ATEM 1 M/E Production Studio 4K

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!

$2,495

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.
Standards

**SD Video Standards**
525i59.94 NTSC, 625i50 PAL

**HD Video Standards**
720p50, 720p59.94
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p50, 1080p59.94
1080i50, 1080i59.94

**Ultra HD Video Standards**
2160p23.98, 2160p24,
2160p25, 2160p29.97

**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 59.94Hz,
1920 x 1080 50Hz,
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

**DVE with 3D Borders & 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>
<th>Media Pool Still Image Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill and key for each Media Player.</td>
<td>720 frames.</td>
<td>PNG, TGA, BMP, GIF, JPEG and TIFF.</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>Maximum Clip Length in NTSC/PAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 with fill and key.</td>
<td>3600 frames.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Media Player Clip Length in 720 HD</th>
<th>Media Player Clip Length in 1080 HD</th>
<th>Maximum Clip Length in NTSC/PAL</th>
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</thead>
<tbody>
<tr>
<td>1600 frames.</td>
<td>720 frames.</td>
<td>3600 frames.</td>
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</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>Media Pool Still Image Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>PNG, TGA, BMP, GIF, JPEG and TIFF.</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>
<th>4K to HD Down Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware based real time.</td>
<td>12 input x 2 channel mixer.</td>
<td>Yes, program x 1.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processing Delay</th>
<th>Audio Mixer</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2 Lines.</td>
<td>Selectable On/Off/Audio-Follow-Video.</td>
</tr>
</tbody>
</table>

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<tr>
<th>Processing Delay</th>
<th>Audio Mixer</th>
</tr>
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<tbody>
<tr>
<td>&lt; 2 Lines.</td>
<td>Level and Peak metering.</td>
</tr>
</tbody>
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<tr>
<th>Processing Delay</th>
<th>Audio Mixer</th>
</tr>
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<tr>
<td>&lt; 2 Lines.</td>
<td>Master gain control.</td>
</tr>
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<tr>
<th>Processing Delay</th>
<th>Audio Mixer</th>
</tr>
</thead>
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<tr>
<td>&lt; 2 Lines.</td>
<td>Analog outputs may be used for separate monitoring.</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.

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## Operating Systems

<table>
<thead>
<tr>
<th>Software</th>
<th>Mac 10.14 Mojave, Mac 10.15 Catalina or later.</th>
<th>Windows 8.1 or Windows 10.</th>
</tr>
</thead>
</table>

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## Power Requirements

**Power Supply**
1 x Internal 100 - 240V AC.

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## Physical Specifications

### Physical Installation
1 Rack Unit Size.

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## Environmental Specifications

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

ATEM 1 M/E Production Studio 4K - Technical Specifications
What's Included

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

Warranty

12 month Limited Manufacturer's Warranty.

Blackmagic Design Authorized Reseller