

ATEM 4 M/E Constellation 4K



ATEM 4 M/E Constellation 4K is a massive 4 M/E Ultra HD live production switcher. It features 40 standards converted 12G-SDI inputs, 24 12G-SDI aux outputs, 4 DVEs, 16 ATEM Advanced Chroma Keyers, 4 media players, 4 independent Ultra HD multiviews, 2 SuperSource processors and more. You even get built in talkback and a professional 156 channel Fairlight audio mixer with EQ and dynamics!

\$10,705

Connections

Total Video Inputs

40

Total Video Outputs

28

Total Aux Outputs

24

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,
1 x 5 pin XLR Talkback.

Total Audio Outputs

2 x balanced 1/4 inch Jack,
2 x 32 stereo channel BNC MADI out,
1 x 5 pin XLR Talkback.

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.

SDI Audio Inputs

8 Ch embedded audio on all SDI inputs.

Extra Audio Inputs

1 x 5 pin XLR Talkback.

SDI Video Outputs

28 x 10-bit 720p, 1080i, 1080p, 2160p.

SDI Audio Outputs

16 Ch embedded into SDI output on all outputs.

Extra Audio Outputs

1 x 5 pin XLR Talkback.

SDI Program Outputs

Any of the 24 SDI outputs.

Down Converted SDI Program Output

1

SDI Preview Outputs

Any of the 24 SDI outputs.

SDI Multi View Outputs

4

HDMI Multi View Outputs

None

Webcam Output

1 x USB-C supporting 720p or 1080p at PGM frame rate.

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

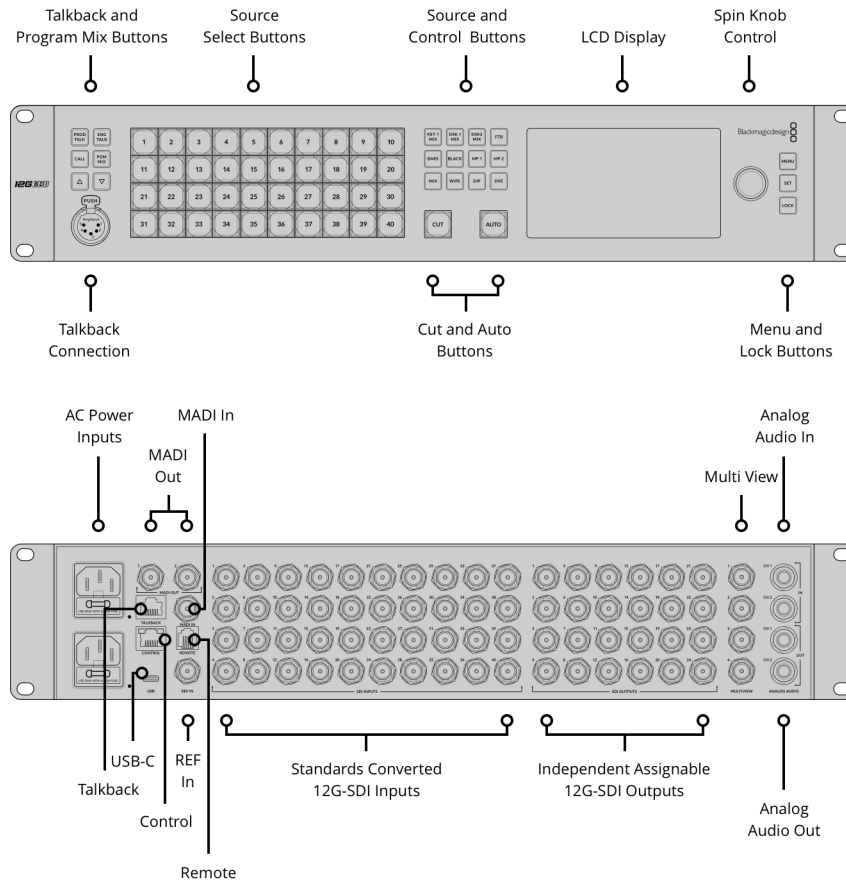
RJ45 for 3rd party talkback systems.

Tally Output

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

Computer Interface

1 x USB-C port.



Standards

SD Video Standards

None

HD Video Standards

720p50, 720p59.94, 720p60
1080i50, 1080i59.94, 1080i60
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p30, 1080p50,
1080p59.94, 1080p60.

Ultra HD Video Standards

2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p30, 2160p50,
2160p59.94, 2160p60.

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, REC 2020.

SDI Auto Switching

Automatically detects between 1.5G-SDI, level A and level B 3G-SDI, 6G-SDI and 12G-SDI.

Product Specifics

Upstream Keyers

16

Downstream Keyers

4

Advanced Chroma Keyers

16

SuperSource

2

Talkback Support

Yes

Mix Minus Support

Yes

Linear/Luma Keyers

21

Transition Keyer (Stinger/DVE)

4 Stinger, 4 DVE.

Total Number of Layers

28

Pattern Generators

21

Color Generators

2

DVEs

4

Control Panel

Front fascia emergency switching, software or optional hardware panel.

Routable Windows

64

Tally

Red for program and green for preview indication.

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 or Ultra HD.

Media Player

Media Players

4

Channels

Fill and key for each media player.

Media Pool Still Image Capacity

64

Media Pool Clip Capacity

4

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 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.

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

< 10 lines.

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

1 x selectable HD down converted output

Software

Control Panel Included

ATEM Software Control Panel included free for Mac 12.0 Monterey, Mac 13.0 Ventura or later and Windows 10 and 11.

Software Updates

Using USB or Ethernet connection directly connected to Mac 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-C to chassis.

Operating Systems



Mac 14.0 Sonoma,
Mac 15.0 Sequoia or later.



Windows 10 and 11.

Power Requirements

Power Supply

2 x Internal 100 - 240 AC 50/60Hz.

Power Usage

255 W

Physical Specifications



Physical Installation

Physical Installation

2 rack units height.

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 4 M/E Constellation 4K

Welcome wallet with QR code for software download

Warranty

1 Year Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller