The advanced ATEM 1 M/E Production Studio 4K model switches between SD, HD or Ultra HD video standards so you can connect a wide range of video sources such as cameras, disk recorders and computers. Featuring 10 inputs, chroma keys, transitions, media pool, 4 upstream keyers, downstream keyers, audio mixer, multi view, full motion DVE, stinger transitions, large media pool with full motion clips and 3 auxiliary outputs!

**Connections**

**Total Video Inputs**
11 with 10 active.

**Total Video Outputs**
10

**Total Aux Outputs**
3

**SDI Rates**
270Mb, 1.5G, 3G, 6G

**Total Audio Inputs**
2 x XLR, 2 x RCA.

**Total Audio Outputs**
2 x XLR Program.

**Timecode Connections**
None

**Reference Input**
Tri-Sync or Black Burst.

**Video Input Re-Sync**
On all 10 inputs.

**SDI Video Inputs**
10 x 10-bit SD/HD/Ultra HD 4K switchable. 2 channel embedded audio.

**HDMI Video Input**
1 x HDMI type A. 10-bit SD/HD/Ultra HD 4K switchable. 2 channel embedded audio.

**Analog Audio Outputs**
2 x XLR.

**SDI Audio Outputs**
2 Ch embedded into SDI output on all outputs.

**SDI Program Outputs**
2 x 10-bit SD/HD/Ultra HD 4K switchable.

**HDMI Program Outputs**
1 x HDMI type A, 10-bit SD/HD/Ultra HD 4K switchable.

**Down Converted SDI Program Output**
1 x 10-bit (Ultra HD 4K to HD)

**SDI Preview Output**
1 x 10-bit SD/HD/Ultra HD 4K switchable.

**Total Multi Views**
1

**SDI Multi View Outputs**
1

**HDMI Multi View Outputs**
1

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

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

**Computer Interface**
1 x USB 2.0 port.

**ATEM 1 M/E Production Studio 4K - Technical Specifications**

$2,495
Standards

SD Video Standards
525i 59.94 NTSC, 625i 50 PAL

HD Video Standards
720p 50, 720p 59.94
1080p 23.98, 1080p 24, 1080p 25,
1080p 29.97, 1080p 50, 1080p 59.94
1080i 50, 1080i 59.94

Ultra HD Video Standards
2160p 23.98, 2160p 24,
2160p 25, 2160p 29.97

SDI Compliance
SMPTE 259M, SMPTE 292M,
SMPTE 424M.

Video Sampling
4:2:2.

Color Precision
10-bit

Color Space
REC 601, REC 709, REC 2020.

HDMI Input Resolutions
for Computers
720 x 480i 59.94Hz,
720 x 576i 50Hz,
1280 x 720 59.94Hz,
1280 x 720 50Hz,
1920 x 1080 50Hz,
1920 x 1080 59.94Hz,
3840 x 2160 23.98Hz,
3840 x 2160 24Hz,
3840 x 2160 25Hz,
3840 x 2160 29.97Hz.

Product Specifics

Upstream Keyers
4 with Chroma/Linear/Luma key.

Chroma Keyers
4

Downstream Keyers
2

Linear/Luma Keyers
7

Talkback Support
None

Transition Keyer (Stinger/DVE)
1 Stinger, 1 DVE.

Mix Minus Support
None

Total Number of Layers
8

Pattern Generators
7

Color Generators
2

Drop Shadow
1
Control Panel Compatibility
ATEM 1 M/E Broadcast Panel preferred.
Compatible with ATEM 2 M/E Broadcast Panel. Includes ATEM Software Control Panel.

Media Player

<table>
<thead>
<tr>
<th>Media Players</th>
<th>Media Player Clip Length in 720 HD</th>
<th>Maximum Clip Length in NTSC/PAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1600 frames.</td>
<td>3600 frames.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Channels</th>
<th>Media Player Clip Length in 1080 HD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill and key for each Media Player</td>
<td>720 frames.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Still Image Capacity</th>
<th>Media Player Clip Length in Ultra HD</th>
<th>Media Pool Video File Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 with fill and key.</td>
<td>180 frames</td>
<td>TGA Sequence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Clip Capacity</th>
<th>Media Pool Still Image Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 with fill and key.</td>
<td>PNG, TGA, BMP, GIF, JPEG and TIFF.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Clip Length in 720 HD</th>
<th>Media Pool Audio File Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600 frames.</td>
<td>WAV, MP3 and AIFF.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Clip Length in 1080 HD</th>
<th>Media Pool Video File Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>720 frames.</td>
<td>TGA Sequence.</td>
</tr>
</tbody>
</table>

Multi View Monitoring

<table>
<thead>
<tr>
<th>Multi View Monitoring</th>
<th>Tally</th>
<th>Windows Source Labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x 10 views.</td>
<td>Red for program and green for preview indication.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Routable Windows</th>
<th>Multi View Video Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>HD</td>
</tr>
</tbody>
</table>

Display

<table>
<thead>
<tr>
<th>Interface</th>
<th>Front Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum monitor resolution of 1366 x 768.</td>
<td>Built in LCD monitor for video and 42 LED buttons for Aux switching.</td>
</tr>
</tbody>
</table>

Processing

<table>
<thead>
<tr>
<th>Colorspace Conversion</th>
<th>Audio Mixer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware based real time.</td>
<td>12 input x 2 channel mixer. Selectable On/Off/Audio-Follow-Video. Level and Peak metering. Master gain control. Analog outputs may be used for separate monitoring.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processing Delay</th>
<th>4K to HD Down Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2 Lines.</td>
<td>Yes, program x 1.</td>
</tr>
</tbody>
</table>
Software

Control Panel Included
ATEM Software Control Panel included free for Mac 10.12 Sierra, Mac 10.13 High Sierra 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 or Windows 10.

Power Requirements

Power Supply
1 x Internal 100 - 240V AC.

Physical Specifications

Physical Installation
1 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 1 M/E Production Studio 4K  
SD card with software and manual

Warranty

12 month Limited Manufacturer's Warranty.