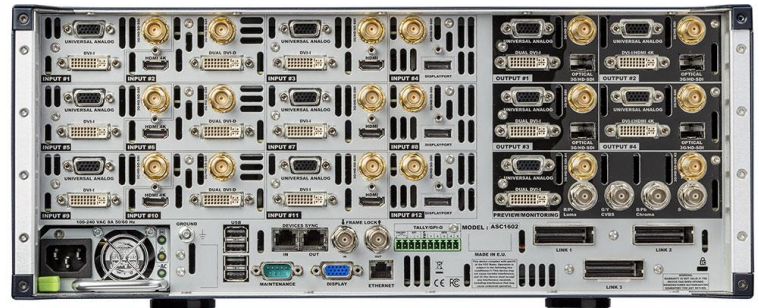


# Ascender 16 - 4K

Ref. ASC1602-4K



Cutting edge, solid state, multi-output seamless switcher and video wall processor.  
Perfect for live events and system integration



## Flexible and Powerful

Like all the products of the **LiveCore™** series, the **Ascender 16 - 4K** offers flexibility through its support of different video standards (custom formats included) and its versatile connectivity. It also features state-of-the-art live processing and a rich 4K hardware package allowing creative display configurations such as multi-projector soft-edge blending or large scale video walls applications.



## Built for Dependability

The **LiveCore™** series of product has been designed to provide a robust hardware platform that you can rely on for all of your video processing and seamless switching needs. Engineered to be road-hardened to survive tough live event environments and also for the long-haul in fixed installations. From Live concerts, to permanent LED walls in stadiums, **LiveCore™** has you covered.

## Designed for Creativity

The **Ascender 16 - 4K** offers many advanced real time processing features that you might only expect to find in high-end professional broadcast studios. Cut and fill, alpha-channel support, Chroma and Luma key, true seamless switching on all layers as well as an intuitive web based user interface which will help unleash all your creative potential.

## Expandable for Larger Events

For larger events or larger screens, 2 chassis can be linked via proprietary link cables. In this configuration, input/output capabilities are doubled without requiring any upstream splitter or any matrix router. For even more impressive shows, multiple chassis can be controlled by **Vertige™** or **RCU** to create huge video canvases with up to 96 outputs and 192 megapixels.

Up to  
**12**  
inputs

Up to  
**4**  
outputs

**4U**  
size

Up to  
**4K**  
60Hz

  
Cut & Fill

  
Rotation

### Ascender 16 - 4K at a glance

- ▶ Versatile connectivity (12 seamless inputs and 42 input plugs)
- ▶ State-of-the-art, real-time 10 bit 4:4:4 processing
- ▶ Advanced video effects for impressive visual shows
- ▶ True-seamless switching technology
- ▶ User-friendly and intuitive Web-based graphic user interface
- ▶ Heavy-duty design for optimized uptimes in mission-critical use

	Ascender 16 - 4K	Ascender 32 - 4K - PL	Ascender 48 - 4K - PL
Layers per output	2	4	6
Perspective Layers	-	✓	✓

## KEY FEATURES

- Based on LiveCore™ platform
- Ruggedized and heavy-duty design
- Versatile connectivity (12 active inputs, 42 total input plugs)
- Input formats up to Dual Link 60Hz 4:4:4 or 4k30Hz 4:4:4 - supports Quad HD sources
- Output formats up to 4K30Hz 4:4:4, 4K60Hz 4:2:0 and Quad HD 60Hz 4:4:4
- Seamless crossfade on all layers, on all 12 sources
- Rotation capability on all outputs
- Independent output rate
- Flying layer movement with programmable paths
- Multiple layer transition options
- Independent preview/mosaic/monitoring output
- Customization of monitoring layouts (8 presets)
- Intuitive drag and drop Web based GUI, cross platform compatible
- Live video thumbnails shown on GUI
- Collaborative architecture (up to 5 simultaneous operators)
- Single screen memories and master memories to easily recall looks on all your screens
- Creative display configurations (mixer, hard-edge, soft-edge)
- Custom output formats for non-standard display applications (10 memories)
- Custom Canvas mode allows you to place outputs anyway on your “video canvas” for special LED wall applications
- Area of Interest option to customize active areas of outputs
- Confidence monitor available for unused outputs
- Native background using still images or live sources
- Still images support alpha-channels for transparent background
- Cut and Fill (using two sources or a source and a still image)
- Quiet: 49dB average noise at 1m when ambient temperature is less than 32°C/90°F
- Additive modularity (increase the outputs and/or inputs by adding an additional Ascender or LOE)
- Associative modularity (create a large system of LiveCore™ units all controlled from a Vertige™ or from RCU)
- Sequencer for creating programmable timelines
- Remote services and maintenance
- HDCP compliant

### Dimension (in Rack Units - RU)

▶ 4RU

### Dimensions (without rack ears and rear rack mount)

- ▶ W 17.32" x H 6.96" x D 20.47"
- ▶ L 440 mm x H 177 mm x P 520 mm

### Dimensions (with handles)

- ▶ W 19" x H 6.96" x D 21.41"
- ▶ L 482.6 mm x H 177 mm x P 544 mm

### Weight without accessories

- ▶ 18.5 kg / 40.78 lbs

### Shipping weight accessories included

- ▶ 24.3 kg / 53.57 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: 49 DBa@1m
- ▶ Rear: 51 DBa@1m

### Thermal dissipation

- ▶ 1024 BTU/hr

### Warranty

- 3-year warranty on parts and labor back to factory

### Power Supply

- ▶ 100-240 VAC 50/60Hz 8A swappable
- ▶ Max consumption: 300 W

### Safety Compliance

- ▶ IEC/UL/EN 60950-1, CSA22.2#60950-1, UL Listed (US & Canada) File:E359143

### Supplied with

- ▶ 1 x Power supply cord
- ▶ 1 x Web-based Remote Control Software
- ▶ 1 x Rackmount kit
- ▶ 1 x Ethernet cross cable (for device control)
- ▶ 1 x MCO 10 pin connector
- ▶ 1 x User manual (PDF)\*
- ▶ 1 x Quick start guide including safety instructions\*

## INPUTS

- 12 active inputs, 42 total input plugs
- 6x HDMI (3x HDMI up to 4k30Hz included)
- 3x DisplayPort (up to 4k30Hz)
- 9x DVI-I (3x DVI Dual-Link up to 2560x1600 included)
- 12x 3G/HD/SD-SDI
- 12x Universal Analog (6x HD15 & 6x DVI-A)

## OUTPUTS

- 4 outputs with 5 plugs per output
- 8x Universal Analog (4x HD15 & 4x DVI-A)
- 4x 3G/HD/SD-SDI
- 2x DVI-I Dual-Link up to 2560x1600 (output #1 and #3)
- 2x DVI/HDMI 4K up to 4k30Hz 4:4:4 or up to 4k60Hz 4:2:0 (output #2 and #4)
- 4x SFP (Optical for SDI Fiber transmission)

## MONITORING OUTPUT

- 2x Universal Analog (HD15 & DVI-A)
- 1x DVI-I
- 2x 3G/HD/SD-SDI
- 1x RGBs/RGsB/RGB/YPrBr/YC/comp analog output
- Customizable labels - Up to 12 widgets

## LAYERS

- 2 True-Seamless scaled layers per output
- 1 native background layer per output
- Advance layer management

## TRANSITIONS & EFFECTS

- True A/B Mix
- Borders: Edge, Smooth, Smooth Edge, Shadow...
- Transitions: Cut, Fade, Slide, Wipe, Circle, Stretch, Depth, Flying window
- Layer effects: Background Cut, Transparency, Luma/Chroma Key, DSK, H&V Flip, Cut and Fill
- Colors effects: B&W, Negative, Sepia and Solarize

## FRAMES & LOGOS

- Up to 100 frame/logo memories – Fully resizable
- Download/upload via Web RCS
- Capture from live inputs

## CONTROL

- Web RCS: On-board intuitive web based user interface
- Vertige™: Premium remote controller
- RCU: Rack mountable master control unit
- Shot Box<sup>2</sup>/Control Box<sup>2</sup>: Cost effective control solutions
- TCP protocol and AMX/Crestron drivers
- AW VideoCompositor: Drag & drop Crestron® GUI

## OTHER FEATURES

- Tally/GPI-O
- Independent Frame Lock input and output loop

## EXPANDABILITY

- 2 chassis can be linked via proprietary link cables to expand input/output capabilities
- Several chassis can be controlled from a Vertige™ or from RCU to create huge video canvases

 Specifications subject to change without prior notice

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