Black Magic ATEM Television Studio Pro Switcher
Chroma Key and Lower Thirds Quick Start

The first step is to download the ATEM software into a computer. Connecting with an external computer will allow you to easily load graphic files into the switcher for Chroma Key backgrounds and lower thirds. Please see page 17 of the ATEM User manual for instructions on installing the software and connecting the switcher to a computer.

In the rack document folder, you will find an SD drive with the software and manual.

***Please Note*:**

- **To connect to the switcher's ethernet port, please use the port on the Tally and Interface accessible from the from of the rack and labeled "Switcher Ethernet".**

- **For lower thirds, please use PNG files with transparency.**

The switcher's IP address has been set to **192.168.1.110.** Please see the manual on how to change it. It can also be changed from the panel menu settings if you do not yet have ethernet connectivity.

Chroma Key Set Up
Once you've connected to the switcher, you can load your graphic files into the Media Player.
- From the menu button, select "Media Players", then press the SET button. MP1 will highlight.
- Press the SET button again.
- You will see a list of graphic files you've uploaded into the Media Player library.
- Select the file that you would like as the backdrop of the Chroma Key effect.
- Press the "MENU" button twice to get out of that setting.

You should now see the selected graphics in the "Media Player 1" window of the multiview monitor.

- Go to "Upstream Key" in the menu and press the SET button.
- Scroll down to "Key Type" and press the SET button.
- Scroll down to "Chroma" and press "SET".
- Press the MENU button once to return to the Upstream Key settings.
- Now scroll down to "Fill" option and press SET button.
- Select which camera will be using the Chroma Key background. For this purpose, let say that you will be using camera 1 (or HDMI input 1). Scroll down to "Camera 1" and press the SET button, then press the MENU button once to return to the Upstream Key settings.

Please Note: Since your system has three cameras we assume you will use HDMI input 1,2,3 for cameras (1,2,3 respectively). Therefore you can use HDMI input 4 for any computer image you'd like to use in the system ('say for Power Point presentations or video playback). Therefore, the audio on HDMI Input 4 should be up so that the computer's audio signal will pass through to the broadcast. There are black volume knobs on the panel for each respective input.

Now scroll down to "Hue" and press the SET button. you should see a big number value on the menu screen.
The hue selection will let you set up the correct color to "key out" for your effect.
In order see the adjustment you will now need to go to the panel buttons and select both the BKGD & KEY 1 TIE buttons.

Next you will need to make sure you have the background source (Media Player 1) selected on the panel's Preset Bus. You will need to press the SHIFT + 1/MP 1 button.

The Preset Bus is how you tell the switcher which source you want as the background when using the chroma key effect.

Press them both at the same time so that they are both lit. You will now see the effect on the preview window of the multiview monitor.

Turn the menu knob until you see the effect on Camera 1 and the Green is keyed out or no longer visible.

__Please note__: for the effect to look good, you will need a very well lit green screen background. It should also be lit "flat" so that it looks evenly lit throughout the whole background. Have an object such as a desk or a person on camera so that you can adjust the edges. Once the effect looks as good as you can get it, press the MENU button once for other adjustments. You should also play with the other adjustments (Gain, Y Suppress, Lift, & Narrow Chroma Key Range) to tweak the effect as optimally as you can get it.

Once you're done with the adjustments, press the MENU button until you get out of the menu setting.

Now that your effect is set up, anytime you want to use it, you will need to press both panel buttons simultaneously. This will put the effect on the Preview window, then press the CUT button to send it to program, or use the panel slider or AUTO button for a dissolve.

When you no longer want to use the Chroma Key effect or want to return to normal operation press the BKGD button so that it is lit without the KEY 1 TIE.

Lower Thirds
- Go to MENU and select "Downstream Key 1" and press the SET button to enter those settings.
- Scroll down to "Fill Source" and press the SET button.
- Scroll down to "Media Player 2" and press the SET button. This means your lower thirds graphics will be using the file you select in Media Player 2.
- Press the MENU button twice to get back to the Menu settings.
- Now turn the menu knob to select "Media Players" and press the SET button.
- Select MP2 (Media Player 2) and press the SET button.
- Scroll down to select the lower third graphics you'd like to use, then press the SET button.

You should now see that file in the "media Player 2" window of the multiview monitor. Press the MENU button until you're out of the settings. Your Downstream Key should be ready to use.
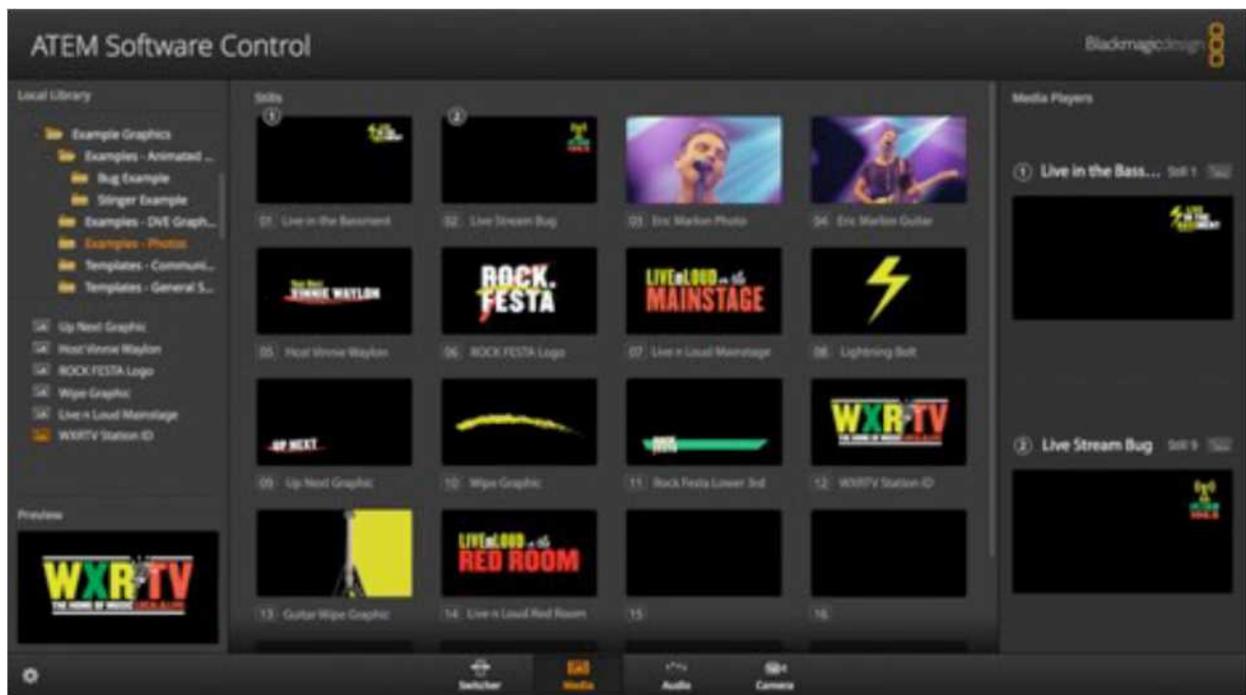
Please remember to use PNG files with transparency for easy results.

Now go to the panel and select the DSK 1 CUT or DSK 1 AUTO to activate the lower third. You should now see it on the Program window of the Multiview.

To remove the lower third press the DSK button again.

If you need a different lower third, go to the menu and select the Media Players option and change the Media Player 2 graphics to the new lower third. Remember that Media Player 1 is being used as your Chroma Key background so do not change this file.

If you have an external computer with the ATEM Control Software, changing the files in the Media Players is really easy and super fast (click and drag method). We recommend using the software if you're going to use a lot of files or need to change them quickly.

When you turn off the switcher these Chroma Key settings will be lost and the Media Player selections will default. You will have to set them up again. However, the media files, will still be there in the memory and available to you -- you will not need to re-import them.

Please feel free to contact me if you have any questions.

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