

ATEM Constellation 8K



Ultra HD live production switcher with so many features, you can combine them all to make an incredibly powerful 8K switcher! This massive 4 M/E switcher features 40 12G-SDI inputs, 24 12G-SDI aux outputs, 4 DVEs, 16 ATEM Advanced Chroma Keyers, 4 media players, 4 independent Ultra HD multi viewers, 2 SuperSource processors and even standards conversion on all inputs! When switched to work in 8K, all of these features are combined to make a powerful native 8K switcher! You even get built in talkback and a professional 156 channel Fairlight audio mixer with EQ and dynamics!

\$11,245

Connections

Total Video Inputs

40 x up to Ultra HD / 10 x in 8K

Total Video Outputs

28 x up to Ultra HD / 7 x in 8K

Total Aux Outputs

24 x up to Ultra HD / 6 x in 8K

SDI Rates

1.5G, 3G, 6G, 12G

Total Audio Inputs

2 x balanced 1/4 inch Jack, 1 x 32 stereo channel BNC MADI in.

Total Audio Outputs

2 x balanced 1/4 inch Jack, 2 x 32 stereo channel BNC MADI out.

Timecode Connections

None

Reference Input

Tri-Sync or Black Burst.

Video Input Re-Sync

On all 40 inputs.

Frame rate and format converters

On all 40 inputs.

SDI Video Inputs

40 x 10-bit 720p, 1080i, 1080p, 2160p and 10 x 4320p switchable.

Extra Audio Outputs

1 x 5 pin XLR Talkback.

SDI Audio Outputs

2 Ch embedded into SDI output on all outputs.

Extra Audio Inputs

1 x 5 pin XLR Talkback.

SDI Program Outputs

Any of the 24 SDI outputs.

Down Converted SDI

Program Output

None

SDI Preview Outputs

Any of the 24 SDI outputs.

Total Multi Views

4 x up to Ultra HD / 1 x in 8K

SDI Multi View Outputs

4

HDMI Multi View Outputs

None

Remote

RJ12 supports RS-422

Control Panel Connection

Ethernet supports 10/100/1000 BaseT. Allows direct connection between panel and chassis, or via network.

Internal Timecode Generator

Yes

Talkback

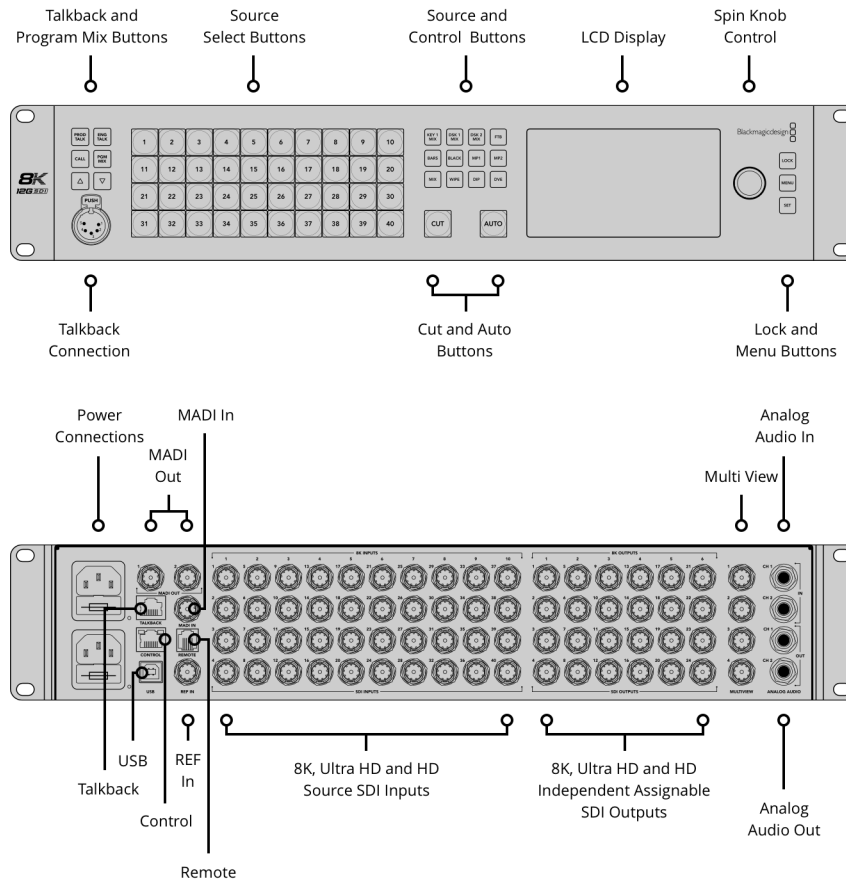
RJ45 for 3rd party talkback systems.

Tally Output

Added via ethernet connection to Blackmagic Design GPI and Tally Interface product. (Not included).

Computer Interface

1 x USB 2.0 port.



Standards

SD Video Standards

None

HD Video Standards

720p50, 720p59.94
1080i50, 1080i59.94
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p50, 1080p59.94

Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p50, 2160p59.94

8K Video Standards

4320p23.98, 4320p24, 4320p25,
4320p29.97, 4320p50, 4320p59.94

SDI Compliance

SMPTE 292M, SMPTE 296M,
SMPTE 424M, SMPTE 425M Level A
and B, SMPTE 2081-1, SMPTE
2081-10, SMPTE 2082-1 and SMPTE
2082-10, SMPTE 2082-12.

Video Sampling

4:2:2

Color Precision

10-bit.

Color Space

REC 709

SDI Auto Switching

Automatically detects between level A
and level B 3G-SDI, 6G-SDI and 12G-
SDI. Requires 2SI in 8K mode.

Product Specifics

Upstream Keyers

16 x up to Ultra HD / 4 x in 8K with
Chroma/Linear/Luma key.

Downstream Keyers

4 x up to Ultra HD / 2 x in 8K.

Advanced Chroma Keyers

16 x up to Ultra HD / 4 x in 8K.

SuperSource

2

Talkback Support

Yes

Mix Minus Support Yes	Pattern Generators 21 x up to Ultra HD / 9 x in 8K	Control Panel Front fascia emergency switching, software or optional hardware panel.
Linear/Luma Keyers 21 x up to Ultra HD / 7 x in 8K	Color Generators 2	Routable Windows 64 x up to Ultra HD / 16 x in 8K
Transition Keyer (Stinger/DVE) 4 Stinger, 4 DVE .	DVE with 3D Borders & Drop Shadow 4 x up to Ultra HD / 1 x in 8K	Tally Red for program and green for preview indication.
Total Number of Layers 28 x up to Ultra HD / 7 x in 8K		Windows Source Labels Yes

Multi View Monitoring

Multi View Monitoring 4 x 16 Multi View pattern options for up to 64 total views.	Multi View Video Standard Select HD, Ultra HD or 8K.
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Media Player

Media Players 4 x up to Ultra HD / 1 x in 8K	Media Pool Clip Capacity 4 x up to Ultra HD / 2 x in 8K with fill and key.	Media Player Clip Length in 8K 100 frames.
Channels Fill and key for each media player.	Media Player Clip Length in 720 HD 3200 frames.	Media Pool Still Image Format PNG, TGA, BMP, GIF, JPEG and TIFF.
Media Pool Still Image Capacity 64 x up to Ultra HD / 24 x in 8K with fill and key.	Media Player Clip Length in 1080 HD 1600 frames.	Media Pool Video File Format TGA Sequence.
	Media Player Clip Length in Ultra HD 400 frames.	Media Pool Audio File Format WAV, MP3 and AIFF.

Display

Interface Minimum monitor resolution of 1366 x 768.	Front panel Built in HD LCD monitor for video, 42 LED buttons for setup and emergency switching, 8 source buttons, 4 transition buttons, 6 talkback selection and mix buttons, menu control knob and set button, front panel lock button.
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Processing

Processing Delay

< 7 lines in up to Ultra HD / in 10 lines in 8K

Audio Mixer

156 Channel mixer
Selectable On/Off/Audio-Follow-Video.
Level and Peak metering.
Master gain control.
6 band parametric EQ, Dynamics including Expander, Gate, Compressor and Limiter.

Down Conversion

None

Software

Control Panel Included

ATEM Software Control Panel included free for Mac 10.13 High Sierra, Mac 10.14 Mojave or later and Windows 8.1 64-bit or Windows 10 64-bit.

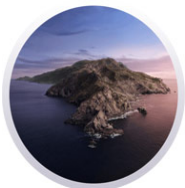
Software Updates

Using USB 2.0 connection directly connected to Mac OS or Windows computers. Includes ATEM Setup Utility.

Configuration

Set via ATEM Software Control Panel, excluding ATEM chassis IP address which is set via the ATEM Setup Utility connected via USB to chassis.

Operating Systems



Mac 10.14 Mojave,
Mac 10.15 Catalina or later.



Windows 8.1 and 10, both 64-bit.

Power Requirements

Power Supply

2 x Internal 100 - 240 AC.

Power Usage

300W

Physical Specifications



Physical Installation

Physical Installation

2 Rack Unit Size.

Environmental Specifications

Operating Temperature

0° to 40° C (32° to 104° F)

Storage Temperature

-20° to 60° C (-4° to 140° F)

Relative Humidity

0% to 90% non-condensing

What's Included

ATEM Constellation 8K

Welcome wallet with QR code for software download

Warranty

12 Month Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller