

# ATEM 2 M/E Production Studio 4K



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

### 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 Connections

1 x XLR in and 1 x XLR out.

### Reference Input

Tri-Sync or Black Burst.

### Video Input Re-Sync

On all 20 inputs.

### SDI Video Inputs

20 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.

### 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

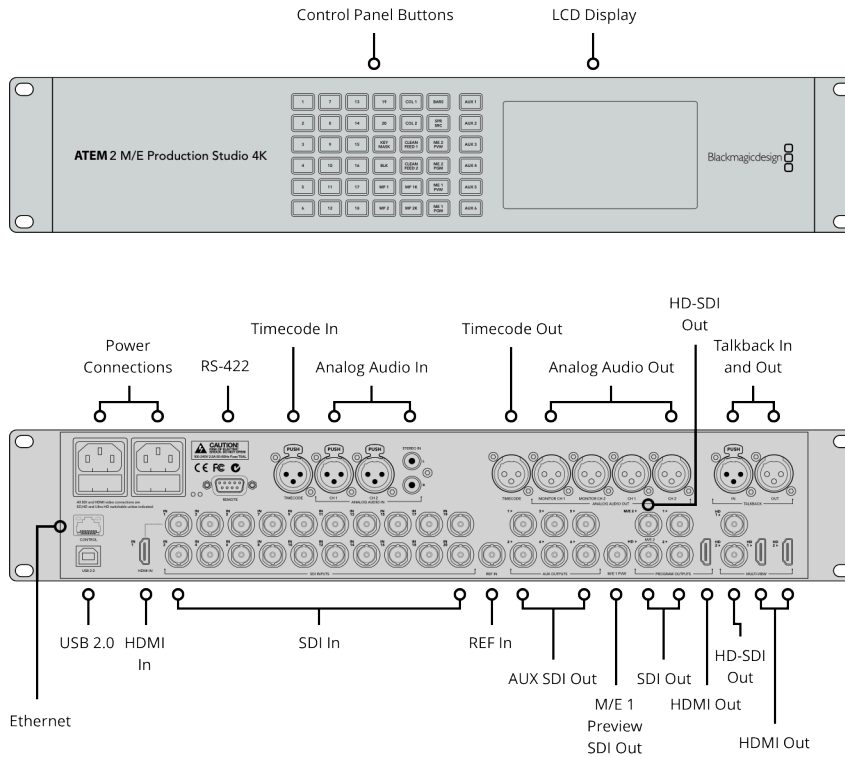
Ethernet supports 10/100/1000 BaseT. Allows direct connection between panel and chassis, or via network.

### Tally Output

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

### Computer Interface

1 x USB 2.0 port.



## 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 Keys

4 with Chroma/Linear/Luma key.

### Chroma Keys

4

### Mix Minus Support

None

### Downstream Keys

2

### Talkback Support

None

### Linear/Luma Keys

7

<b>Transition Keyer (Stinger/DVE)</b> 1 Stinger, 1 DVE.	<b>Pattern Generators</b> 8	<b>Drop Shadow</b> 1
<b>Total Number of Layers</b> 13	<b>Color Generators</b> 2	<b>Control Panel</b> Software or optional hardware panel
	<b>DVE with 3D Borders &amp;</b>	

## Media Player

<b>Media Players</b> 2	<b>Media Player Clip Length in NTSC/ PAL</b> 3600 frames.	<b>4K</b> 180 frames
<b>Channels</b> Fill and key for each media-player.	<b>Media Player Clip Length in 720p</b> 1600 frames	<b>Media Pool Still Image Format</b> PNG, TGA, BMP, GIF, JPEG and TIFF.
<b>Media Pool Still Image Capacity</b> 32 with fill and key	<b>Media Player Clip Length in 1080</b> 720 frames	<b>Media Pool Video File Format</b> TGA Sequence.
<b>Media Pool Clip Capacity</b> 2 with fill and key.	<b>Media Player Clip Length in Ultra HD</b>	<b>Media Pool Audio File Format</b> WAV, MP3 and AIFF.

## Multi View Monitoring

<b>Multi View Monitoring</b> 2 x 10 Views for 20 total views.	<b>Routable Windows</b> 16	<b>Windows Source Labels</b> Yes
<b>Multi View Video Standard</b> HD.	<b>Tally</b> Red for program and green for preview indication.	

## Display

<b>Interface</b> Minimum monitor resolution of 1366 x 768.	<b>Front Panel</b> Built in LCD monitor for video and 42 LED buttons for Aux switching.
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## Processing

<b>Colorspace Conversion</b> Hardware based real time.	<b>Audio Mixer</b> 22 input x 2 channel mixer. Selectable On/Off/Audio-Follow- Video. Level and Peak metering. Master gain control. Dedicated analog outputs for monitoring.
<b>Processing Delay</b> < 2 Lines	
<b>4K to HD Down Conversion</b> Yes, program x 1	

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## 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

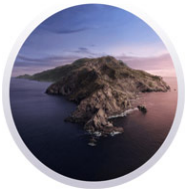
Using USB 2.0 connection directly connected to Mac OS or Windows computers. Includes ATEM Setup Utility.

### 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



Mac 10.14 Mojave,  
Mac 10.15 Catalina or later.



Windows 8.1 and 10.

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## Power Requirements

### Power Supply

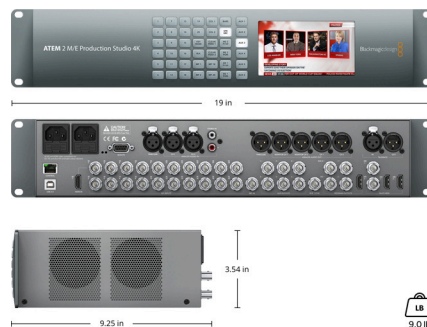
2 x Internal 100 - 240V AC.

### Power Usage

150 W

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## Physical Specifications



## Physical Installation

### Physical Installation

2 Rack Unit Size.

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## 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

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