

### **Innovative Design**

Elegant machined metal design in a super compact size!



ATEM Production Studio 4K switchers feature an elegant machined aluminum front panel with dedicated buttons to let you switch auxiliary outputs. You can use the built in video screen to monitor auxiliary outputs or as technical monitoring to help during set up! You get the highest quality video and audio connections that switch virtually all SD, 720p HD, 1080i HD, 1080p HD and Ultra HD formats, plus built in multi voltage power supplies so you can take your switcher anywhere in the world!

### **Powerful Software and Hardware Control**

Get innovative software control or choose a hardware panel



Use a single screen for all your monitoring!

regular HDMI TV! Multi view outputs in regular 1080i HD, so even if your broadcast is in SD or Ultra HD you can still use a standard TV for monitoring! You can customize the multi view layout and also add custom labels. Multi view makes it easy to watch your program, preview, and live sources all simultaneously on a single monitor and you can even choose from 4 different screen

### 16 Cameras ATEM 2 M/E



The advanced ATEM 2 M/E Production Studio 4K model features 2 independent multi view outputs so that you can monitor up to 16 cameras simultaneously across 2 screens!

### **Other Configurations**



### **Creative Transitions**

# Get dozens of exciting effects and transitions!

ATEM includes a huge range of real time high quality transitions that are available in all SD, HD or Ultra HD resolutions! Use mixes, dips, wipes and more for amazing broadcast quality live switching! Every transition is instantly available and you get full control of the transition type, pattern, length and other attributes. Create a customized 'on air' looks using the large choice of wipe patterns. The ATEM 1 M/E and 2 M/E Production Studio 4K models also

Click a transition



include animated stingers and DVE transitions!



Choose from instantly available wipe, mix, dip, DVE and stinger transitions!



### **Digital Video Effects**

# Position, resize, rotate and scale in real time!

The advanced ATEM 1 M/E and 2 M/E Production Studio 4K models include a powerful digital video effects processor. Use this amazing high quality DVE to position, resize, rotate and scale live video all in real time. Create professional picture-in-picture effects with customizable 3D borders, shadows and lighting. Add dynamic DVE transitions to your production with squeeze, push, swoosh and spin effects that displace your live video revealing the next source. You can even use the DVE for graphic wipe transitions!

# **SuperSource**Multi Layering

Add multi box compositions quickly and easily

with ATEM SuperSource! Available on the ATEM 2 M/E Production Studio 4K, you get a completely separate 5 layer switcher with the power of 4 picture in picture DVEs and 4 keyers that you can assign to any ATEM video input! Imagine using SuperSource for multi camera interviews or picture in picture production while leaving all your M/Es, keyers and DVE completely free for other tasks. SuperSource compositions can also be quickly saved and recalled in an instant!







All popular image formats, such as PNG, TGA, BMP, GIF, JPEG and TIFF are supported.

# **Dual Media Players**Large graphics memory!

ATEM production switchers include media pool memory that lets you download still frames and graphics for keying using the two built in media players. All popular image formats are supported, or you can direct download from Photoshop CC with the included plug-in. The ATEM Production Studio 4K supports 20 Ultra HD RGBA still frame graphics, while the ATEM 1 M/E and 2 M/E Production Studio 4K models support 32 Ultra HD RGBA still frame graphics and 180 frames of real time Ultra HD video or 720 frames of real time 1080 HD video.



### **Power Macros**

The fastest way to set up and automatically trigger events!

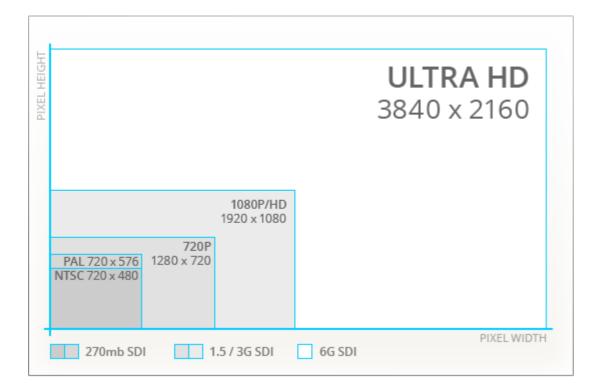


To automate complex sequences of precisely timed actions on your ATEM switcher, you can now create powerful shortcuts called macros. Record a sequence of transitions between video sources, including key effects, audio mixer adjustments, camera control settings and more using the ATEM software or hardware control panel. Macros are saved as XML files that can even be edited with a standard text editor so you can combine them together to build sophisticated sequences that would be impossible to execute manually during a live production! That means you can create unique looks for your programs that can be recalled instantly, copied between switchers and used over and over again!

### **Amazing Ultra HD**

Massive 3840 x 2160 video resolution!

The ATEM Production Studio 4K is the world's first



Ultra HD live production switcher! Ultra HD operates at 4 times the resolution of 1080 HD video with a massive 3840 x 2160 frame size! The entire switcher can be set to Ultra HD and all media players, downstream keyers, upstream keyers, transitions, DVE and color generators operate in native Ultra HD. Even if you're working in SD or HD now, your ATEM Production Studio 4K switcher is always ready for Ultra HD whenever you need it!

### **Advanced 6G-SDI**

Take advantage of super fast 6G-SDI and HDMI 4K technology with video connections that effortlessly handle Ultra HD using a single cable! 6G-SDI connections are multi rate, and switch between 270 Mb/s, 1.5 Gb/s, 3 Gb/s and 6 Gb/s data rates for compatibility with SD, HD or Ultra HD equipment all on a single BNC connection. That means you can connect to virtually any SDI and HDMI cameras, routers, decks, monitors and more! 6G-SDI gives you a future proof design.





### **Remote Camera Control**

Full camera control from your switcher!

Get full control of your cameras right from the ATEM software control! The new Blackmagic Studio Camera can be controlled via the SDI program feed to the camera, so you can control its built in camera settings and full color corrector, all remotely from the ATEM software control panel! There are two types of control interface, a CCU layout for traditional camera control style, or a color corrector interface which is the same as DaVinci Resolve's primary color corrector so you can use all your color correction skills from DaVinci Resolve for adding incredible creativity to live production!

### **Professional Audio Mixer**

Live mix multi channel audio from your cameras in real time!









Balance control



Fader Control



External Audio

All ATEM switchers feature a powerful built in multi channel audio mixer! You can mix your camera audio and other video sources from both HDMI and SDI inputs, as well as external audio from the analog XLR and HiFi audio inputs. You can use the ATEM

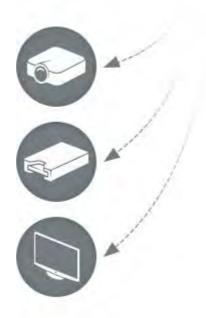
audio mixer for direct input mixing or use audio follow video mixing where the audio automatically crossfades when switching from one input to another. The analog audio inputs are great for microphones, audio mixers, music players and more!



### **Independent Aux Output**

### Feed big screens on stage!

ATEM switchers have independent auxiliary outputs that are perfect for feeding big video screens on stage or can also be used to send "clean feeds" without on air graphics to recorders for program mastering. The front panel buttons and screen make it easy to select sources such that you want to send to the aux output. Auxiliary outputs can be selected to any video input, media players, the preview bus, test signals and more! Aux outputs are fantastic for tech monitoring with SmartScope Duo 4K.





### Switcher control on Mac or PC!

Included free with every ATEM Production Studio 4K Switcher is the beautifully designed ATEM software control panel for both Mac and Windows. With a full visual switcher control panel and parameter palettes for quick switcher adjustments, you can load graphics into the media pool, adjust the audio mixer,



### **Professional Broadcast Panels**

Add a hardware panel for fast professional switching!

## **Extreme Reliability**

Professional hardware based switcher for incredible reliability.

Broadcast and live production situations demand mission critical reliability! That's why ATEM Switchers use an internal aviation quality operating system! Cheap computer based switchers interrupt the video if the computer crashes, while ATEM doesn't have this problem because the computer is only the control panel! With ATEM you still have video output so your live event is protected from any possible computer failure. Simply use other control panels or restart your computer without interruption to the program!

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### **ATEM Production Studio 4K**



**ATEM Production Studio 4K** The world's first Ultra HD 4K live



**ATEM 1 M/E Production Studio 4K** Advanced 1 M/E live production



ATEM 2 M/E Production Studio 4K World's most advanced live production

# **Program Production** The fastest way to produce live television programming. The fastest way to create professional television programming is to switch it live! You can set up cameras in your studio and then produce content live so you get energetic programing that has the exciting unpredictability of a live event. Interview and chat shows, cooking shows and even

### **Broadcast News**

instructional programing are fast to produce and much lower cost than shooting scenes and manually editing. Live programming is fantastic for children's television shows where the excitement and fun of kids playing naturally in front of a studio audience can be captured live!

Live news coverage of historic events!

The ultimate live event is real time news! Live production is the only way to cover live news because there is simply no time to shoot and edit. Live news can be broadcast or streamed over the internet for a

worldwide audience. Even specialist news like tech news, sports news, or other specific news coverage can be completed with ATEM. You have all the graphics power and keys needed to present information professionally with the same high production values as the biggest broadcast networks.



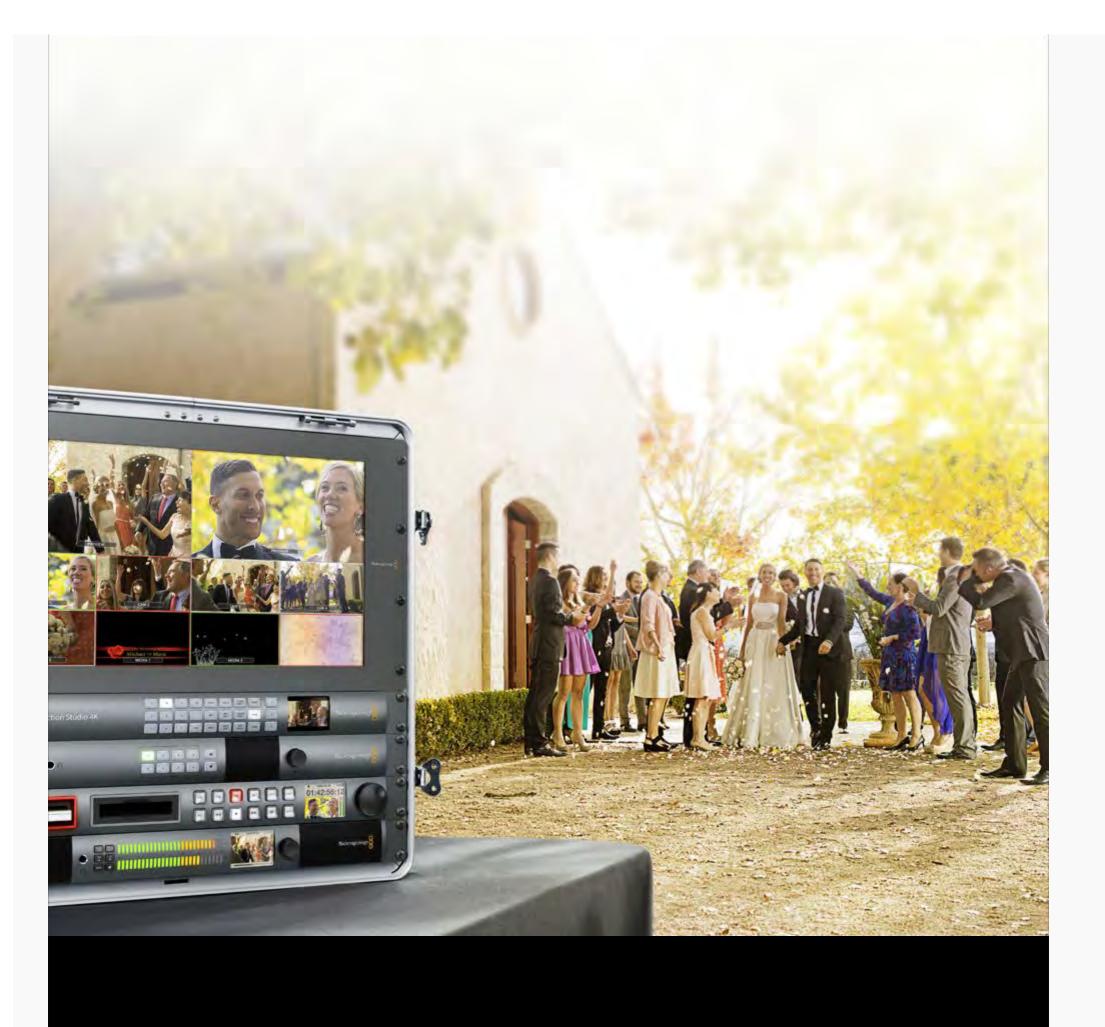




# **Live Weddings**

Multi camera weddings produce romantic results!

ATEM Switchers are perfect for producing beautiful real time wedding videos! Imagine delivering the completed program in time for the couple to take it on their honeymoon! Multi camera wedding productions capture the emotion of the event in a way that can not be done with a single camera! With romantic crossfades between wide shots and the close ups, and if you're connected to a television or projector in the venue, you can switch to a camera outside to show the wedding party arriving!

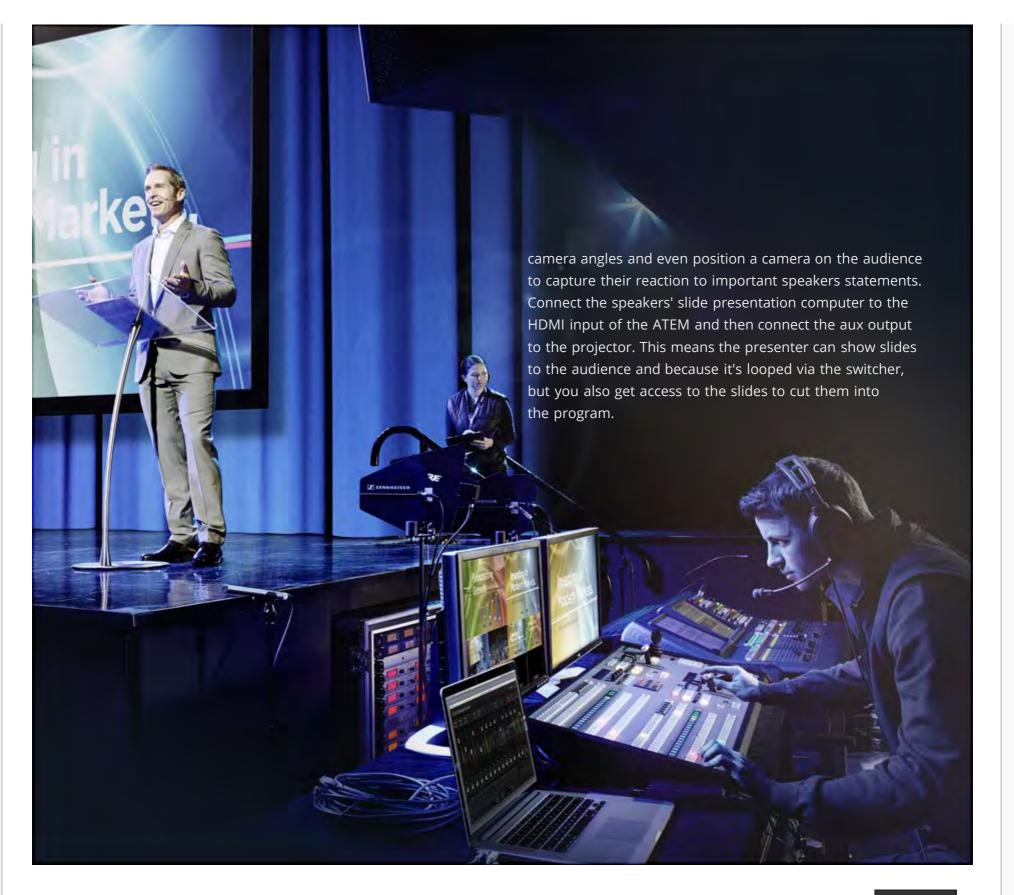


# Worship ATEM Production Studio 4K switchers are perfect for broadcasting services to giant screens and off site campuses, so that every member of the community can see the minister, choir

Broadcast to your community anywhere in the world!

or congregation, no matter where they are in the world. ATEM Production Studio 4K switchers give you multiple program outputs and auxiliary outputs so you can broadcast live footage of the service to one screen and send lyrics to another screen while you are recording the final program for future use!

### Create television programs from speeches!



Next ►

**Find Reseller** 

### **Award Winning Design**

ATEM features advanced technology in an elegant design



ATEM Production Studio 4K switchers feature unique and revolutionary design because you get cutting edge technology and attractive design all miniaturized into an incredibly small size. The ATEM front panel is machined from a solid block of

aluminum so it's an attractive design but also strong enough to withstand the bumps and shocks when it's installed in broadcast trucks and portable racks. With ATEM you get the most advanced technology and more creative features than any other solution!



### **Machined Metal**

### Elegant design looks great in your studio

ATEM Production Studio 4K switchers have an elegant machined aluminum design that's optimized for live production. Designed with the features complex production demands, the elegant front panel includes illuminated buttons for aux switching as well as built in video display for live status! The built in 6G-SDI and HDMI 4K connections mean you get the latest technology for a future proof design that will work for you for years to come.

Its compact size means you can install anywhere!



### **Fast Aux Switching**

# Select aux outputs quickly from the front panel

ATEM Production Studio 4K switchers include independent auxiliary outputs which are perfect for driving big screens at live events, because your switcher has access to all the video sources and camera feeds. This means your aux outputs are part of the event and you can use the front panel aux control buttons to instantly select cameras and other sources to the aux output. You get the choice of outputting video inputs, media players, key masks, clean feeds, program, preview, test signals and more!

### **Professional Connections**

# Standard connections for quality and reliability

ATEM uses industry standard BNC connections for SDI video and XLR connectors for balanced analog audio so you get robust broadcast quality connections that maintain signal quality and support years of reliable operation. For compatibility with consumer cameras and computers HDMI connections are built in, eliminating the need for cumbersome external converters. Because the video connections support 6G-SDI and HDMI 4K you get a future proof design and the latest video technology.



### **SDI or HDMI Inputs**

A model for your workflow



Choose from three exciting models of ATEM Production Studio 4K based on the needs of your workflow. The ATEM Production Studio 4K has 4 HDMI and 4 SDI inputs for a total of 8 inputs. For larger installations, the ATEM 1 M/E Production Studio 4K includes 10 SDI inputs and the ATEM 2 M/E Production Studio 4K includes 20 SDI inputs, with input 1 able to be switched to HDMI. All SDI and HDMI inputs can switch between SD, HD and Ultra HD television standards.

### **Features**

### Get the features you need for more creative production



Raise the production standard of any live event with the amazing built in features of ATEM Production Studio 4K switchers! You get upstream luma, linear, pattern and chroma keying for special effects, as well as downstream keying for logos and lower thirds.

You also get 2 built in media players with media storage in the switcher for professional broadcast graphics! The ATEM 1 M/E and 2 M/E Production Studio 4K models also include a world class DVE for picture in picture effects and exciting stinger transitions.

### **Creative Transitions**

Choose from a wide range of built in transitions!





CUT MIX WIPE DIP DVE GRAPHIC STINGER

ATEM Production Studio 4K switchers have an amazing choice of transitions including Cut, Mix, Dip and Wipe patterns. The advanced 1 M/E and 2 M/E models also give you key frame based DVE moves, flying graphics and animated stingers!

Every transition is instantly available and you get full control of the transition type, pattern, length and more. With so many creative options you can always find the perfect 'on air' style, so there's no limit to the combination of exciting effects you can create!



### Cut

The cut transition is the most simple and widely used of all transitions and you will use it continuously! When you press the cut button, ATEM instantly changes from current program source to the preview source precisely at the moment you hit the button. Cuts can be performed by directly selecting sources on the program bus or more commonly by pressing the cut button to transition to the next source lined up on the preview bus. Cut is easily the most popular transition!



### Mix

One of the most elegant transitions in live production is the dissolve or mix transition. Gradually transitioning from one source to the next by creating a smooth blend between the sources brings out the emotion in your production. You can simply press the auto transition button to automatically trigger a mix between shots at a pre-set transition rate. You can use the t-bar to manually blend the transition for the perfect live mix.



### Dip

Similar to mix transitions, a dip transition is a gradual blend from source to source however, the transition dips to an intermediate third source before completing the transition to the next shot. You can choose to dip to any color, a graphic from the media players or even a live video source. Use black or white for the intermediate source for incredible creativity! For sponsored live productions like sports events, use dip transitions to flash up a sponsor's logos during the broadcast!



### **DVE**

The advanced ATEM 1 M/E and 2 M/E Production Studio 4K models have a powerful built in Digital Video Effects processor or DVE. You can push, spin, squeeze and swoosh your live video from one camera to the next with incredible built in DVE transitions. DVE transitions can be flip flopped and reversed



### **Wipe Patterns**

ATEM Production switchers have 18 built in wipe patterns, which let you create over 100 different styles of wipe transitions! You can use circles, diamonds, squares and more to transition from one source to the another as you gradually expand the shape to reveal the next source. Patterns can be inverted, softened or have customized colored borders. You can also insert live video into borders creating wipe pattern transitions that include three live video streams at the same time!



### **Graphic**

When you want to combine sponsor logos with transitions during a live production, graphic transitions are the perfect solution! Use the DVE to create amazing flying graphic effects and logo wipe transitions. You can create high resolution logos in Photoshop CC using the included plug-in to load directly into

giving you even more transition options. You get over 35 exciting DVE preprogramed moves to choose from. Using the DVE for transitions will increase the production value on any live production!

the ATEM media pool. Photoshop CC graphics with premultiplied keys are perfect for smooth flying logos in the highest quality, as your logo moves across the screen, the shot transitions with a hidden wipe under the flying graphic!



### Stinger

You can create exciting eye popping Stinger transitions by combining live video with animated graphics and sound effects. When you trigger a Stinger, your animation is instantly played back from a media player and keys over the live video as it wipes to the next shot. You also get simultaneously mixed sound effects with the live program output. Stingers are widely used for live sports broadcasts as great transitions to instant replays and back to the live action!

### **Upstream Keyers**

# Amazing multi layer live action

All ATEM Production Studio 4K switchers include powerful upstream keying for amazing broadcast effects! Layer live video, titles, graphics and animation over live video or graphic backgrounds with incredible quality using chroma, luma, linear and pattern keying. You get 4 built in upstream keyers and a DVE in the ATEM 1M/E Production Studio 4K so you can create mind blowing broadcast multi layer effects for your production.





**BlackgaraneOkle**yer



### **Luma Key**

Luma keys are sometimes known as a self key because the same video source is used for cutting the key and overlaying the video image. You can do this with live video from a camera, prerecorded video from a HyperDeck or graphics loaded in the media pool. Luma keys work the best with high contrast images like white elements on a black background, so that you can use the contrast to cut the black background and replace it with live video or broadcast graphics.



### **Chroma Key**

Used every day for TV weather forecasts, chroma keys are a very powerful way of combining live images together in real time, cleanly in high quality! The presenter stands in front of typically a green or blue background, and the chroma keyer will remove only that color and combine it with another image such as prerecorded video or graphic. ATEM Switchers include multiple keyers so you can simultaneously combine multiple live, prerecorded, graphic and chroma key elements in real time.



### **Linear Key**

Get incredibly clean, high quality results with Linear keying by using two separate sources for the fill and the key to create one video image! The fill signal contains video to be stacked over the background, while the key signal contains a grayscale mask to cut out or mask the area to be filled. Fill and key signals can be graphics from the media pool, live motion video, or video and key from an external character generator or graphics system.



### **Pattern Key**

Create amazing transitions with the pattern key! You can use any one of the 18 built in wipe patterns to combine live images or graphics with geometric shapes. The pattern keyer gives you full pattern control including softness, symmetry, size and position completely independent of the transition block. That means you can use pattern keys to create picture in picture effects that can be transitioned to as easily as any live camera source, and you don't need to tie up your DVE!

### **Downstream Keyers**

# Add bugs, logos and lower thirds

All ATEM switchers feature two downstream keyers so you can insert high quality graphics like logos, bugs and titles over the live 'on air' program output. Downstream keyers are the last layers of keying so they overlay all video switched to the main program. You can also easily bypass the downstream keyers by using the clean feed aux outputs. This means you can record the clean feed as your master and use the downstream keyers for overlays that you only want on air.







### **DVE**

# Move, resize, scale and rotate live video instantly!

Perfect for live breaking news production, the DVE lets you create live crosses from the studio to the excitement on location. Create picture in picture effects with both the studio host and location reporter combined as one video output. The high quality DVE gives you control of size, position, rotation and features 3D borders, drop shadows and lighting! You can save customized DVE positions and automatically trigger the picture to animate full screen or zoom as the live interview concludes.

### **Audio Mixer**

# Mix cameras and audio inputs with the built in audio mixer!

ATEM's built in audio mixer is incredibly powerful and easy to use! Open the audio mixer control tab on your Mac or PC and



you get complete multi track mixing control with level meters! You can direct camera and external audio with precision level and balance adjustments, enable and disable channels or activate audio follow video mode instantly. You can also connect to Mackie™ standard USB audio mixer panels, giving you hardware feedback and feel of flying faders and meter displays.



### **SuperSource**

The advanced ATEM 2 M/E Production Studio 4K features an amazing built in SuperSource layering switcher! In addition to 2 full M/E's, keyers and DVE, you get an additional 4 independent DVE channels so you can resize and position live cameras, video replays,

broadcast graphics and more. SuperSource is like having an additional multi layer VFX switcher built in! Imagine being able to take a satellite video feed from 4 different locations to create multi camera interviews or a picture in picture live broadcast!



### **Multi View**

Get multi camera monitoring using a single low cost TVs

ATEM Production Studio 4K switchers let you connect loads of sources and monitor them all at the same time using the built in multi view. Multi view makes it easy to see your cameras, graphics, preview and program outputs on single screen. That means you don't need lots of monitors to see all your individual cameras! You get HDMI and SDI multi view outputs so you can connect to professional broadcast SDI monitors or even low cost big screen televisions using the HDMI multi view output! The advanced ATEM 2 M/E Production Studio 4K model features 2 independent multi view outputs so you can see up to 16 cameras across 2 screens.

# Multiple Television Standards

# Switch television standards for any type of live production

ATEM gives you the flexibility to work in different standards at any time! Most live production is currently being produced in HD, now you can work in SD or in the new Ultra HD standard whenever you need. ATEM Production Studio 4K switchers are designed to operate in virtually any SD, HD and Ultra HD television format, so you can operate in the SD or HD television format you need today, and then instantly switch over to Ultra HD in the future! That's a true future proof design!





ATEM 1M/E Production Studio 4K.

### **Internal media players**

# Load on-air graphics to eliminate complex external servers!

You can store broadcast quality RGBA graphics in the media pool ready for instant playback via the ATEM media players. The two media players appear as input sources to your switcher. You can transition to graphics as full frame video or feed them to the keyers for overlaying video. Popular image formats such as PNG, TGA, BMP, GIF, JPEG and TIFF are supported. The advanced ATEM 1 M/E and 2 M/E Production Studio 4K models feature a larger media pool with live clip storage plus 32 still graphic support.



### **Photoshop CC Plug-in**

Create and download graphics directly to your ATEM

With the included Photoshop CC plug-in, you can create graphics

### The world's fastest live production switcher control software!





Directly control your ATEM switcher from your desktop or laptop using the included free ATEM Software Control for Mac or Windows. You can load the media pool with graphics, adjust focus, iris and color balance cameras, change switcher settings,

and even mix audio from your cameras. You can even run multiple copies for busy live productions when more than one person is working on the job, all from the most elegant and fastest to use software available.

# **Switcher Control Tabs**Control or setup your ATEM

The ATEM Software Control panel is designed with separate tabs so it's easy to find the controls you need. The switcher tab is for switcher control and includes palettes for adjusting keys, transitions, media players and more. The settings tab changes the switcher settings and customizes the multi view, and the media pool tab manages graphics. A dedicated tab for the audio



mixer control includes faders and meters for every input and master level control.



### **Select Sources**

### Live switch your sources!

You get the most efficient live production workflow with ATEM! The program bus is always live, so when you select a source it will immediately go on air! Take advantage of the advanced live switching workflow by using the preview bus, with selections you make appearing in the preview screen. You can see what you have ready to go on air, and take them live with a press of the cut or auto buttons! Using the preview bus helps you see the next transition source so you can confidently control your live production.

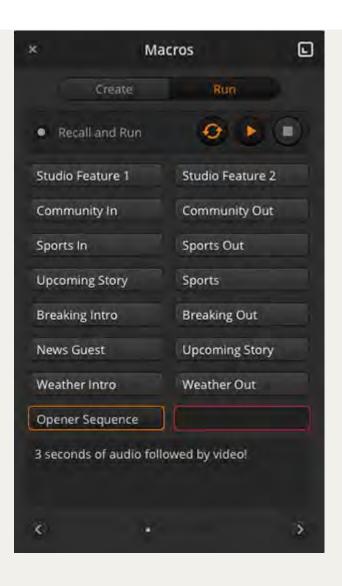
### **Complete control of your Transitions**

Control your Mix, Wipe, Dip, DVE and Stingers fast

### **Create Macros**

Automate complex sequences of actions

Take your program to the next level by creating macros, shortcuts that can be used to automate complex sequences of



precisely timed actions on your ATEM switcher. You can record everything from transitions between video sources, key effects, graphics and more then save them for use during your live production. Macros are saved as XML files that can be edited and combined together using a standard text editor. To record a macro simply open the macro window, select record and then operate your switcher to automatically store every setting you change. When you want to trigger any of the macros you have created, simply push the macro button or you can trigger the same macro from any of the hardware control panels.



Add user defined pauses in your macros.



### **Transition Control**

ATEM Switchers are designed to give you fast and flexible control during live production operation. The transition control block lets you quickly select your transition style, you can



### **Transition Settings**

ATEM gives you precise transitions adjustments! The switcher palettes are on the right side of the switcher control and are fast and logical to use. When you open the transition palette

choose between mix, dip, wipe or even DVE and animated stingers if you are using the ATEM 1 M/E or 2 M/E Production Studio 4K switcher. Simply push the cut button for an immediate transition, or select timed automatic transitions that are triggered by pushing the AUTO button. You also get full manual control with the fader bar!

you can see every adjustable option for each type of transition. Simply choose the transition type and you can adjust all the individual parameters. You get so many options you will always find the perfect style for your production as there is almost no limit to the creative transitions you can create!



### **Wipe Transitions**

Create over 100 different styles from the 18 built in wipe pattens. Using the ATEM Software control transition palette, you can select your ideal wipe pattern, change its symmetry or even invert it! Wipe patterns can be softened or have colored borders with customizable width and softness. You can even feed live video inside a wipe border creating interesting geometric patterns with three live video streams at the same time. You get amazing wipe transition flexibility with ATEM Production Studio 4K switchers!



### **DVE Settings**

With the ATEM 1 M/E and 2 M/E Production Studio 4K models that include the built in DVE, you can push, spin, squeeze and swoosh your live video from one camera to the next with powerful built in DVE transitions. The transition palette gives you precise control over the multiple DVE transition options. Choose from over 35 dramatic DVE moves that will bring an extra level of excitement to your production. DVE transitions can be flipped and reversed giving you even more creative options.





Push, spin, squeeze and swoosh from one camera to the next with powerful built in DVE transitions available on the ATEM 1 M/E and 2 M/E Production Studio 4K models.

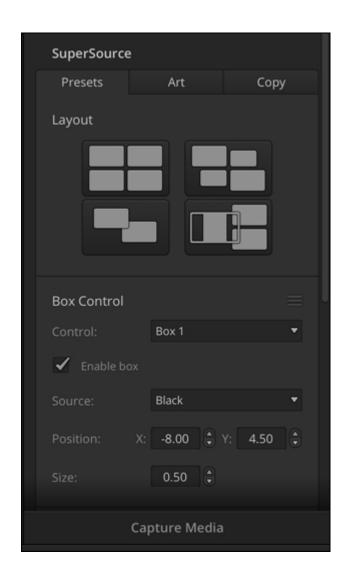


### **Camera Control**

Get full control of your cameras right from the ATEM software control! The new Blackmagic Studio Camera can be controlled via the SDI program feed to the camera, so you can control its built in camera settings and full color corrector, all remotely from the ATEM software control panel! There are two types of control interface, a CCU layout for traditional camera control style, or a color corrector interface which is the same as DaVinci Resolve's primary color corrector so you can use all your color correction skills from DaVinci Resolve for adding incredible creativity to live production!

### **SuperSource Control**

Available on the ATEM 2 M/E Production Studio 4K, Super Source lets you add multi box picture-in-picture compositions to your live broadcasts quickly and easily! Using the ATEM Software Control it's easy to choose a preset SuperSource layout, customize it, or create your own from scratch. You get all the controls you need in one place, making it super fast to choose and save presets, add artwork, and adjust individual box parameters including size, position, border, crop, shadow, and more!







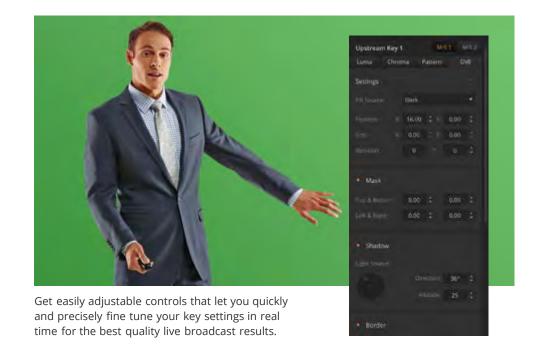
### On Air

### Select keyers on air live!

Once your upstream settings are customized, the fastest way to bring them on air is to use the ON AIR button! The on air buttons enable or disable the key signal, plus they also indicate which keys are live on air. When you're switching live it's vital to know which keyers are active so you can select it as part of the next transition. Each upstream keyer has its own dedicated on air button so you will get 1 on the ATEM Production Studio 4K and 4 on the advanced ATEM 1 M/E Production Studio 4K model.

### Get perfect multi layering

When you need fast, precision keying you can use the software controls to adjust keying with high accuracy. Key backgrounds are never perfectly flat, so it's important to have easily adjustable controls that let you quickly and precisely fine tune your key settings in real time for the best quality live broadcast results. The ATEM Software Control gives you precise control over every key parameter and you can use your mouse or trackpad to quickly adjust keys for the perfect result.



# **Fader Bar**Get full manual control

The most experienced vision switchers know that sometimes the only way to get a dramatic multi camera mix during live performances is with manual fader control! Automatic transitions are smooth but often do not have the subtlety needed when mixing between wide and close up angles of performances like music performances. With manual control you can mix shots together and hold the mix until the right moment before completing the transition. The fader bar also gives you manual control of wipe, key and even DVE transitions.





# **Auto Transition**Simply perfect transitions!

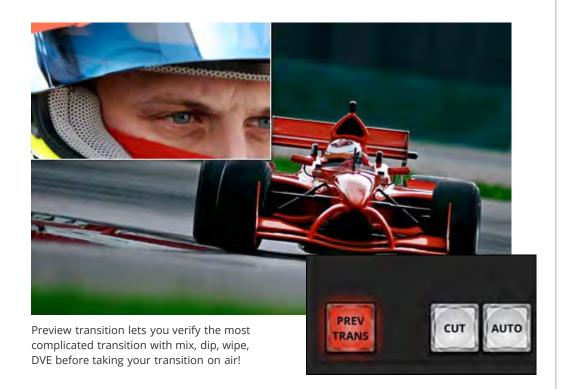
Smooth automatic transitions are easy with the auto transition button. Simply set your preferred transition rate between 1 and 250 frames using the ATEM software control, and every time



you hit the AUTO button your ATEM Production Studio 4K switcher will perform a perfectly timed, smooth transition. You can use auto transitions for every part of the ATEM switcher including dissolves, dip, mix, fading on key sources, wipes and animated DVE transitions.

# **Preview Transition**Check your transitions

The PREV TRANS button lets you rehearse and preview complicated transitions before you take them on air! Your ATEM Production Studio preview video can be seen on your multi view screen or on a monitor connected to the switchers SDI preview output. Preview transition lets you verify the most complicated transition with mix, dip, wipe, DVE and even keys without affecting your program output. Preview transitions is the best way to ensure your transition is perfect before going to air.



### **Fade to Black**

### The perfect program end!

Ideal for the start and end of your production or fading down for commercial breaks, fade to black (FTB) is the absolute last layer of the switcher and ensures all the layers are faded down together. Once the program output has been faded to black, the FTB button will flash red until it is pressed again. Selecting fade to black again

will then fade up from black at the same rate. With a dedicated fade to black button, you can be sure all sources are faded cleanly in sync for the perfect program end!



# ATEM Software Control Seet General Control

### **io Mixer** vels, balance and more!

channel audio mixer lets you adjust the level audio from each switcher input, plus the balanced audio input connections. Each ered so you can always see the levels of each You can set the audio to auto fade up and her sources are changed and the mixed audio into all video outputs!



Audio Follow Video



Fader Control

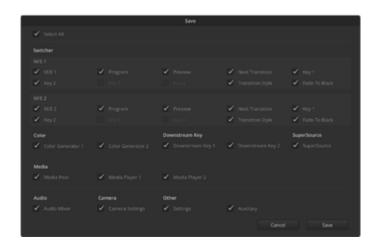


Balance Control

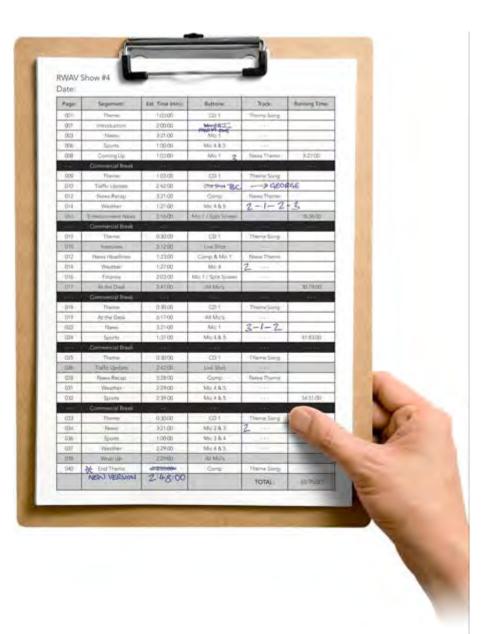
### **Switcher Snapshot**

### Save the switcher state!

No matter how complicated your switcher set up is, you can quickly save it to your computer for fast recall any time you need it. Save complete or partial switcher setups as time stamped XML files so you'll never accidentally overwrite a saved setup. Save switcher positions, keys, wipes, DVE moves and even your entire media pool content! Any updated media is added to the media folder and mapped to the latest XML as you keep saving. That's perfect for moving your job setup between ATEM switchers.



You can save switcher positions, keys, wipes, DVE moves and even your entire media pool content as separate files so you can use them live as simple macros.

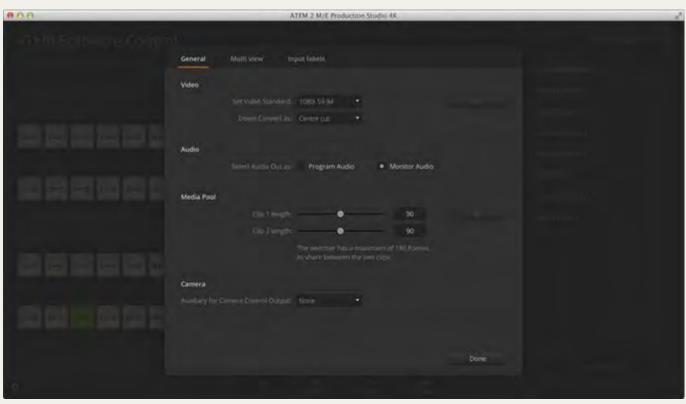


### Media

# Simple drag and drop media download!

ATEM features easy download of all your RGBA graphics and clips. From the software control media tab you can manage the built in media pool and see the status of each loaded graphic. You can drag and drop frames into the media pool spaces and they will automatically download to the switcher. You can also download graphics direct from the included Photoshop CC plug in! The Media pool can be saved as part of a switcher snapshot, so you can save your switcher settings and graphics on a single disk.







ATEM 2 M/E Production Studio 4K



ATEM 1 M/E Production Studio 4K



ATEM Production Studio 4K



ATEM 2 M/E Broadcast Panel



ATEM 1 M/E Broadcast Panel



**GPI** and Tally Interface

# **ATEM 2 M/E Production Studio 4K**Technical Specifications

**Find Reseller** 

### Description

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!

**Price** \$3,995

### Connections

### **Total Video Input**

20

### **Total Video Output**

13

### **SDI Video Input**

20 x 10-bit SD/HD/Ultra HD 4K

### **Extra Audio Inputs**

1 x XLR Timecode and 1 x XLR Talkback

### **Sync Input**

Tri-Sync or Black burst.

### **Internal Frame Synchronizers**

### **SDI Aux. Output**

6 x 10-bit SD/HD/Ultra HD 4K switchable.

### **Quantity of Multi Views**

2 x SDI plus 2 x HDMI, able to be used concurrently.

SMPTE 259M, SMPTE 292M, SMPTE 424M.

### Software

### **Control Panel Included**

ATEM Software Control Panel included free for Mac OS X 10.7.2 or 10.8 Mountain Lion and Windows 7 64-bit or Windows 8 64-bit.

### **Software Updates**

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

### Configuration

Set via ATEM Software Control Panel, excluding ATEM chassis IP address which is set via the ATEM Switcher Utility connected via USB to chassis.

### **Processing**

### **Colorspace Conversion**

Hardware based real time.

### **Processing Delay**

< 2 Lines.

### **Audio Mixer**

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.

### **4K to HD Down Conversion**

Yes, program x 1.

# Operating Systems



Mac OS X 10.9 Mavericks, Mac OS X 10.10 Yosemite or later.



Windows 7 64-bit or Windows 8 64-bit.

### **Product Specifics**

### **Total Number of Layers**

8

### **Upstream Keyers**

4

### **Downstream Keyers**

2

### Linear/Luma Keyers

7

### **Chroma Keyers**

4

### **Pattern Generators**

/

### **Color Generators**

2

### **Transition Keyer (Stinger/DVE)**

1 and 1

### 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.

### Display

### Interface

Minimum monitor resolution of 1366 x 768.

### **Front panel**

Built in LCD monitor for video and 27 LED buttons for Aux switching.

### Media Player

### **Media Players**

2

### Channels

Fill and key for each Media Player.

### **Media Pool Still Image Capacity**

32 with fill and key.

### **Media Pool Clip Capacity**

### Maximum Clip Length in Ultra HD 4K

180 frames

### Maximum Clip Length in 1080

720 frames.

### Maximum Clip Length in 720p

1600 frames.

### Maximum Clip Length in NTSC/PAL

3600 frames.

### **Media Pool Still Image Format**

PNG, TGA, BMP, GIF, JPEG and TIFF.

### **Media Pool Video File Format**

TGA Sequence.

### Connections

### **Total Video Input**

3

### **Total Video Output**

5

### **SDI Video Input**

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

### **HDMI Video Input**

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

### **Analog Audio Output**

2 x XLR.

### **SDI Audio Output**

2 channel embedded into SDI output.

### **Audio Input**

2 x XLR. 2 x RCA.

### **Sync Input**

Tri-Sync or Black burst.

### **Internal Frame Synchronizers**

8. All inputs.

### **SDI Program Output**

1 x 10-bit SD/HD/Ultra HD 4K switchable.

### **HDMI Program Output**

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

### Down Converted SDI Program Output

1 x 10-bit HD (Ultra HD 4K to HD).

### **SDI Aux. Output**

1

### **Quantity of Multi Views**

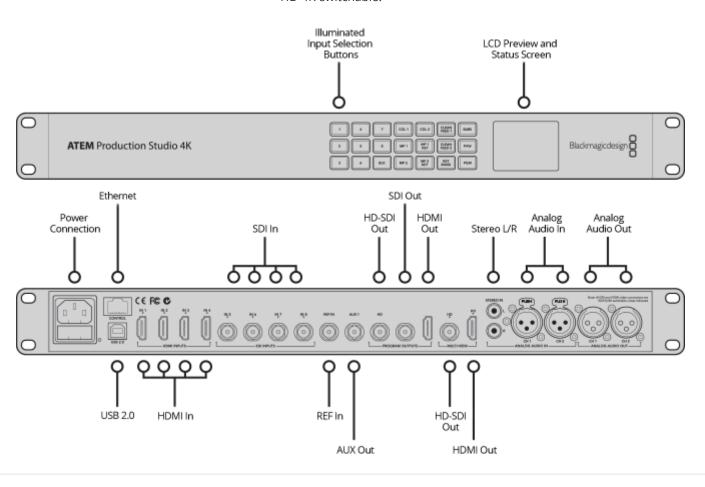
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### **Outputs per Multi View**

1 x HD-SDI and 1 x HDMI.

### **Control Panel Connection**

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



### Video Standards

### **SD Format Support**

625/25 PAL 4:3 and 16:9, 525/29.97 NTSC 4:3 and 16:9

### **HD Format Support**

720p50, 720p59.94, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080i50, 1080p50, 1080i59.94, 1080p59.94.

### **Ultra HD 4K Format Support**

3840 x 2160p23.98, 3840 x 2160p24, 3840 x 2160p25, 3840 x 2160p29.97.

### **Color Precision**

10-bit

### **Color Space**

REC 601, REC 709

### **HDMI Input Resolutions** for Computers

720 x 480i 59.97Hz, 720 x 576i 50Hz, 1280 x 720 59.94Hz, 1280 x 720 50Hz and 1920 x 1080 59.94Hz, 1920 x 1080 50Hz, 3840 x 2160 23.98Hz, 3840 x 2160 24Hz, 3840 x 2160 25Hz,

### **Processing Delay**

1 Line.

### **Audio Mixer**

10 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.

### **4K to HD Down Conversion**

Yes, program x 1.

**SDI Compliance** 

SMPTE 259M, SMPTE 292M, SMPTE 424M.

**Video Sampling** 

4:2:2

3840 x 2160 29.97Hz.

**Colorspace Conversion** 

Hardware based real time.

### Software

### **Control Panel Included**

ATEM Software Control Panel included free.

### **Tally Output**

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

### **Software Updates**

Using USB connection directly connected to Mac OS X or Windows computers. Includes ATEM Switcher Utility.

### Configuration

Set via ATEM Software Control Panel, excluding ATEM chassis IP address which is set via the ATEM Switcher Utility connected via USB to chassis.

# Operating Systems



Mac OS X 10.9 Mavericks, Mac OS X 10.10 Yosemite or later.



Windows 7 64-bit or Windows 8 64-bit.

### **Product Specifics**

### **Total Number of Layers**

4

### **Upstream Keyers**

1

### **Downstream Keyers**

2

### Linear/Luma Keyers

3

### **Chroma Keyers**

1

### **Pattern Generators**

2

### **Color Generators**

2

### **Display interface**

Minimum monitor resolution of 1366 x 768.

### **Media Players**

2

### Channels

Fill and key for each Media Player.

### Media Pool Still Image Capacity

20 with fill and key.

### Media Pool Still Image Format

PNG, TGA, BMP, GIF, JPEG and TIFF.

### **Number of Windows**

1 x 10

### **Routable Windows**

8

### Tally

Red for program and green for preview indication.

### **Windows Source Labels**

Yes

### **Control Panel Compatibility**

Includes ATEM Software Control Panel. Also compatible with ATEM 1 M/E Broadcast Panel and ATEM 2 M/E Broadcast Panel.

### Power Requirements

### **Input Voltage**

110-240 V AC

### **Power Usage**

60W

### Physical Specifications



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 95% non-condensing

What's Included

ATEM Production Studio 4K

Software CD

Warranty

**Product Warranty** 

12 Month Limited Manufacturer's Warranty.

Repair policy

Warranty details can be found in the ATEM Switchers Operation Manual in the support page at www.blackmagicdesign.com

# **ATEM 2 M/E Broadcast Panel** Technical Specifications

**Find Reseller** 

Description

The incredible ATEM 2 M/E Broadcast Panel has the power for the most complex live broadcast events and it's perfect when you have the space for a large panel and need all the control at your fingertips. The ATEM 2 M/E Broadcast Panel features an amazing design that not only looks incredible, but perfectly positions all controls just where you need them for the ultimate creativity on complex multi layer live production. The ATEM 2 M/E Broadcast Panel connects via ethernet and includes loop thru for your media management computer.

Price \$14,995

Connections

**Ethernet** 

10/100/1000 BaseT with loop output for additional control panels or computers.

**Software Updates** 

1 x USB for firmware updates.