The new ATEM 2 M/E Production Studio 4K lets you produce broadcast quality live multi camera production in SD, HD or amazing Ultra HD! Featuring 20 inputs with built in re-synchronizers so you can connect the widest range of video sources such as cameras, disk recorders and computers for incredible live music, sport and more! ATEM 2 M/E Production Studio 4K has advanced broadcast features such as chroma key, customizable transitions, upstream and downstream keyers, DVE, Super Source, audio mixer, 2 x multi views, media pool and more! You also get 6G-SDI and HDMI 4K connections and 6 auxiliary outputs for the most advanced live production switching!

**Connections**

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

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

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

**SDI Program Outputs**
3 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 Outputs**
1 x 10-bit (Ultra HD 4K to HD).

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

**Total Multi Views**
2

**SDI Multi View Outputs**
2

**HDMI Multi View Outputs**
2

**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 2 M/E Production Studio 4K**

**Total Video Inputs**
21 with 20 active

**Total Video Outputs**
16

**Total Aux Outputs**
6

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

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

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

**Timecode Connection**
1 x XLR in and 1 x XLR out.

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

**Video Input Re-Sync**
On all 20 inputs.

$3,995
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 50Hz,
1920 x 1080 59.94Hz,
3840 x 2160 23.98Hz,
3840 x 2160 24Hz,
3840 x 2160 25Hz,
3840 x 2160 29.97Hz.

Note: Also supported are; 24, 30 and
60 Hz inputs when switcher is in
23.98, 29.97 and 59.94 Hz
formats respectively.

Product Specifics

Upstream Keyers
4 with Chroma/Linear/Luma key.

Chroma Keyers
4

Mix Minus Support
None

Downstream Keyers
2

Talkback Support
None

Linear/Luma Keyers
7
<table>
<thead>
<tr>
<th>Transition Keyer (Stinger/DVE)</th>
<th>Pattern Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Stinger, 1 DVE.</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Number of Layers</th>
<th>Color Generators</th>
<th>Control Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>2</td>
<td>Software or optional hardware panel</td>
</tr>
</tbody>
</table>

- **DVE with 3D Borders &**

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**Media Player**

<table>
<thead>
<tr>
<th>Media Players</th>
<th>Pattern Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Channels</th>
<th>Color Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill and key</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Still Image Capacity</th>
<th>Color Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 with fill and key</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Clip Capacity</th>
<th>Color Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 with fill and key</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Media Player Clip Length in NTSC/PAL**
  - 3600 frames.

- **Media Player Clip Length in 720p**
  - 1600 frames.

- **Media Player Clip Length in 1080**
  - 720 frames.

- **Media Player Clip Length in Ultra HD**
  - 180 frames.

<table>
<thead>
<tr>
<th>Media Pool Still Image Format</th>
<th>Color Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNG, TGA, BMP, GIF, JPEG and TIFF.</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Video File Format</th>
<th>Color Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGA Sequence.</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Media Pool Audio File Format</th>
<th>Color Generators</th>
<th>Drop Shadow</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAV, MP3 and AIFF.</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

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**Multi View Monitoring**

<table>
<thead>
<tr>
<th>Multi View Monitoring</th>
<th>Routable Windows</th>
<th>Windows Source Labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 10 Views for 20 total views.</td>
<td>16</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- **Multi View Video Standard**
  - HD.

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

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**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>

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**Processing**

- **Colorspace Conversion**
  - Hardware based real time.

- **Processing Delay**
  - < 2 Lines

- **4K to HD Down Conversion**
  - Yes, program x 1

- **Audio Mixer**
  - 22 input x 2 channel mixer.
  - Selectable On/Off/Audio-Follow-Video.
  - Level and Peak metering.
  - Master gain control.
  - Dedicated analog outputs for monitoring.
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.png](attachment:Mac.png)

Mac 10.12 Sierra, Mac 10.13 High Sierra or later.

![Windows.png](attachment:Windows.png)

Windows 8.1 or Windows 10.

Power Requirements

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Power Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x Internal 100 - 240V AC.</td>
<td>150 W</td>
</tr>
</tbody>
</table>

Physical Specifications

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>
</table>

What's Included

ATEM 2 M/E Production Studio 4K
SD card with software and manual

Warranty

12 Month Limited Manufacturer's Warranty.