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 be 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!

$9,995

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

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

**Internal Timecode Generator**
Yes

**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 601, REC 709, REC 2020.

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.

Talkback Support
Yes

Mix Minus Support
Yes
### Linear/Luma Keyers
- 21 x up to Ultra HD / 7 x in 8K

### Transition Keyer (Stinger/DVE)
- 4 Stinger, 4 DVE

### Total Number of Layers
- 28 x up to Ultra HD / 7 x in 8K

### Pattern Generators
- 21 x up to Ultra HD / 9 x in 8K

### Color Generators
- 2

### DVE with 3D Borders & Drop Shadow
- 4 x up to Ultra HD / 1 x in 8K

### Control Panel
- Front fascia emergency switching, software or optional hardware panel.

### Routable Windows
- 64 x up to Ultra HD / 16 x in 8K

### Tally
- Red for program and green for preview indication.

### Windows Source Labels
- Yes

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### 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

#### Channels
- Fill and key for each media player.

#### Media Pool Still Image Capacity
- 64 x up to Ultra HD / 24 x in 8K with fill and key.

#### Media Pool Clip Capacity
- 4 x up to Ultra HD / 2 x in 8K with fill and key.

#### Media Player Clip Length in 720 HD
- 3200 frames.

#### Media Player Clip Length in 1080 HD
- 1600 frames.

#### Media Player Clip Length in Ultra HD
- 400 frames.

#### Media Player Clip Length in 8K
- 100 frames.

#### Media Pool Still Image Format
- PNG, TGA, BMP, GIF, JPEG and TIFF.

#### Media Pool Video File Format
- TGA Sequence.

#### Media Pool Audio File Format
- WAV, MP3 and AIFF.

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### 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.
## 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 Specifications Image]

Physical Installation

Physical Installation
2 Rack Unit Size.

Environmental Specifications

<table>
<thead>
<tr>
<th>Operating Temperature</th>
<th>Storage Temperature</th>
<th>Relative Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0° to 40° C (32° to 104° F)</td>
<td>-20° to 60° C (-4° to 140° F)</td>
<td>0% to 90% non-condensing</td>
</tr>
</tbody>
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What's Included

ATEM Constellation 8K
SD card with software and manual

Warranty

12 Month Limited Manufacturer's Warranty.