Blackmagicdesign

ATEM 4 M/E Constellation HD

The massive 4 M/E model doubles the features of the 2 M/E model with 40 x 3G-SDI inputs, 24 x 3G-SDI outputs, 4 DVEs, 16 ATEM Advanced Keyers, 4 multiviews and 2 SuperSource for 12 x DVEs in total.

$3,695

Connections

Total Video Inputs
40

Total Video Outputs
24

SDI Rates
1.5G, 3G

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.

SDI Audio Inputs
2 Ch embedded audio on all SDI inputs.

SDI Audio Outputs
2 Ch embedded audio on all SDI outputs.

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 Aux Outputs
Any of the 24 SDI outputs.

SDI Preview Outputs
Any of the 24 SDI outputs.

SDI Program Outputs
Any of the 24 SDI outputs.

Down Converted SDI Program Output
None

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

Total Multi Views
4 x 3G-SDI

Remote
RJ12 supports RS-422

Control Panel Connection
Ethernet. Direct connection between panel and chassis, or via network.

Internal Timecode Generator
Yes

Talkback
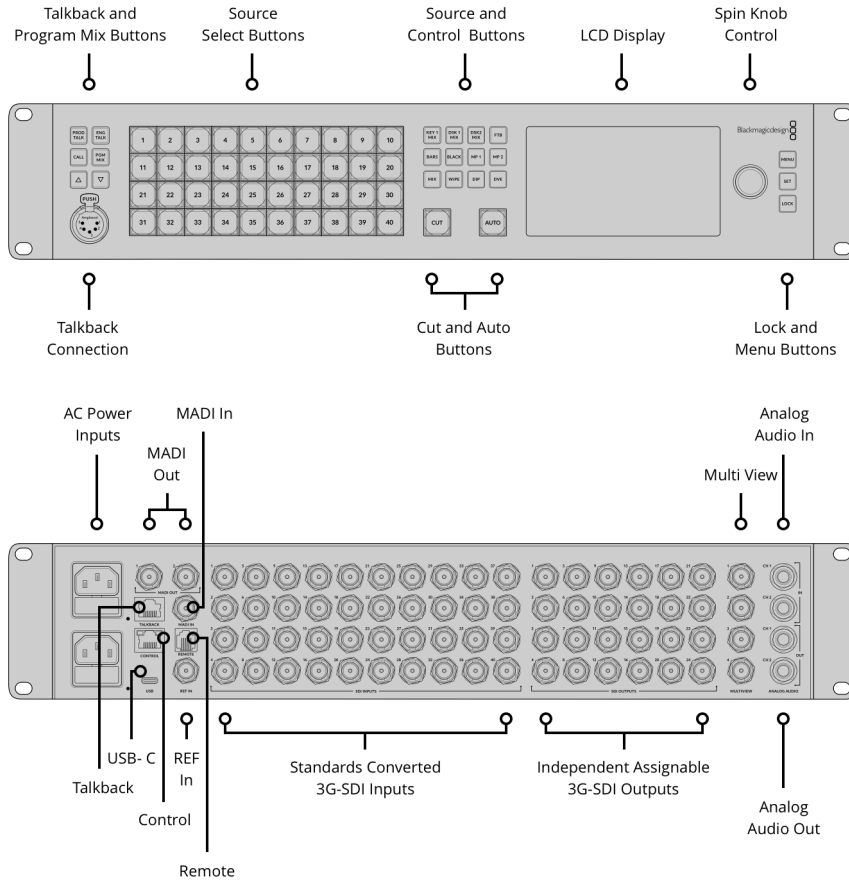RJ45 for 3rd party talkback systems.

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

Ethernet
Supports 10/100/1000 BASE-T.

Computer Interface
1 x USB-C supports USB 3.1 Gen 1 (5Gb/s)

Front panel labels:

Talkback and Program Mix Buttons · Source Select Buttons · Source and Control Buttons · LCD Display · Spin Knob Control

Talkback Connection · Cut and Auto Buttons · Lock and Menu Buttons

Rear panel labels:

AC Power Inputs · MADI In · MADI Out · Analog Audio In · Multi View

USB-C · Talkback · Control · REF In · Remote · Standards Converted 3G-SDI Inputs · Independent Assignable 3G-SDI Outputs · Analog Audio Out

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

SDI Compliance
SMPTE 292M, SMPTE 296M,
SMPTE 424M, SMPTE 425M level A
and B.

Video Sampling
4:2:2

Color Precision
10-bit.

Color Space
REC 709

SDI Auto Switching
Automatically detects between 1.5G-SDI and level A or level B 3G-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

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 multi views each configurable to 16, 13, 10, 7 or 4 up views. Includes monitoring of Program, Preview, Inputs, Media Players, M/Es, DSKs, SuperSource, Clean Feed with optional labels and audio meters.

Multi View Video Standard

HD

Display Minimum Resolution

1366 x 768

Media Player

Media Players

4

Channels

Fill and key for each media player.

Media Pool Still Image Capacity

60

Media Pool Clip Capacity

4 x up to 1080p60.

Media Player Clip Length in 720 HD

1200 frames.

Media Player Clip Length in 1080 HD

600 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

Front panel

Built in 5 inch 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

None

Software

Control Panel Included

ATEM Software Control Panel included free for Mac 11.11 Big Sur, Mac 12 Monterey or later and Windows 10 or 11.

Software Updates

Using USB or Ethernet 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 11.1 Big Sur,
Mac 12.0 Monterey or later.

Windows 10 and 11.

Power Requirements

Power Supply

2 x Internal 100 - 240 AC.

Power Usage

147W estimated.

Physical Specifications

Physical Installation

Physical Installation
2 Rack Unit Size.

Environmental Specifications

Operating Temperature	**Storage Temperature**	**Relative Humidity**
0° to 40° C (32° to 104° F)	-20° to 60° C (-4° to 140° F)	0% to 90% non-condensing

What's Included

ATEM 4 M/E Constellation HD
Welcome wallet with QR code for software download

Warranty

12 Month Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller