ NVMe drive - Speed 4000 MB/S

# **AUDIO**

Optional two-channel audio interface with balanced

Support optional multichannel audio interfaces via USB

Audio formats: wav, mp2, aac

## **OPTIONAL INPUTS**

Up to four optional low latency input cards (five combined input/output cards):

2 x HDMI 1.4, 4 x HDMI 1.4, 1 x HDMI 2.0,

2 x HDMI 2.0, 2 x 3G-SDI, 4 x 3G-SDI, 1 x DVI, 2 x DVI

Network streams (H.264, H.265...)

Newtek™ NDI 4.5 live video streaming (NDI™ is a trademark of NewTek, Inc. - ndi.newtek.com)

### CONTROL

Picturall Commander user interface software

TCP/IP, ArtNet, RS232 (option)

### NETWORKING

2 x 1Gb EtherCon

Optional 1 x 10Gb EtherCon

### **OPERATING SYSTEM**

Optimized Linux OS

Specifications subject to change without prior notice

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