

Using the Blackmagic ATEM

The **Blackmagic ATEM** is a live video switch that allows for smooth selection of video sources. In the Sight and Sound setup, the main output of the switch is sent to the projector. The output is duplicated and sent to a channel on the **V800** video mixer.



Figure 1: The ATEM TV Studio HD front panel.

A multi-view monitor shows the 8 available inputs in the lower half of the display. The upper left picture is the **preview**, and the upper right shows the current **program** output.

The Blackmagic ATEM can be controlled by switches on the front of the unit. It can also be (more easily) be controlled from computer software.



The Windows Start menu has an icon for opening the Blackmagic ATEM Software Control program.

The **Blackmagic ATEM Software Control** display provides buttons for selecting the contents of the **Preview** and **Program** displays in the multiview monitor.



Figure 2: The ATEM multi view monitor.

To switch from the Preview to the Program...

- Select the **Cut** button, or
- Select the **Auto** button, or
- Drag the **T-bar** between the upper and lower positions.

The **Preview** and **Program** sections of the ATEM Software Control display have the same collection of buttons.

In our system at the time of this writing, we have the following input options:

- **WALL** (an HDMI connector below the window of the outside wall of the Sound Booth,
- the **Booth Tower** Computer,
- the **Mediasonic DVD Player**, and
- an output from the **V800 Video Mixer**.

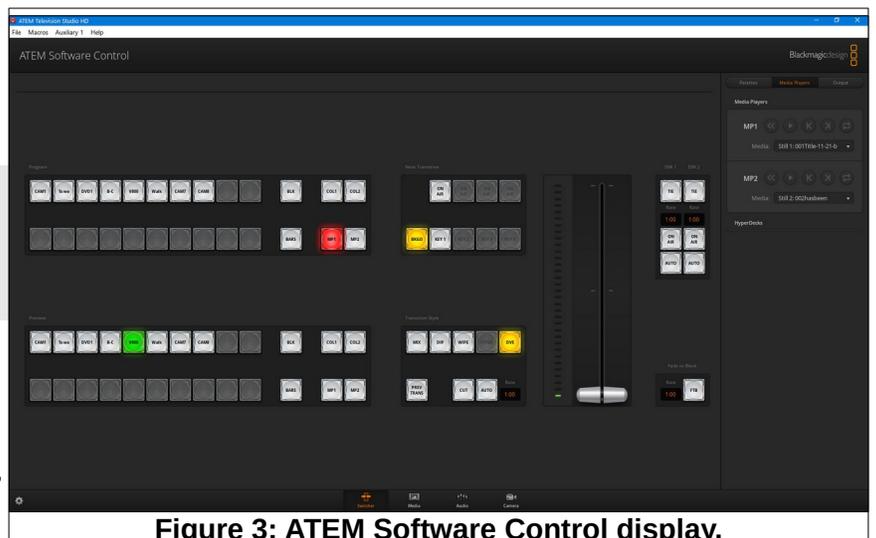


Figure 3: ATEM Software Control display.



Transition Styles

The **Program** option sends video to the auditorium projector. A duplicate video output sends the same video to a channel of the **V800** video mixer.

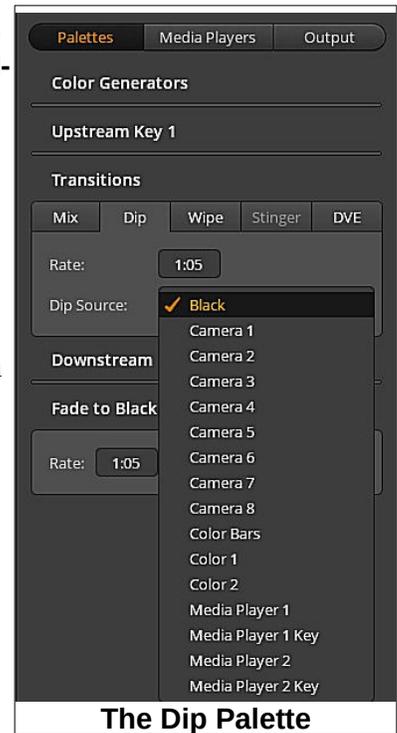
There are four **Transition Styles** available when the Auto or T-Bar functions are used, **MIX**, **DIP**, **WIPE**, and **DVE**.

The **MIX** option makes a smooth fade between the **Preview** and **Program** displays when the **Auto** button is selected or if the **T-Bar** is moved.

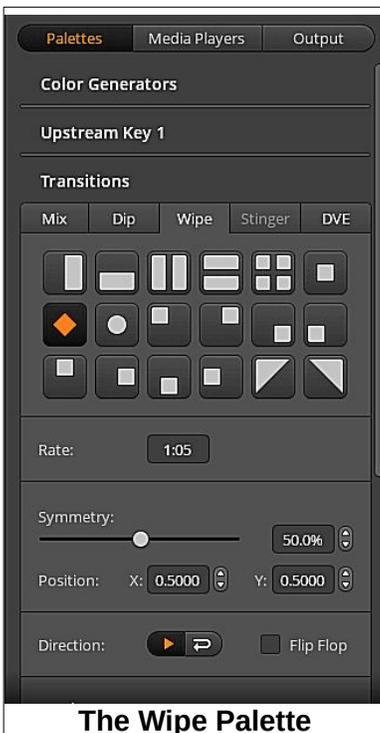
There is a **Rate** box next to the **Auto** button that controls the length of time the transition takes.

The **DIP** button fades from **Program**, to the currently select **DIP Source**, to the **Preview** display when the **Auto** button is selected. The **DIP source** is selected using a drop down list from the **Dip Palette**.

For example, If the DIP source is set to Black, the transition will fade from the current Program display, to Black, to the Preview display. At the end of the Transition the Program and Preview displays will have been switched. The value in the Rate box will control how long the transition will take.



The Dip Palette



The Wipe Palette

The **WIPE** option will use the transition pattern selected in the **Wipe Palette** when the **Auto** button is selected or when the **T-Bar** is moved.



The DVE Palette

The **DVE** button will use the transition selected in the **DVE Palette**.



Additional Input Options



In addition to the 8 video inputs, the ATEM has 6 other options; **BLK** (black), **BARS** (color bars), **COL1** and **COL2** (solid colors), and **MP1** and **MP2** (frame stores). These are available in both the Preview and Program sections of the ATEM Control Panel.

A total of 20 possible

frame store images can be loaded at any particular time.

To open the Image Store, select the **Media** option from the bottom of the ATEM Software Control Display.

The frame store images can be copied from the **Local Library** which can be set to any available drive or folder.

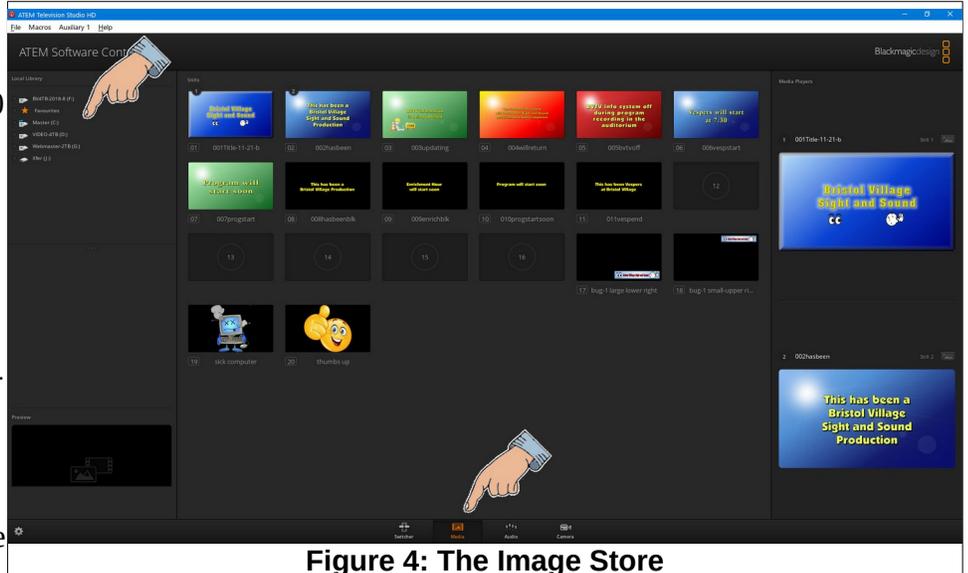


Figure 4: The Image Store

Once the image store is populated, images can be selected for **MP1** and **MP2** by using the drop down list in the **Media Players Palette**. The **MP1**, **MP2**, **BARS**, **Col1**, **COL2**, and **BLK**, can be moved from **Preview** to **Program** like any other video source.



The Media Players Palette

