



## ATEM Production Switchers

### The professional production switchers for SD, HD and Ultra HD!

ATEM Production Studio 4K switchers are portable and easy to connect, perfect for dedicated television studios, community town halls, churches and schools. You get a compact design that is also ideal for outside broadcast vehicles and portable road cases where space is limited. ATEM gives you

the flexibility to work in virtually any resolution including SD, HD or incredible Ultra HD. So that means you can switch to Ultra HD at any time and capture incredible detail because you're working in the television format of the future!



### Live Sport

#### Capture the excitement of live sports!

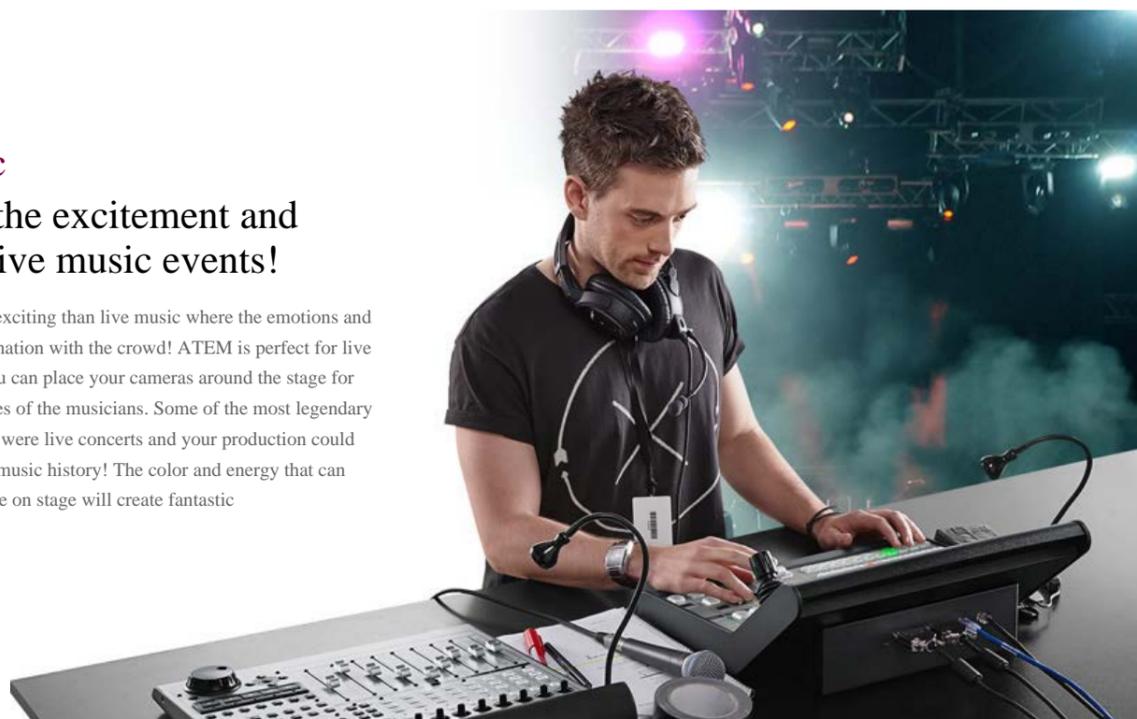
Imagine covering live sports with multiple cameras positioned at all the best angles to capture the action. Live sport is the perfect event for live production switchers because you can capture the excitement of the event and then instantly cut to close ups of the action. Use Photoshop® CC and the built in media players to instantly update scorecards and graphics to help viewers understand what's happening in the chaos of the game! ATEM is the perfect live switcher for all types of sporting events.



### Live Music

#### Broadcast the excitement and energy of live music events!

There is nothing more exciting than live music where the emotions and energy erupts in combination with the crowd! ATEM is perfect for live concert production. You can place your cameras around the stage for wide and close up angles of the musicians. Some of the most legendary music events in history were live concerts and your production could become a milestone in music history! The color and energy that can only be experienced live on stage will create fantastic finished programs!



### ON AIR

### 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 programming that has the exciting unpredictability of a live event. Interview and chat shows, cooking shows and even instructional programming 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!



### Broadcast News

#### 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

### Broadcast to your community anywhere in the world!

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 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!



## Conference Presentation

### Create television programs from speeches!

Turn speeches into television programs with your ATEM switcher! You can capture the speaker with multiple camera angles and even position a camera on the audience to capture their reaction to important speakers statements. Connect the speakers' slide presentation computer to the HDMI input of the ATEM and then connect the aux output to the projector. This means the presenter can show slides to the audience and because it's looped via the switcher, but you also get access to the slides to cut them into the program.



# 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.

**Ethernet Control**  
Connect your computer or control panel for switcher control.

**HDMI In**  
Switchable HDMI input for cameras or computer sources in SD, HD or Ultra HD.

**Up to 10 SDI Inputs**  
10x SDI inputs for camera or decks in SD, HD or Ultra HD.

**REF In**  
Black Burst and HD-Tri-Sync genlock input.



**Up to 3 AUX Outputs**  
Independent Aux outputs for clean feeds or driving large screens and projectors.

**Preview Out**  
6G-SDI preview output for monitoring next source video.

**Program Outputs**  
6G-SDI and HDMI program outputs and down converted HD output.

**SDI or HDMI MultiView**  
View video inputs on a single SDI monitor or HDMI TV with downconverted HD output.

## Professional Outputs. Broadcast to your audience

No matter if you're broadcasting to your audience, connecting to your mastering recorder or streaming over the internet, ATEM has all the audio and video outputs you need. You get a 6G-SDI and HDMI main program output plus a down converted program SDI output. For easy monitoring on

any HD-SDI or HDMI display, you get support for program, preview and 8 video source views using the built in multi view. Depending on the model you get up to 6 independent aux outputs!



**HiFi Audio Input**  
Connect consumer HiFi audio equipment to built in audio mixer.

**Balanced Audio Input**  
Connect professional audio equipment such as mics into built in audio mixer.

**Analog Audio Out**  
Main mix output from built in audio mixer. Perfect for feeding PA systems.

## Professional Audio The audio connections you need for great sound

ATEM has been designed for true professional broadcast quality audio. You get a built in audio mixer that lets you live mix the embedded audio from all video inputs. All inputs feature audio sample rate converters for clean sound even when the video input from non genlocked sources is being resynchronized. Balanced analog XLR audio inputs and HiFi RCA audio inputs are included and connect directly into the built in audio mixer. The built in audio mixer lets you manually mix sources or you can set mixer inputs to "audio follow video" so your audio crossfades as you switch between sources. Your program audio is embedded onto all video outputs and also output to balanced analog XLR audio connections.

## 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!



**A A A A B B B B**

### 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!



**A A A B B B B B**

### 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.



**A A A C C B B B**

### 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!



**A A A B (B) (B) (B) B**

### 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!



**A A A A A EA B B B**

### 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



**A LOGO LOGO LOGO LOGO LOGO LOGO LOGO B B B**

### Graphic

When you want to combine sponsor logos with transitions during a live production, graphic transitions are the perfect solution! Use the DVE to

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



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 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 IM/E Production Studio 4K so you can create mind blowing broadcast multi layer effects for your production.



## 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.



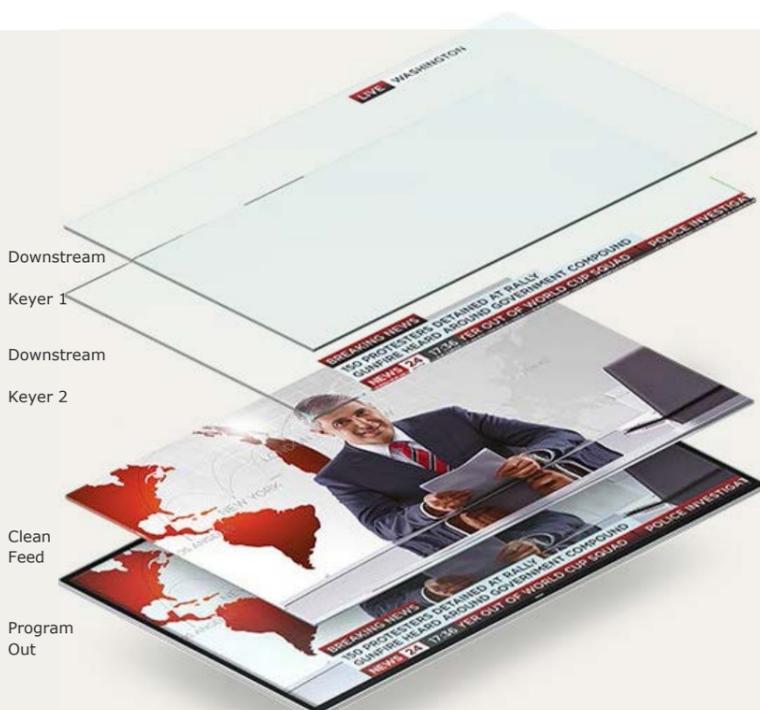
## Pattern Key

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!



2

Video clips with audio

32

RGBA still graphics

180

Frames of UltraHD

ATEM 1M/E Production Studio 4K.

## Internal media players

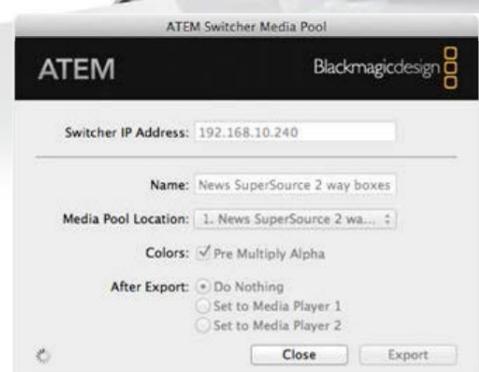
Load on-air graphics to eliminate complex external servers!

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 Adobe Photoshop® CC plug-in, you can create graphics live and then instantly download them into the ATEM media pool. Most graphic designers know and use Adobe Photoshop® CC every day and now you can use their creative skills on your live production! Designers can create professional broadcast graphics such as logos, lower thirds, scorecards and other real time graphics that can be downloaded directly to the media pool. Now you can instantly change live graphics in seconds!



# 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



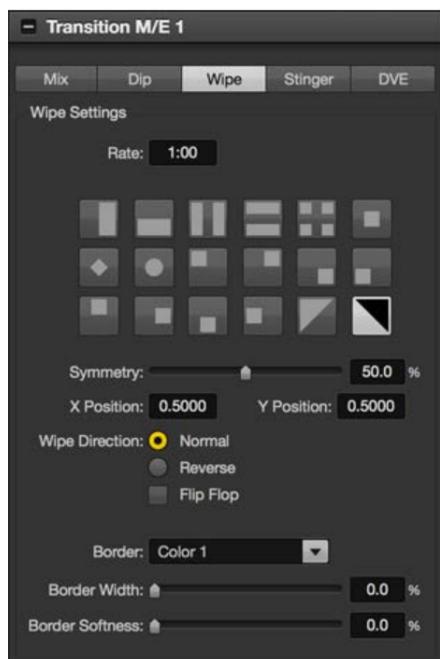
### Transition Control

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 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!



### 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 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!



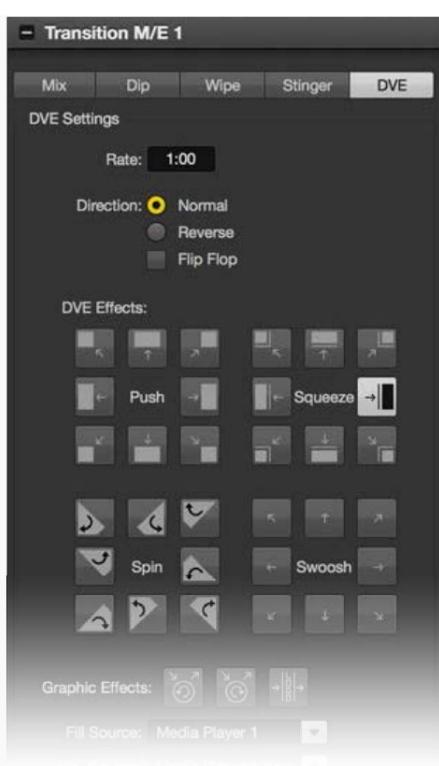
### Wipe Transitions

Create over 100 different styles from the 18 built in wipe patterns. 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.

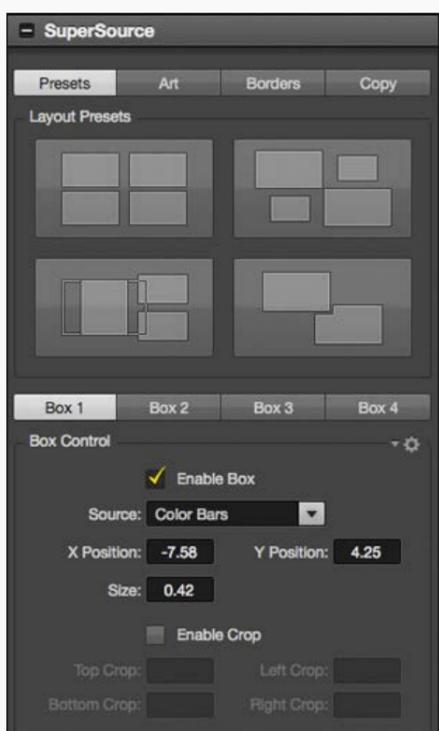


Push, spin, squeeze and swoosh from one camera to the next with powerful built in DVE transitions available on the ATEM 1 M/E and 2 M/E Production Studio 4K models.



## 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.

## Keyer Control 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.



Get easily adjustable controls that let you quickly and precisely fine tune your key settings in real time for the best quality live broadcast results.

## 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!

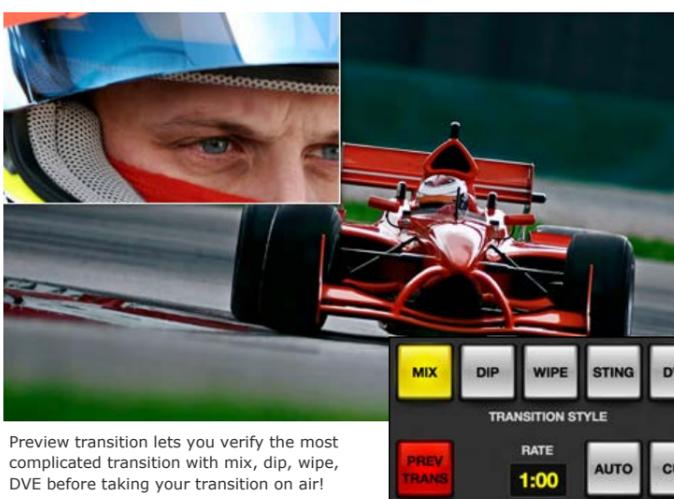
Smooth automatic transitions are easy with the auto transition button. Simply set your preferred transition rate between 1 and 250 frames using



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

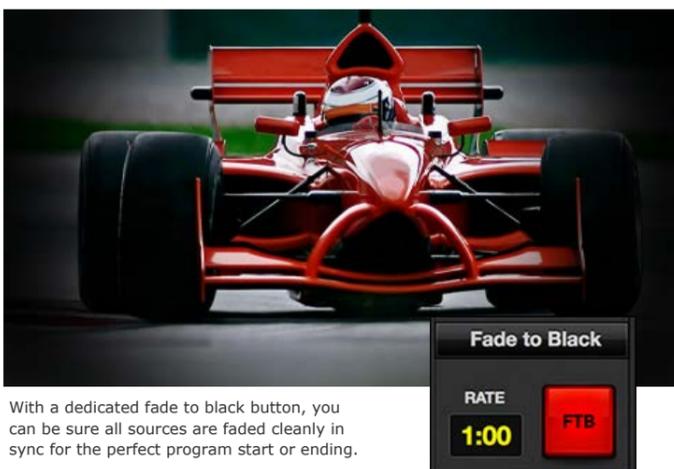
The PREV TRANS button lets you rehearse and preview complicated transitions before you take them on air! Your ATEM Production Studio preview video can be seen on your multi view screen or on a monitor connected to the switchers SDI preview output. Preview transition lets you verify the most complicated 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.



Preview transition lets you verify the most complicated transition with mix, dip, wipe, DVE before taking your transition on 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!



With a dedicated fade to black button, you can be sure all sources are faded cleanly in sync for the perfect program start or ending.



## Full Audio Mixer Control levels, balance and more!

The built in multi channel audio mixer lets you adjust the level and balance of the audio from each switcher input, plus the additional HiFi and balanced audio input connections. Each audio input is metered so you can always see the levels of each source accurately. You can set the audio to auto fade up and down as the switcher sources are changed and the mixed audio is then embedded into all video outputs!



Audio Follow Video



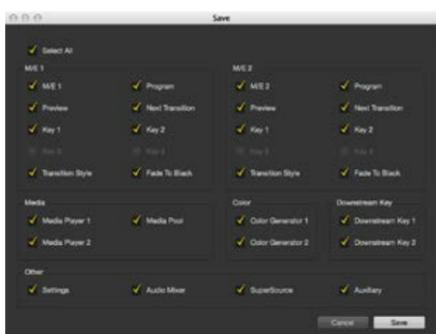
Balance Control



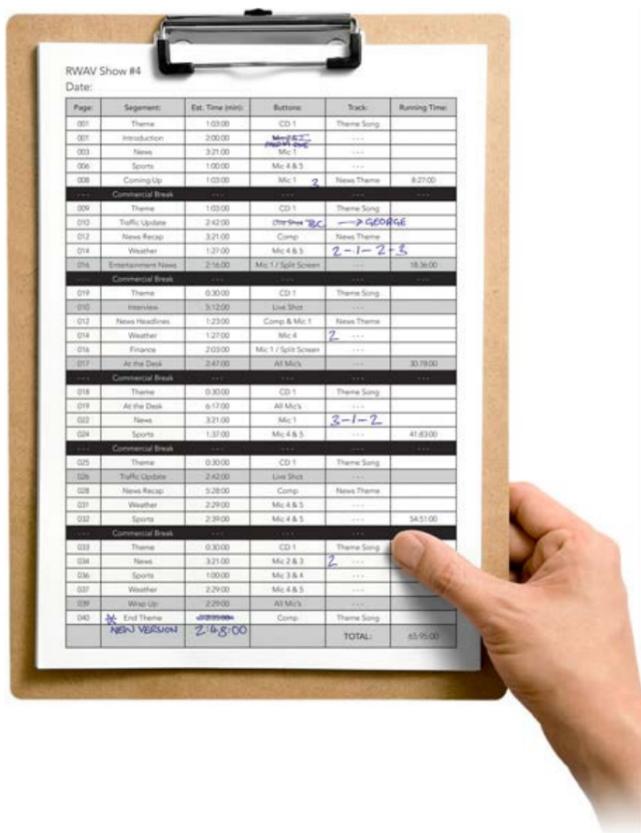
Fader Control

## 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.



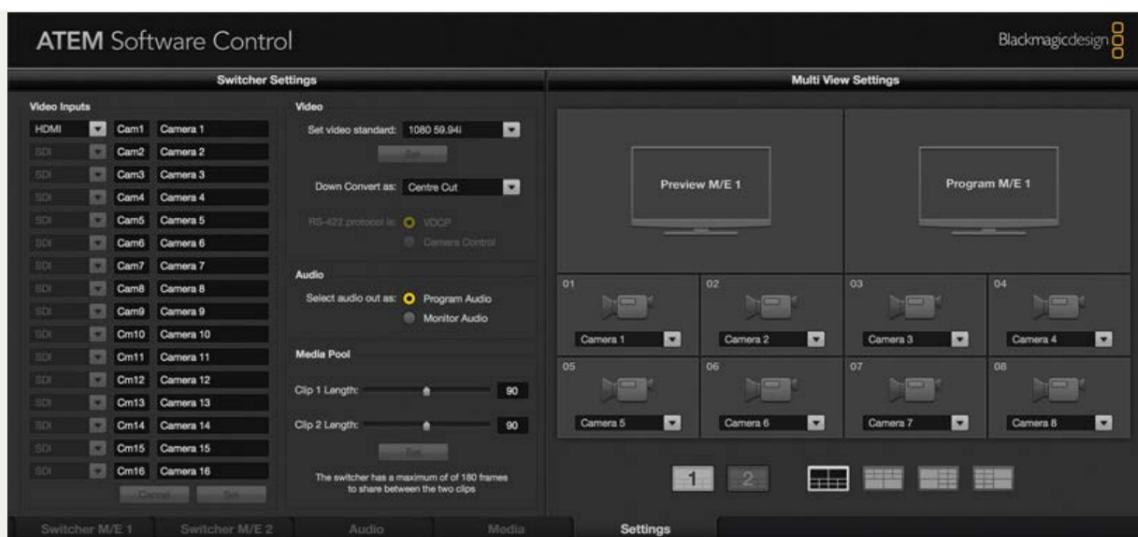
## Media Simple drag and drop media download!

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.



Download graphics direct from the included Photoshop® CC plugin. As you update graphics live, you can download in seconds.





## Switcher Settings

Get full control over your ATEM switcher settings for any type of live production!

When you're setting up your job you can use the switcher settings tab to adjust the video format of your switcher as well as the media pool size and input labeling. You can also fully configure the multi view output by arranging the camera inputs and program view into 4 different arrangements. Setting up your switcher is so easy with the ATEM software control because everything has been laid out so that settings are fast to change as required. That makes setting up for new jobs easy!

## Control Options

The most portable switcher control software available!

Now you can take your ATEM Production Studio 4K switcher on the road because the included ATEM Software Control runs from your laptop. You get complete switcher control that includes live switching, keyer and transition control, loading the media pool, all switcher settings and even audio mixing control. The ATEM switcher and laptop are so small you can fit them all in a bag or backpack. Now you can go to any event as there is no more portable solution than the ATEM!



Next ▶

# ATEM Broadcast Panels

Add the power of a hardware control panel to your ATEM!



For the ultimate in professional control you can add an optional ATEM Broadcast Panel to your ATEM switchers! Nothing beats a dedicated hardware control panel when you are switching complex live performances! Made from the highest quality components, the ATEM 1 M/E and 2 M/E

Broadcast Panels are designed for extreme speed, incredible reliability and ease of use. There is no faster way to run live production than with a dedicated hardware control panel!



\$4,995 | The ATEM 1 M/E Broadcast Panel is small enough to fit within the width of an equipment rack.

## ATEM 1 M/E Broadcast Panel The super compact control panel for 1 M/E switchers!

ATEM 1 M/E Broadcast Panel is a professional hardware control panel with smooth acting controls, buttons and knobs for precise control of your ATEM switcher. The ATEM 1 M/E Broadcast Panel is compact and fits within a standard equipment rack width so you can install it on a sliding rack shelf, perfect for "fly away kits" portable mobile racks and compact broadcast vans. You get full control of your switcher, including camera inputs, transitions, keyers, fader bar, settings, DVE positioning and more!



## ATEM 2 M/E Broadcast Panel The ultimate broadcast grade panel for true professionals!

\$14,995 | The ATEM 2 M/E Broadcast Panel perfectly positions all controls just where you need them!

The incredible ATEM 2 M/E Broadcast Panel has the power for the most complex live broadcast events. The ATEM 2 M/E Broadcast Panel features an amazing design that perfectly positions all controls just where you need them for the ultimate creativity on complex multi layer live production. Featuring separate control sections for every part of the 2 M/E switcher, you can find the controls you need quickly with every control at your fingertips.

Get the control panel that makes your live production faster!  
Live production is easier and fun with an ATEM control panel!



## Select Sources Switch camera to air instantly!

ATEM Production switchers are designed to give you the most advanced live switching workflow! The switcher control panel has separate program and preview buses that you can use together to quickly and accurately switch sources on air. Selections made on the preview bus will appear on your preview screen, so you can see what you have ready to go on air, then take it live by pressing the cut or auto buttons. Switching sources on the program bus go live immediately as it is always on air!



## Transition Control Select your favorite transition

ATEM Broadcast Control Panels give you total control over your transitions. All creative transitions are instantly available on the dedicated hardware panels and include the same cut, mix and wipe transitions that you can also control from the ATEM software control panel. You can cut directly, use the mix and wipe buttons and fader bar or just press AUTO to trigger the selected transition! With ATEM Broadcast Panels you get precision switcher control with the buttons you need at your fingertips.



With the push of a button you can choose mix, dip or wipes and even exciting programable DVE or animated stinger transitions!

## Transition Styles Transitions at the push of a button!

ATEM gives you a huge range of transition styles and loads of options to control them. Immediate source to source transitions can be selected by simply pushing the cut button. For more interesting transitions you can choose mix, dip or wipes, and if you are using the advanced ATEM 1 M/E and 2 M/E Production Studio 4K model you also get exciting programable DVE or animated stinger transitions. Take manual control with the fader bar or select auto transition button for smooth timed transitions.





## Wipe Transitions

### Standard wipes made easy

ATEM Broadcast Panels give you fast and flexible wipe transition control! You can select wipe patterns directly from the broadcast panel and customize them to suit your production style. You get complete control over wipe, symmetry, softness and also adjustments for colored borders with variable width and softness, you can even use the joystick to position the centre of a wipe. With dedicated joystick, fader and control knobs you get precise wipe pattern positioning.



Get complete control over wipe, symmetry, softness plus adjustments for colored border control with variable width and softness.



## DVE Transitions

### Amazing digital video effects

The ATEM 1M/E and 2M/E Broadcast panels give you fast and precise control over all the DVE transition options. You get an incredible quality joystick, soft knob and key frame control so you can quickly design your own DVE moves with adjustments for lighting and drop shadow effects that add depth to your animated graphic composition. You can also enable the DVE key mode to fly high quality graphics into frame or select any of the pre programmed push, spin, squeeze and swoosh transitions.



The built in joystick lets you position the DVE using up and down movements or you can scale the image size by rotating the joystick!

## Keyer Control

### Get perfect green screens.

Hardware control is ideal when doing chroma keying because you can finely adjust the parameters for clean key edges to get layering that looks seamless. The ATEM 1 M/E and 2 M/E Broadcast Panels give you precision control knobs so you can create the perfect chroma key quickly and accurately. Easily adjustable controls at your fingertips means you can adjust live key settings instantly if lighting or shadows change during the broadcast so you will always deliver incredible results.



Precision control knobs can create the perfect chroma key quickly and accurately for perfect multi layer effects.

## Fader Bar

### Exciting manual transitions

Amazing live performances often require transitions that need to be controlled manually. The ergonomically designed T bar control lets you ride transitions perfectly as part of the live performance! Sometimes the emotion of a live event means you need to feel a transition to get it perfectly in sync with the camera operators and talent. Like a conductor, the vision mixer is part of the performance and drives the mood as the production unfolds.



The ergonomically designed T bar control lets you set transitions manually allowing you to match the emotions of the performance.



## Auto Transition

### Fully automatic transitions

Just below the ATEM broadcast panel fader bar is the auto transition button. Selecting auto will instantly perform the next transition you have setup in the transition block. You can use auto transitions for every type of transition including dissolves, keying, wipe patterns and animated DVE transitions. Automatic transitions can be pre programmed for any duration from 1 to 250 frames and are ideal for smooth constant mixing between cameras.



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## Preview Transition

### Check your transition is perfect!

You get a dedicated preview transition button on both the ATEM 1 M/E and 2 M/E broadcast panels. The PREV TRANS button helps you avoid on air mistakes when preparing live transitions by displaying the result on your preview video output and on the multi view screen. With the preview transition button you can verify the most complicated transition with mix, dip, wipe, DVE and even keys without affecting your on air program output.



Both 1 M/E and 2 M/E broadcast panels feature a dedicated preview transition button so you can preview the next transition before it goes to air.



## Fade to Black

The broadcast panel fade to black button controls the entire output of the switcher! Selecting FTB will smoothly fade your program output to black at a preset transition rate. FTB is very useful for the start and end of your production or for fading out to commercial breaks. Because fade to black will always override your live program output, button guards have been designed to stop accidental triggering. This means you only hit fade to black button when you intend to!





## Joystick

### Get perfect DVE control

Move elements around the screen just like a video game using the Joystick! With full 3 Axis control you can adjust the symmetry of wipe patterns and control your DVE. The joystick control with the DVE is ideal to position live video over video. Scale the size, position up down or left and right for the perfect picture in picture effect. You can also use the joystick to move the DVE and enter start and end keyframe screen positions for your own customized animated DVE moves.

**3 AXIS**



## System Status

In live broadcast stations that demand 24/7 operation, you need to know all systems are online and working well. That's why ATEM broadcast panels have built in redundant power supply inputs and status lights for both the control panel and the switcher chassis power supplies. If you have a power supply failure, the back up power supply will take over plus you will be notified on the status lights of the failure so you can arrange for repair while staying on air uninterrupted!



## System Control

Quickly find the setting or adjustment you are looking for with a dedicated system control menu with 12 LCD buttons. You get a large data display window above 4 sets of soft keys and control knobs to help you make precise adjustments quickly. The system control matrix of menu is organized into a multi level tree structure that is easy to navigate. Adjust keys, wipes, DVE, media players, color generators, switcher settings, aux outputs and more!



## Auxiliary Outputs

### Set aux outputs fast and live!

The amazing full featured layout of the ATEM 2 M/E Broadcast Panel has dedicated buttons for auxiliary output control. Conveniently located in the top button row called the select bus, you can quickly set your auxiliary destination and switch its source. The select bus also lets you directly select inputs for the up and downstream keyers and the DVE. When you're switching a live production you need to find things quickly and the ATEM 2 M/E Broadcast panel has the dedicated buttons you need at your fingertips.



Conveniently located in the select bus, you can quickly set the auxiliary output and then live switch sources at the push of a button.



## Media Players

### Built in graphics and titles

Selecting stills from the media pool, ready for on air is quick and easy with the ATEM Broadcast panels. You can select any loaded still or clip to the output of either two media players directly from the system control menu. Get complete stills selection control independent from the media pool control on your computer. You can advance stills from the panel, decide between stills and clips, play and or loop the clips directly from your ATEM Broadcast control panel.



Set stills from the panel, change between stills and clips plus play and loop the clips directly from your ATEM broadcast control panel.



## Controlling Two ATEM Switchers:

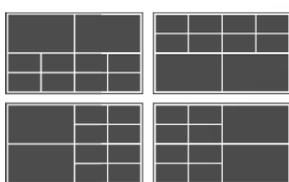
### 2 M/E Panel can control 2 x 1 M/E switchers

The incredible ATEM 2 M/E Broadcast Panel features an amazing design that lets you control 2 ATEM switchers from the single panel. Simply connect to any two switchers and then you can control them from each M/E row on the panel! That means you get double the switcher power and you can build your own multi M/E switcher by connecting one switcher to the other and running them both together!

## Settings

### Setup for jobs faster and easier!

Use the ATEM broadcast panel system control section to change and update all the settings on your ATEM switcher. You can map any source to any cross point on the panel, so you can group commonly used sources together for faster switching. You can also set panel button brightness as well as other switcher features such as traditional program/preview switching mode or direct mode switching styles. Most ATEM switcher settings can be changed from the panel, making setup easy.



You can setup your switcher including the arrangement of the switcher multi view output to your preferred layout!



## Audio Mixer

### Connect hardware audio panels!

All ATEM switchers are compatible with Mackie™ protocol USB control panels for live audio mixing! Simply connect a third party USB fader panel to your Mac or PC computer to get real time virtual control of every audio level on your Mac. As you adjust levels on the virtual software faders move in sync with you. You can even use the mouse to adjust levels on your computer and the flying faders will track your movement. Combining a fader panel with the built in mixer gives you the highest quality audio mixing experience.



 **USB CONTROL**

## Multiple Control Options Control your ATEM worldwide!

ATEM switchers use a standard ethernet connection for control so you can connect ATEM to Mac or Windows computers running the ATEM software control. You can also connect a powerful ATEM broadcast panel for greater control, or multiple combinations of both software and hardware control simultaneously! You can even connect ATEM to your network and control your switcher from anywhere in the world or use the included SDK to develop your own solution!

 **SOFTWARE**

Software control lets you control your ATEM locally or using the internet for control from anywhere in the world!

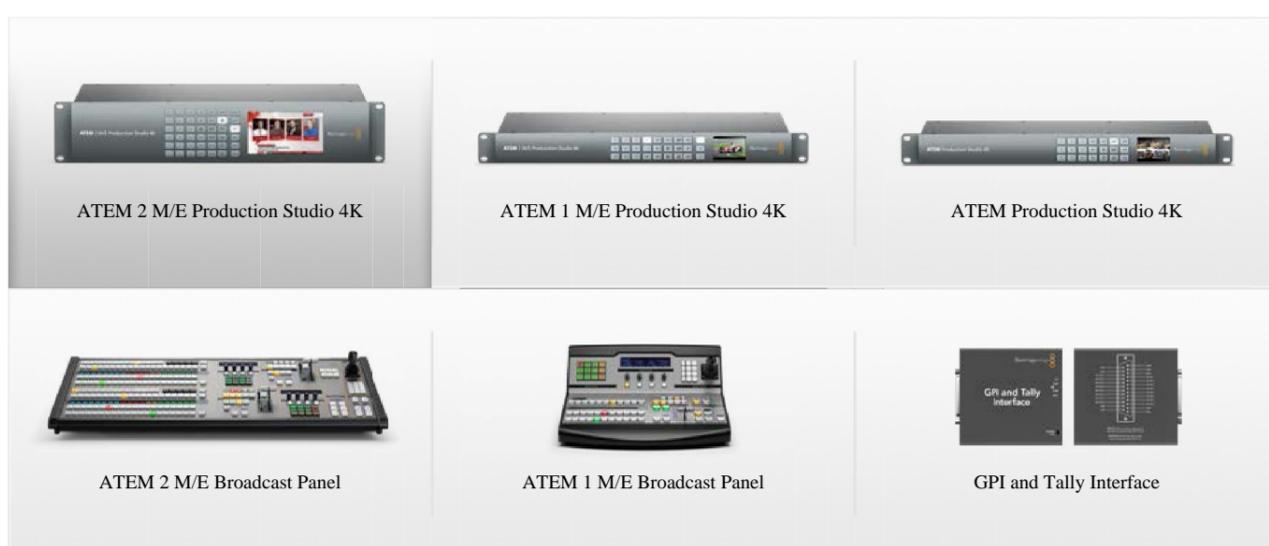
 **INTERNET**

Connect any combination of hardware and software switcher control simultaneously for multi user workflow.

 **FREE SDK**

Custom develop your own control solutions by using our software developer kit included free with every ATEM switcher!





## ATEM 2 M/E Production Studio 4K

### Technical Specifications

#### 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 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 Output**  
2 x XLR Program 2 x XLR Monitor

**Extra Audio Outputs**  
1 x XLR Timecode and 1 x XLR Talkback

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

**Audio Input**  
2 x XLR. 2 x RCA.

**Extra Audio Inputs**  
1 x XLR Timecode and 1 x XLR Talkback

**Sync Input**  
Tri-Sync or Blackburst

**Internal Frame Synchronizers**  
20. All inputs

**SDI Program Output**  
3 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 (Ultra HD 4K to HD)

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

**SDI Aux. Output**  
6 x 10-bit SD/HD/Ultra HD 4K switchable

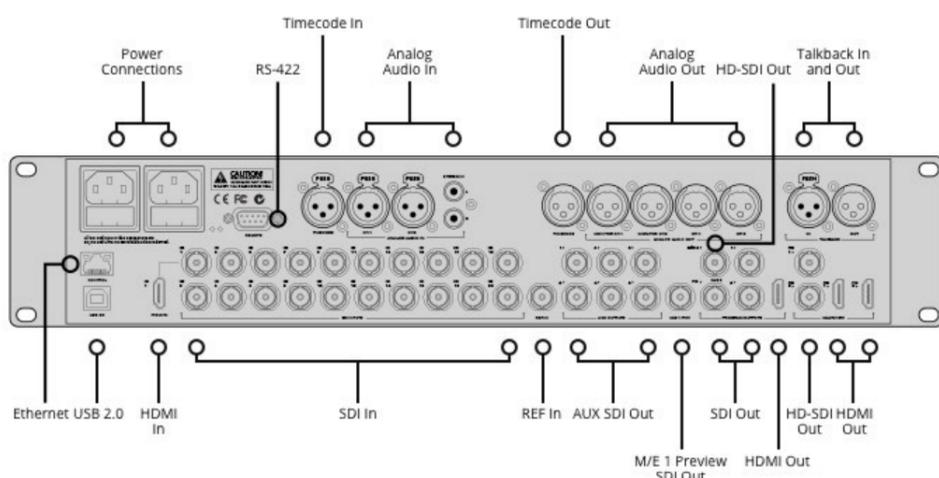
**Quantity of Multi Views**  
2 x SDI plus 2 x HDMI, able to be used concurrently.

**Multi View Outputs**  
2 x SDI and 2 x HDMI.

**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 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**  
3840x2160p23.98, 3840x2160p24, 3840x2160p25, 3840x2160p29.97.

**SDI Compliance**  
SMPTE 259M, 292M

**Video Sampling**  
4:2:2

**Color Precision**  
10-bit/p>

**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.

#### 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**  
22 input x 2 channel mixer. Selectable On/Off/Audio-Follow-Video. Level and Peak metering. Master gain control. Dedicated analog outputs for monitoring.

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

#### Operating Systems

Mac OS X 10.8 Mountain Lion, Mac OS X 10.9 Mavericks or later.  
Windows 7 64-bit or Windows 8 32-bit or 64-bit.

#### Product Specifics

**Total Number of Layers**  
13

**Upstream Keyers**  
4

**Downstream Keyers**  
2

**Linear/Luma Keyers**  
7

**Chroma Keyers**  
4

**Pattern Generators**  
7

**Color Generators**  
2

**Transition Keyer (Stinger/DVE)**  
1 and 1

**DVE with 3D Borders & Drop Shadow**  
Yes, program x 1

**Control Panel Compatibility**  
ATEM 2 M/E Broadcast Panel preferred. Compatible with ATEM 1 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 42 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**  
2 with fill and key.

**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.

**Media Pool Audio File Format**  
WAV, MP3 and AIFF.

<b>Multi View Monitoring</b>	<p>Number of Windows 2 x 10</p> <hr/> <p>Routable Windows 16</p>	<p>Tally Red for program and green for preview indication.</p>	<p>Windows Source Labels Yes</p>
<b>Physical Installation</b>	Physical Installation 2 Rack Unit Size.		
<b>Power Requirements</b>	<p>Power usage 150W</p>	<p>Power Supply 2 x built in international AC power supply. 100-240V AC</p>	
<b>Physical Specifications</b>			
<b>Environmental Specifications</b>	<p>Operating temperature 0° to 40° C (32° to 104° F)</p>	<p>Storage temperature -20° to 60° C (-4° to 140° F)</p>	<p>Relative Humidity 0% to 90% non-condensing</p>
<b>What's Included</b>	ATEM 2 M/E Production Studio 4K Software CD		
<b>Warranty</b>	12 Months Limited Manufacturer's Warranty		

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## ATEM Production Studio 4K

 <p><b>ATEM Production Studio 4K</b> The world's first Ultra HD 4K live production switcher! Features 6G-SDI in SD, HD and Ultra HD!</p> <p><b>\$1,695</b></p> <p><a href="#">Buy Now</a></p>	 <p><b>ATEM 1 M/E Production Studio 4K</b> Advanced 1 M/E live production switcher with DVE, stingers and 6G-SDI so you can work in SD, HD and Ultra HD!</p> <p><b>\$2,495</b></p> <p><a href="#">Buy Now</a></p>	 <p><b>ATEM 2 M/E Production Studio 4K</b> World's most advanced live production switcher with 20 6G-SDI inputs, DVE, SuperSource and much more!</p> <p><b>\$3,995</b></p> <p><a href="#">Buy Now</a></p>
 <p><b>ATEM 1 M/E Broadcast Panel</b> Control panel for ATEM live production switchers. Supports all ATEM switchers.</p> <p><b>\$4,995</b></p> <p><a href="#">Buy Now</a></p>	 <p><b>ATEM 2 M/E Broadcast Panel</b> Control panel for ATEM live production switchers. Supports all ATEM switchers.</p> <p><b>\$14,995</b></p> <p><a href="#">Buy Now</a></p>	 <p><b>GPI and Tally Interface</b> Adds 8 Tally relay contacts to any ATEM switcher.</p> <p><b>\$495</b></p> <p><a href="#">Buy Now</a></p>

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