



Bristol Village Sight and Sound Operating Manual





The Bristol Village Sight and Sound Operating Manual

Developed for use at Bristol Village, Ohio
https://bvres.org/bvhome_21.html
 Sight and Sound web page
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Opening the Sound Booth

Please use the following sequence when opening the sound booth for new programs.

Power Amp rack

1. Turn on the main power switch on the power amplifier rack.
2. Turn on the BVTV monitor.



NOTE: if only microphones are required, turn on the Sound Board and skip other steps.

AV equipment Startup

1. Turn on Samsung Plus switch.
2. Turn on V800... wait until lights stop flashing.
3. Turn on cameras... wait until camera movement has stopped.
4. Turn on Sceptre monitor...
5. Turn on Blackmagic ATEM... If the ATEM multi view is not displayed, push the HDMI switch to switch between the Tower computer and the ATEM. Wait 10 seconds for the HDMI switch to take effect.
6. Turn on all other switches (do not turn on Stage or Wireless lights unless they are needed.)
7. Turn on DVD player (if needed).
8. Turn on Booth Laptop (if needed).
9. Turn on Booth Tower computer (if needed).
10. Turn ON WALL or CH8 computers connected to wall plate by HDMI cable (if needed).
11. Turn on wireless mics as needed.



Equipment Power Switches

If cameras or other equipment do not appear on the V800 multiview monitor, turn the V800 off, wait 30 seconds, and restart it.

AV equipment shut down

1. Turn off Dist Amp.
2. Turn off V800.
3. *Shut Down* booth laptop and booth tower computer if in use.
4. Turn off all other equipment.
5. Turn off Power amp rack.

Sceptre monitor

- The Sceptre monitor is used both for the Blackmagic ATEM multi-view and for the Booth Tower computer.
- There is an HDMI switch below the Sceptre monitor that switches from the Tower Computer to the Blackmagic ATEM.

It takes about 10 seconds for the HDMI switch to make the change.. wait for it.



Microphone Setup

Follow these instructions for sending microphone output to the ceiling speakers. (Do all steps shown in green!)

- ✓ Turn on **Main Amplifier** power.

The Main Amplifier power switch is located under the TV monitor on the rack on the sound booth west wall.

- ✓ Turn on **Sound Board** power

Use the power strip switch below the counter top near the light board.



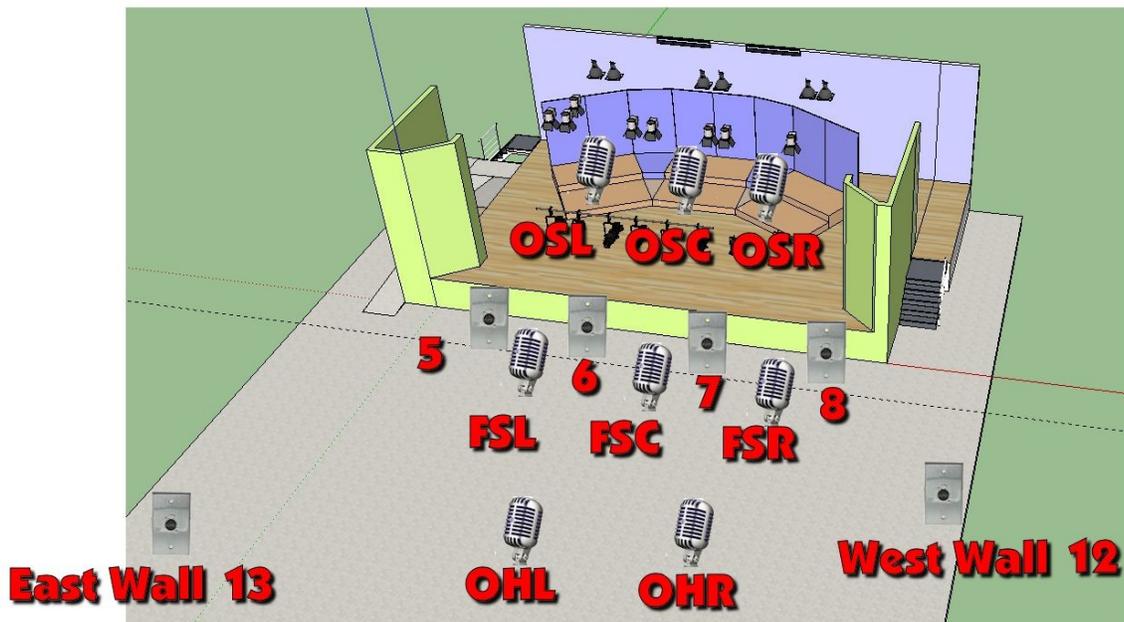
- ✓ Turn on power for any required **wireless microphones** receivers. (Note power strip above receivers.)
- ✓ Check the program request form for the number and placement of microphones.

WARNING: DO NOT connect or disconnect microphones or cords if the microphone line is ON. The loud pop that is heard when a live mic is connected (or disconnected) is from an electrical surge that may damage equipment.





Microphone Locations



- ✓ Place microphones.

Note location of ceiling microphones.

- OSL, OSC, and OSR are above the stage and are typically used for groups on the risers.
- FSL, FSC, and FSR are located on the ceiling beam in front of the stage. These are omni directional shotgun mics that are directed toward the area in front of the stage and are used for groups that are positioned in front of the stage.
- OHL, and OHR are located on the audience side of the ceiling beam in front of the stage. These are used for audience responses and audience hymn singing.
- Mic connectors 5, 6, 7, and 8 are located on the short wall in front of the stage. They are used for microphone placement with reach of microphone cables.

NOTE: The stage floor is like a big drum that can transmit sounds up the microphone stand to the mike and cause unwanted sounds. When using a microphone stand on the stage, always place a piece of carpeting or other soft material under the microphone stand.

- Mic connector 13 is located on the east wall, and mic connector 23 is located on the wall just below the outside of the sound booth window.

- ✓ Make a note of the microphone connector number that corresponds with each sound board volume fader number.

••• **REMINDER** ••• Cover all exposed microphone cables with the rubber floor mats stored on the shelves found in the Sound Booth entry way to prevent tripping accidents.



- ✓ Adjust ceiling speaker volume.

NOTE: Speaker volume in the booth will sound louder than speakers in the auditorium. (If the sound in the booth is not too loud, it is not loud enough in the audience. Check speaker volume outside of the booth. Set ceiling speaker volume fader at *level 0* (the thick horizontal line) as a starting position. Use the **Gain Control Knob** and adjust until one green light blinks on average volume.



- ✓ Do a volume check on all microphones.

NOTE: There is an **ON** button for each microphone volume fader. The **ON** button will be lighted when the fader line is active. All microphone lines should be **OFF** except the ones in use.

Near the bottom of the fader for each of the 32 channels, there are 3 **ASSIGN** buttons. For normal use, all three buttons should be pressed down except for the 1-2 buttons for the over the audience mics OHL & OHR, and



the Ceiling Front of Stage Mics FSL, FSC, FSR. The assignment buttons send the output of each line as follows:

- Group 1-2, Front Speakers and Ceiling Speakers
- Group 3-4, Village, Booth Speakers
- ST, Recorder



Shut Down

NOTE: microphones and cords should not be disconnected unless the power is off or unless that mic fader is OFF. The loud pop that is heard when a live mic is disconnected (or connected) is from a surge that may damage equipment.

- ✓ Turn off main power amplifier.
- ✓ Turn off wireless microphones and receivers.
- ✓ Turn off Sound Board power.
- ✓ Disconnect and store microphones, cables, and cord covers.
- ✓ Check one more time to see that all equipment is off, then cover equipment with dust covers.

Basic Program Setup

✓ Turn on power

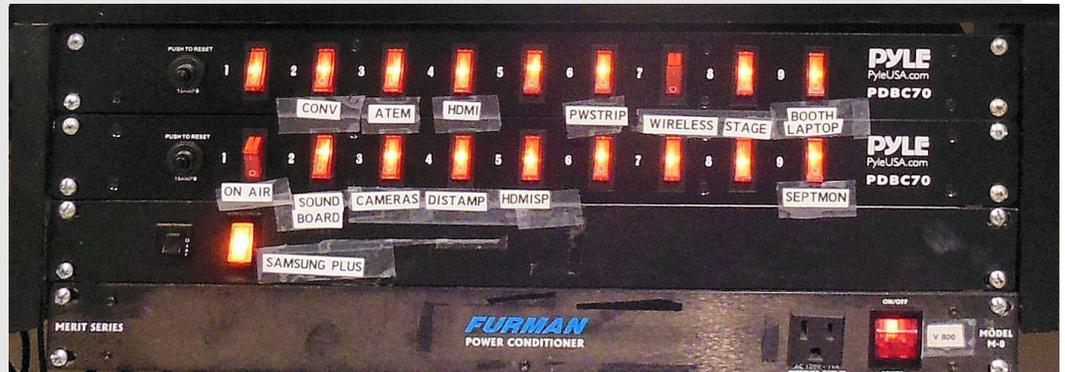
- Turn on main amplifier power. (Use power strip switch at upper right corner of the amplifier rack.)



NOTE: If cameras or other video is being used, turn on the V-800HD first and wait until all lights stop flashing before turning on other video equipment.

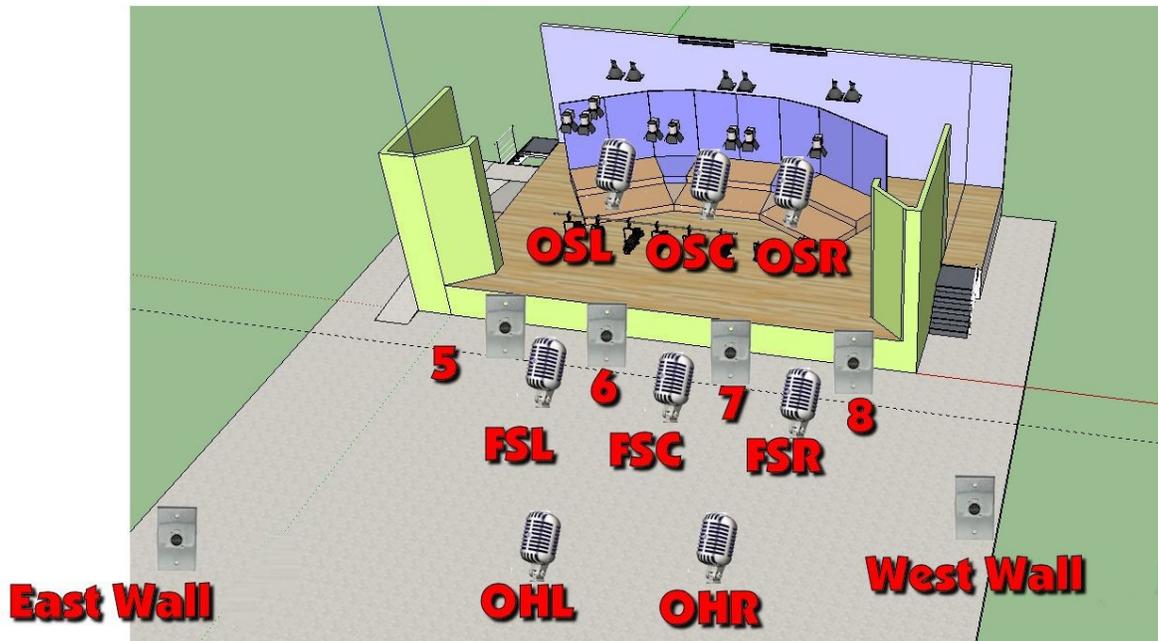
✓ Turn on equipment power.

- Turn on V800 power. **Wait until all V800 lights stop flashing before turning on other equipment.**
- Turn on SAMSUNG PLUS strip.
- Turn on CAMERAS.
- Turn on ATEM.
- Turn on SEPTMON.
- Turn on DISTAMP.
- Turn on CONV, HDMI, PWSTRIP, BOOTH LAPTOP, SOUND BOARD, HDMISP.
- Turn on BOOTH TOWER computer.
- Turn on other power switches as required.
- If the speakers in the lounge area of the Auditorium are needed, turn them on using the switch found under the DVD player. (These speakers are used when people will be seated in the lounge area.)





Microphone Locations

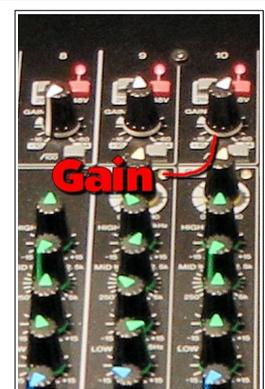
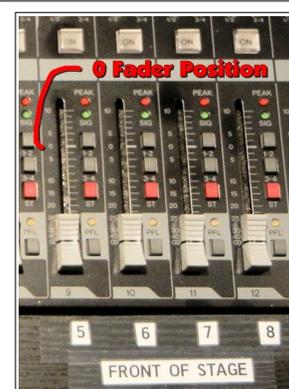


✓ Place microphones as needed.

- Check the Program Request form for locations of required microphones.
- Make a note of the id for each microphone in use.
- Cover exposed microphone cords with the rubber floor mats stored in the shelf found in the Sound Booth entry way.
- Do a volume check on each microphone.

✓ Use the following procedure during each microphone setup test:

- Set the **Fader level to 0**.
- Have someone talk into the microphone using a normal voice.
- Adjust the **Gain Knob** until a green light on the fader starts to flicker. (If the gain is set too high the color of the light will change to red.)





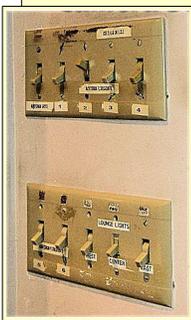
- ✓ Adjust overall sound volume using sound board Front, Ceiling, Village, and Booth speaker faders.
- ✓ Make sure the **RECORDER OUT** fader is **ON**.

To prevent feedback only use the **Front** speakers when there are no microphones in the area in front of these speakers.

- ✓ After the volume levels have been set, keep all microphone channels OFF except the microphones currently in use.
- ✓ Adjust room lighting as required.



Normal room lighting for Vespers is to turn room fluorescent 1,3 and 5, and Audience spots ON. Labeled light switches are on the wall to the left of the sound booth door. If stage spot lights are needed, consult the Stage Lighting section of this manual.



Use the PT-JOY-G54 to control cameras

- ✓ Adjust cameras and set camera presets.



In most situations the camera presets for each camera should be set as follows:

Camera	1	2	3	4
Preset 1	Lectern On Stage	Lectern On Stage	Lectern On Stage	Lectern On Stage
Preset 2	Stage Center	Stage Center	Stage Center	Stage Center
Preset 3	Stage Piano	Stage Piano	Stage Piano	
Preset 4	Audience		Audience	Audience
Preset 5	Organ	Organ	Organ	Organ
Preset 6	Piano Left	Piano Left	Piano Left	Piano Left
Preset 7	Lectern Floor Right	Lectern Floor Right	Lectern Floor Right	Lectern Floor Right
Preset 8	Exercise Class	Exercise Class	Exercise Class	Exercise Class



To set a camera preset position, select the desired camera button, and then hold down the desired Preset button until the notation in the OSD window disappears.

Use the V-800HD video mixer to switch between cameras

See the Using the V-800HD Video Mixer section of this manual to learn how to use the Roland V-800HD to switch between cameras and video sources.

- ✓ If the program is to be recorded, review the Recording Programs section of this manual.
- ✓ At the appointed program start time, switch the master video source switch to VIDEO FROM S&S. Then switch the On Air light switch (found on the power strip below the counter) ON.



Shut Down

- ✓ Switch master to VIDEO FROM OFFICE.
- ✓ Turn off computers.
- ✓ Turn off DISTAMP.
- ✓ Turn off V-800HD.
- ✓ Turn off all other power switches, including power rack.
- ✓ Disconnect and store all microphone cables and cord covers.
- ✓ Check one more time to see that all equipment and lighting is off, then cover equipment with dust covers.

Recording Using OBS Studio

OBS Studio is a free program that can be used to record programs and save them as mp4 files.

The OBS Display

Figure 1 shows the OBS display on the Booth Laptop computer.

If there is no video image on the Laptop, follow the instructions later in this document to select the desired video source.



Figure 1: OBS on the Booth Laptop computer.

Figure 2 shows the OBS display on the Booth Tower computer.

Note that OBS in the figure is set to Studio Mode. (#4)

The V800 Program Out scene has been selected (#1) and the V800 Program Out image is in the Preview window (#2). When OBS recording is started, it will record the scene shown in the Program window.

To move a scene from Preview to Program, select a Transition. (#3)
Note the following features in the OBS display.:

- The current audio and video sources for the selected scene are shown in the sources window at #6.

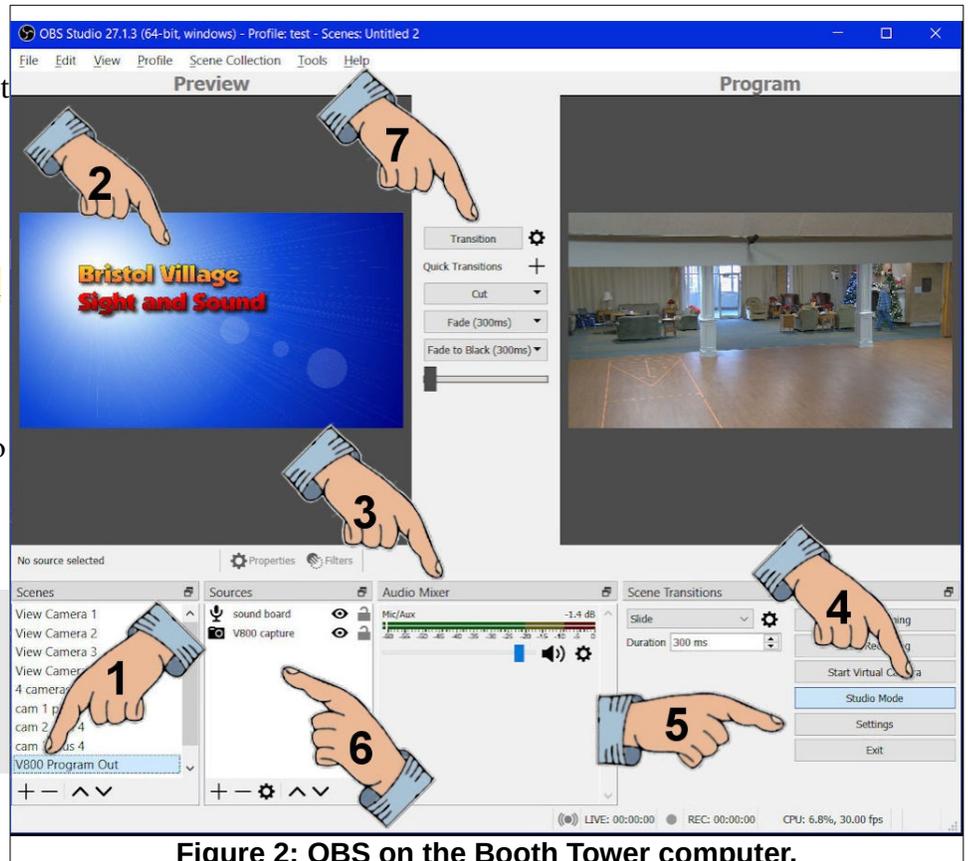


Figure 2: OBS on the Booth Tower computer.



- Audio and video sources can be removed by selecting a source, and clicking on the - button.
- Sources can be added by selecting the + button.
- Settings (including the recording Save As folder) can be adjusted by selecting the Settings option #5, selecting Output, and the using Browse to locate the desired folder (see Figure 3).
- If the audio source is active, the volume meter at #3 (in Figure 2) will show activity when the sound board is sending audio

➤ To Start and Stop recording, select the option at #5 in Figure 2.

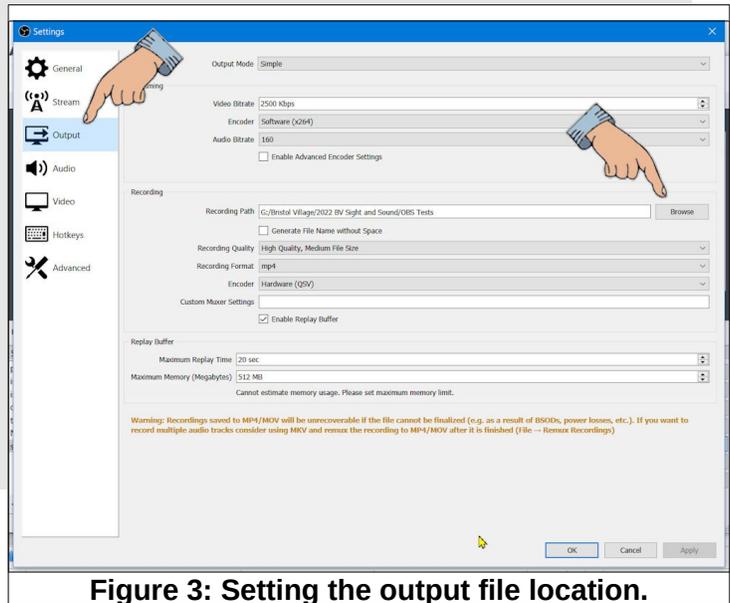


Figure 3: Setting the output file location.

NOTE: OBS will record the scene that appears in the Program window. The OBS Studio remembers the settings from the last user. In most cases, the settings will not have to be adjusted except for setting the path where a new recording will be saved.

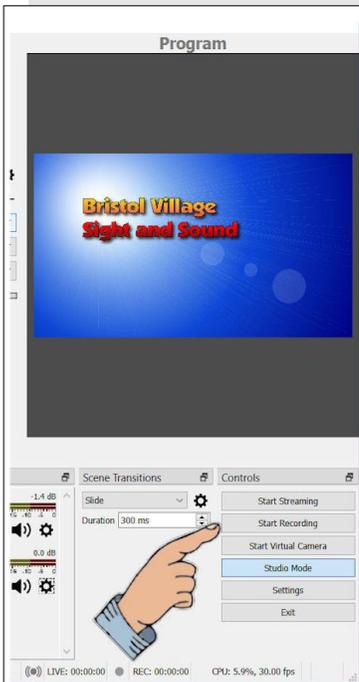


Figure 4: Start Recording.

Figure 5 shows that the V800 Program Out scene has been moved from Preview to Program by selecting the Transition button.

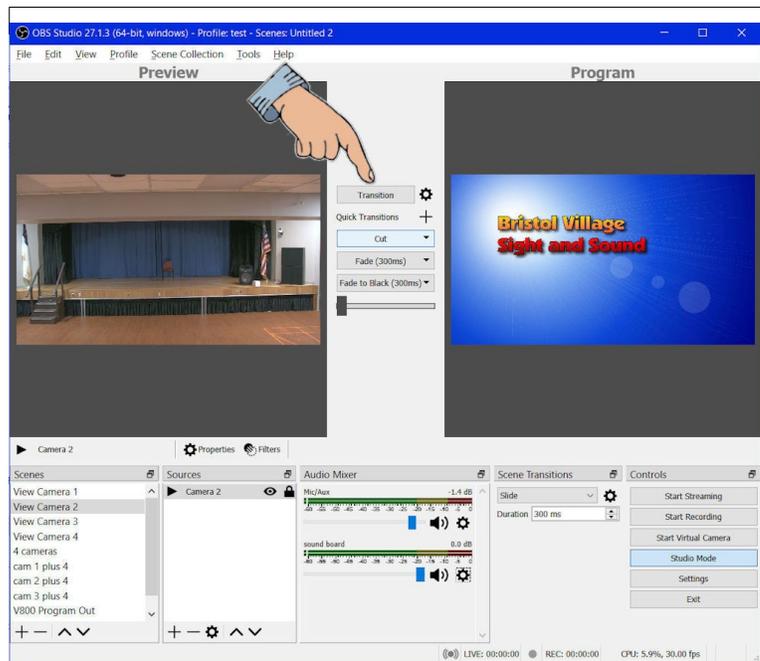


Figure 5: The V800 Program Out scene in the Program window.

Figure 6 shows a drop down list of transition options. Quick Transition buttons can be added by selecting the + below the Transitions button.

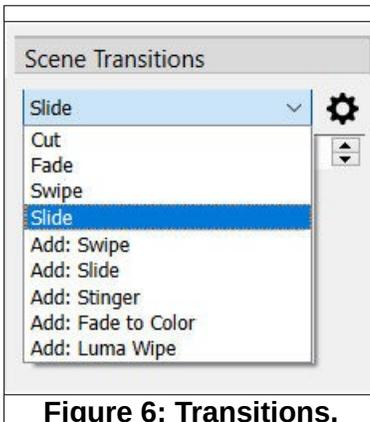


Figure 6: Transitions.



Setting the file location for a new recording.

- ✓ Select the Setting option (option #5 in Figure 2).
- ✓ In the Settings dialog box, select the Output (#1) option.
- ✓ Check to make sure the Recording Format (#2) is set to mp4.
- ✓ Select the Browse (#3) option and set the location for the new recording.
- ✓ Select OK to close the dialog box.

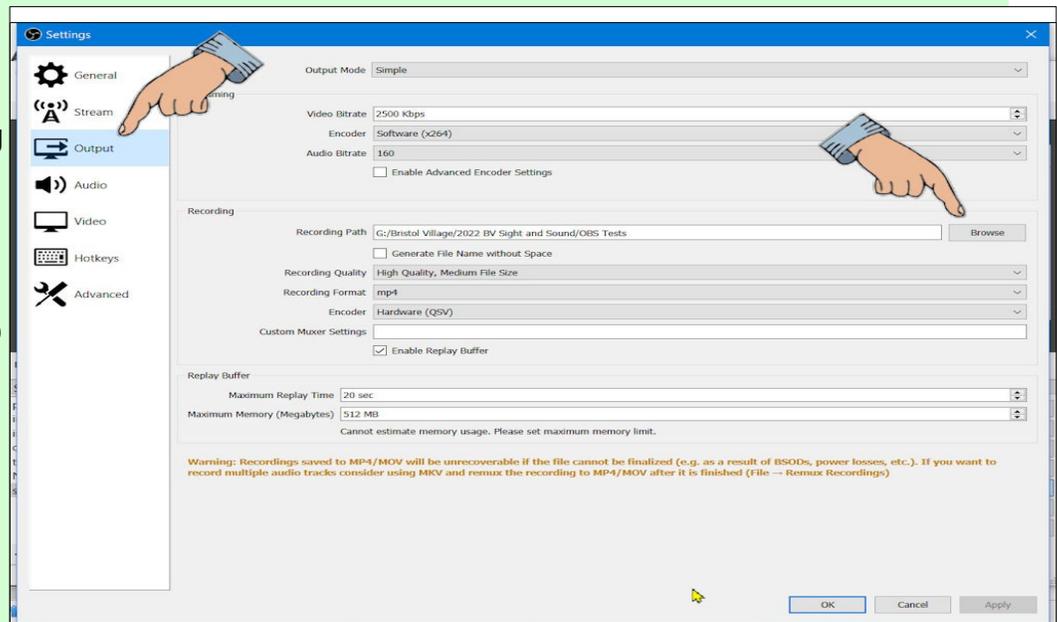


Figure 7: The Settings dialog box.

- ✓ If the OBS display shows the desired scene in the Program window, and the audio meter shows activity, you are ready to Start recording.
- ✓ When the recording is complete, select Stop Recording.

At this point the system will complete creating the mp4 file. When this process has completed, you can use File Explorer to select the mp4 file for viewing.



Advanced OBS Features

OBS characteristics

- OBS has a multiview window option. (see below)
- Each scene appears in a multiview window window.
- A scene can have multiple sources (color, text, VLC window, images, video capture device, or whatever) all arranged in the same scene. Or, it might have just a single image or source.
- In Studio Mode, the selected scene appears in the Preview. It is also highlighted in the Scene list.
- The Transition option sends the Preview image to the Program.
- Whatever is in the Program window gets recorded.

In the screen capture in Figure 8 you can see that 9 scenes have been created;

- a scene for each of the 4 cameras
- a two-camera split scene
- a four-camera split screen
- the current V800 (program) source
- a test image scene

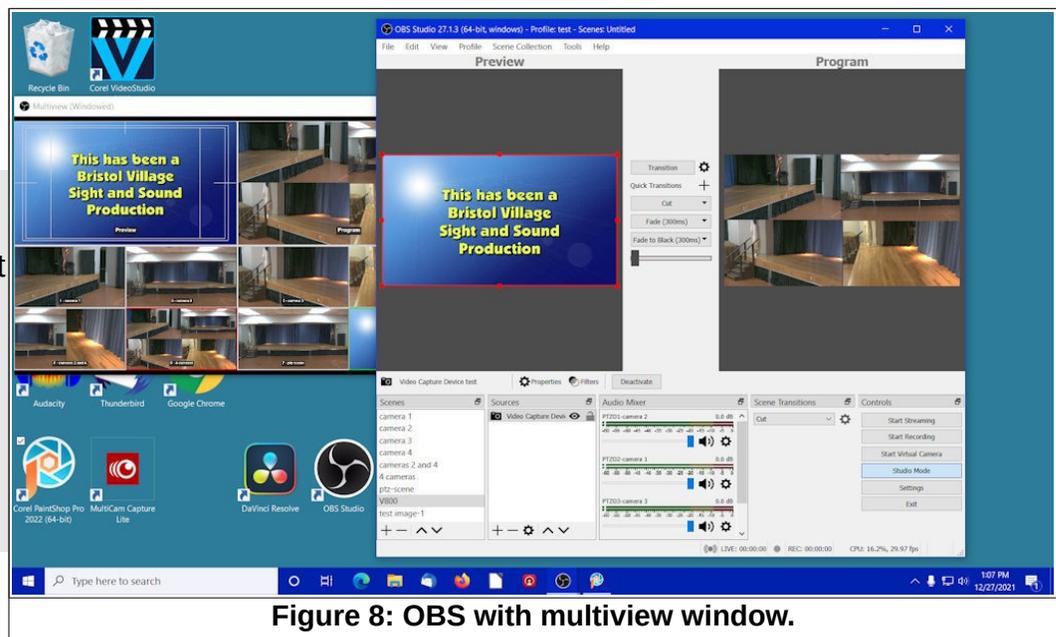


Figure 8: OBS with multiview window.

To place a source in the preview window either select it from the multiview window, or from the scene list. (In Figure 8, the V800 source has been selected.)

To move a scene from the Preview window to the Program window, either select the Transition button or select a transition from the Quick Transitions list below the Transition button. It is also possible to define a hot key to execute a transition.



If the OBS studio is not showing the desired video source on the Booth Laptop, do this.

It is possible that the OBS video source has been changed or contact has been lost. If this happens, do the following:

- ✓ #1, Select the Video Capture Device source as shown in Figure 9.
- ✓ #2, Select the Properties option.

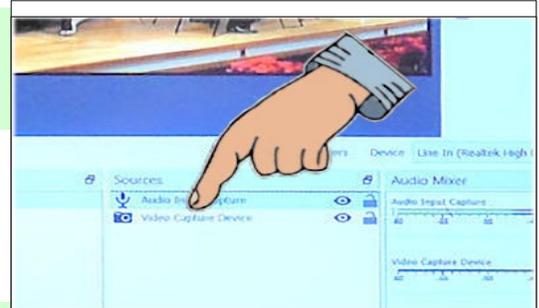


Figure 9: Setting the Video Capture Device.

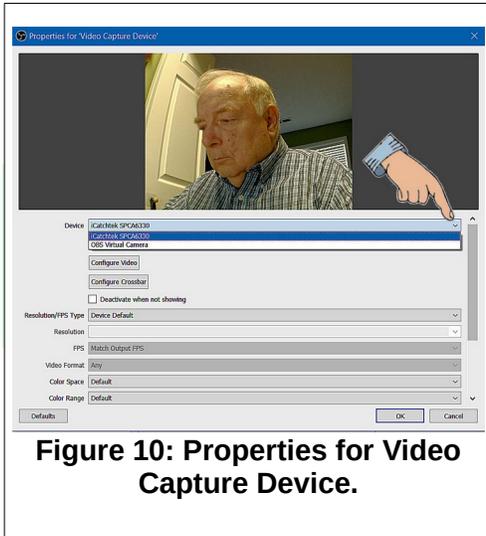


Figure 10: Properties for Video Capture Device.

This will open the Properties for Video Capture Device dialog box as seen in Figure 10.

- ✓ In the Properties for Video Capture Device dialog box, select the device pull down arrow and select the USB camera option.

Note: if the USB camera device is selected but not displayed, select a different device option and then re-select the USB camera option. The screen capture does not show the USB camera because it was captured from a different system setup.

Projecting Displays on the Big Screen

Displays from the **Mediasonic DVD Player**, the **Booth Laptop**, the **Booth Tower Computer**, computers connected to the external HDMI wall jacks, or the **Program display of the V800** can be projected on the **Big Screen**.

Figure 1 shows the Blackmagic ATEM front panel. It is located below the Multiview monitor as seen in Figure 2.

- When an input button is selected the button will turn green and, that source will appear in the Preview display on the Multiview monitor.
- The red button is the current Program source.
- Pressing either the **Cut** or **Auto** buttons on the Blackmagic ATEM will move the Preview source to Program.



Figure 1: The Blackmagic ATEM.



Figure 2: The ATEM and multiview monitor.



Projecting a DVD

Figure 3 shows the **Mediasonic DVD Player**. It is located below the switches for the wireless microphones.

In Figure 2, the Mediasonic is shown in position #3 in the **Multiview monitor**.

When the Mediasonic DVD player is turned on it will appear as a video device on the Blackmagic ATEM multiview display.



Figure 3: The Mediasonic player.

DVDs and CD's can be played on the Mediasonic DVD Player, the Booth Laptop computer, the Booth Tower computer, or computers connected to the external HDMI wall jacks.

WARNING: Always use the **OPEN/CLOSE** switch on the Mediasonic player. Forcing the player tray to close by pressing on the tray is likely to damage the mechanism and destroy the player.

Figure 3 shows the Mediasonic DVD Player. It is located below the switches for the wireless microphones.

- ✓ To send the **Mediasonic** player video to the **Preview** display, press the appropriate switch (#3) on the Blackmagic ATEM.

This will send it to **Preview** on the Multiview monitor.

- ✓ Press the **Cut** (or **Auto**) button on the Blackmagic ATEM. (See Figure 4)



Figure 4: The Blackmagic ATEM.

This moves the Mediasonic **Preview** display to **Program** on the Multiview display.

The Blackmagic ATEM Program output is sent to the Projector.

- ✓ Adjust the sound volume using the appropriate input on the Sound Board.

(NOTE: The Blackmagic ATEM Program output also is sent to Channel 6 of the V800 video mixer.)

Projecting the Booth Tower Computer Display

- ✓ To send the Booth Tower Computer display to the Program output, press the appropriate switch (#8) on the Blackmagic ATEM.

This will send it to **Preview** on the Multiview monitor.

- ✓ Press the **Cut** (or **Auto**) button on the Blackmagic ATEM.

This moves the Mediasonic **Preview** display to **Program** on the Multiview display.

- ✓ Adjust the sound volume using the appropriate input on the Sound Board.

The Blackmagic ATEM Program output is sent to the Projector.



Project the V800 Display

- ✓ Send the desired display to **Program** on the **V800**.
- ✓ To send the **V800** display to the **Program** output of the ATEM, press the appropriate switch (#5) on the Blackmagic ATEM.

This will send it to **Preview** on the Multiview monitor.

- ✓ Press the **Cut** (or **Auto**) button on the Blackmagic ATEM.

This moves the Mediasonic **Preview** display to **Program** on the Multiview display.

- ✓ Adjust the sound volume using the appropriate input on the Sound Board.

The Blackmagic ATEM Program output is sent to the Projector.

Using Stage Speakers

The stage speakers are used to provide audio to performers on stage who would otherwise not be able to hear other performers, CD audio, or themselves. The sound board provides a way to route specific microphones to the stage speakers.

The volume for the stage speakers is controlled by knobs on each speaker and from a sound board volume control. This control knob is found on the right side of the sound board.

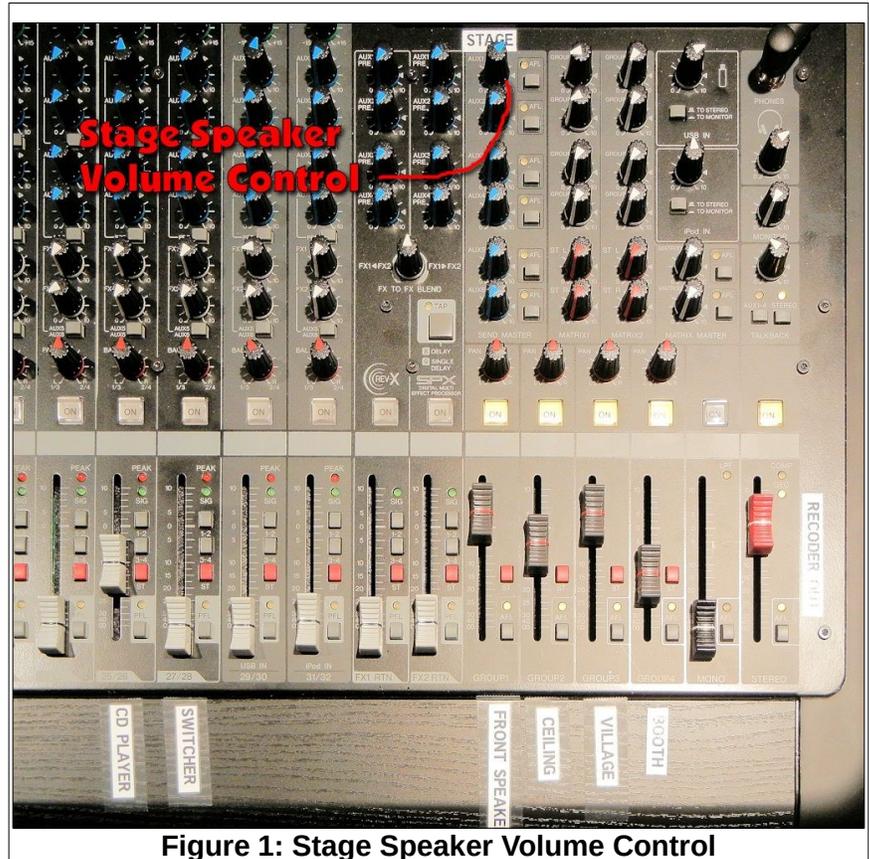


Figure 1: Stage Speaker Volume Control

Each microphone channel has a knob labeled **Aux 1**. The Aux 1 knob controls the sending of microphone output to the Aux 1 Send Master (in our installation, the Aux 1 send master controls the volume of the stage speakers.)

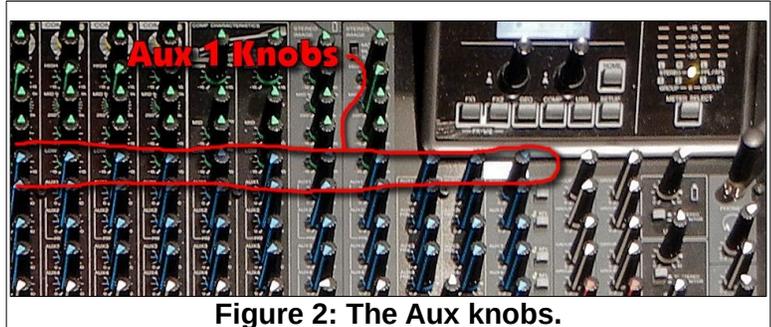


Figure 2: The Aux knobs.

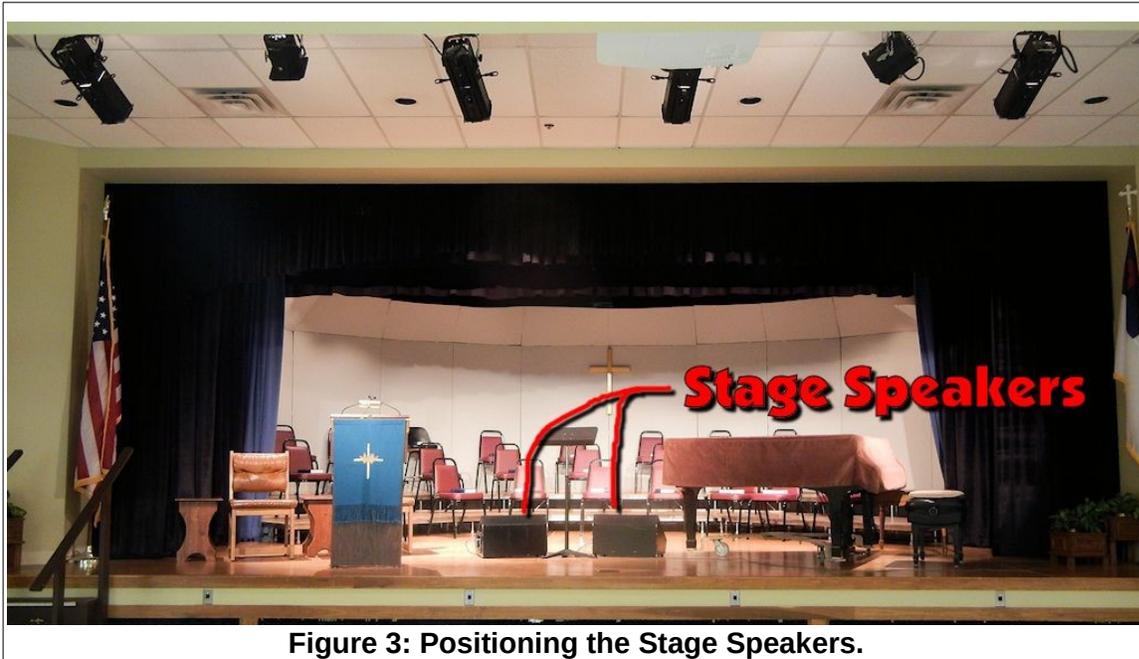


Figure 3: Positioning the Stage Speakers.

Stage Speaker Example 1

Here is an example of stage speaker use. Suppose that members of the chorus seated on the stage need to hear the speaker at the lectern. The stage speakers are positioned on the floor in front of the chorus and the control knobs on both speakers are set to level 8. The lectern microphone is connected to microphone input 5. The sound board line 5 Aux 1 knob is rotated to about half way as a starting point.

With this setup, the volume from the lectern microphone to the stage speakers can be controlled by adjusting the Aux 1 knob on sound board line 5 and the Aux 1 stage speaker volume knob.

NOTE: To prevent feedback in the above example, do not position the stage speakers where they can send sound to the lectern microphone.

Stage Speaker Example 2

Another example of using the stage speakers is when a vocalist is accompanied by the piano. In this example, one stage speaker is placed in front of the vocalist and a second stage speaker is placed near the pianist. Set each stage speaker volume control to level 8.

Let's connect the vocal microphone to front of stage input 6 and the piano microphone to input 7. (The vocal mic must NOT be an omni style mic. Omni mics will cause feedback from the stage speakers.)

On the sound board, all Aux 1 control knobs are all set to 0 except lines 6 and 7 (which are rotated about half way as starting points). The stage speaker volume knob is set to 8 as a starting point. The sound board Aux 1 knobs are then used to adjust the desired stage speaker volume for each microphone. The Aux 1 volume should be adjusted during a live mic check. The vocalist should provide info about the volume from the speaker.



Stage speaker connections

Stage speakers are connected to each other via cables with 1/4 inch phone jacks. Connect the out port of the first speaker to the in port of the second speaker. Connect the in port of the first speaker to a connector jack located on the lower right front side wall behind the stage curtain (as viewed from the audience).



Figure 4: Speaker connector location.

NOTE: There is a coat hook on the wall above the stage speaker connector jack that should be used for storing the stage speaker cables.

Quick review

Set the on-speaker volume controls to 8. Use the sound board Aux 1 control knobs to set volumes for the microphones to send to the stage speakers. Use the sound board Aux 1 send master knob to control the stage speaker volume.

REMINDER: The stage speakers are typically used in conjunction with stand microphones that are placed on the stage floor. The floor is like a big drum that can transmit sounds up the microphone stand to the mike and cause unwanted sounds. When using a microphone stand on the stage, always place a piece of carpeting or other soft material under the microphone stand.

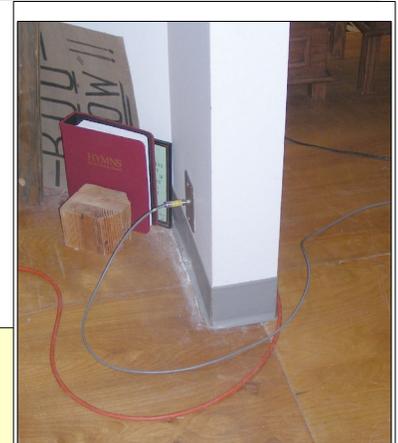


Figure 5: Speaker connector.

Playing DVD's and CD's

Playing DVD's and CD's using the Mediasonic DVD player

Figure 1 shows the **Mediasonic DVD Player**. It is located below the switches for the wireless microphones.

When the Mediasonic DVD player is turned on it will appear as a video device on the Blackmagic ATEM multiview display.



Figure 1: The Mediasonic player.

WARNING: Always use the **OPEN/CLOSE** switch on the Mediasonic player. Forcing the player tray to close by pressing on the tray is likely to damage the mechanism and destroy the player.

Figure 2 shows the **Mediasonic DVD Player** on the **ATEM** Multiview display.

✓ Select button #3 to move the Mediasonic to the **Preview** window.

✓ Insert a DVD or CD into the Mediasonic player.

The Mediasonic player menu should appear on the **Preview** window of the **Blackmagic ATEM**.

✓ Use the Mediasonic **remote control** to select desired options.

✓ Press **play-Pause** on the Mediasonic remote control, and as soon as the desired location is on the display. Press **play-Pause** again on the Mediasonic remote control to **pause** playback.

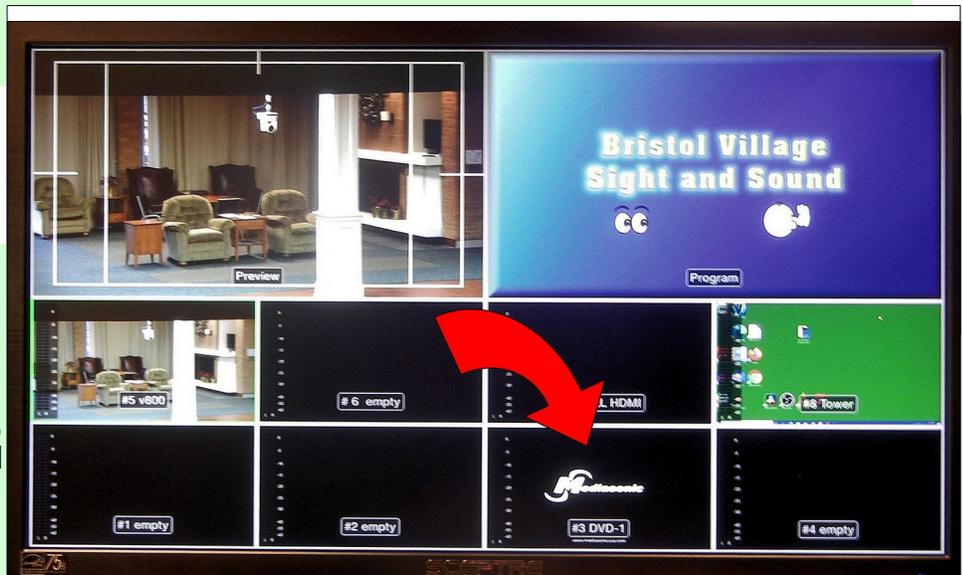


Figure 2: The Mediasonic on the ATEM.

✓ **Play** the selection and adjust the sound volume using the appropriate input on the Sound Board.

✓ Return the player to the desired starting location.

✓ Press the **Cut** (or **Auto**) button on the **Blackmagic ATEM** to send the Mediasonic to the **Program** window on the ATEM.

✓ Press **play-Pause** to play the selection.

This moves the Mediasonic **Preview** display to **Program** on the Multiview display.

If a CD is being played, it is not necessary to send the Mediasonic picture to the ATEM Program.

(NOTE: The Blackmagic ATEM Program output is sent to both the **Projector** and to Channel 6 of the V800 video mixer.)

Wireless Microphones

There are 8 wireless microphones available. They are labeled A through H on the soundboard. The microphones are of two types; Audio Technica 3000 Series and the GTD Audio G-787HL UHF system.



The GTD Audio G-787HL UHF system (A through D) includes two hand held mics and two body packs that can be used with either a head set or lavalier mic.



The Audio Technica system (E through H) includes four receivers, four hand held mics and four body packs. Either a hand held or body pack can be used for each input, but both a body pack and hand held cannot be used with the same channel at the same time.



Before using a wireless microphone, check the battery charge indicator (horizontal dashes) in the receiver display. If the battery shows 1 or 2 bars, replace the batteries before using the microphone.

The audio-technica wireless hand held microphone has a power/mute switch on the end of the microphone. This switch must be held on for a couple of seconds to turn on the microphone power.

When the microphone power is on, a red or green light will appear near the microphone LCD display and the receiver display will show a line of bars representing the battery charge state. A green light will appear when the mic is on and not muted. A red light will appear when the mic is on and muted.



If an audio-technica hand held mic or body pack is off or muted, a red alert light will appear on the receiver.





Wait a couple of minutes after turning on the mic before checking the battery charge. It takes a while for the system to recover from the initial surge reading.

A note about feedback.

Feedback usually occurs when a microphone is picking up sound from a speaker. When the wireless microphones are in use they can be moved near one of the ceiling speakers. If the gain or volume is set too high, feedback may occur. If a wireless microphone is being used for audience questions, the sound board operator should closely monitor volume and mute the mic when it is not in use. It will be noticed that when a wireless mic is near the ceiling speakers, some echoing may be detected.

WARNING: Putting your hand over a microphone will not stop feedback. In fact it will cause feedback.

Wireless Receivers

A power strip in the rack above the wireless receivers has a labeled switch for each receiver. Unless someone has turned off the switch on an individual receiver, only the power strip switch need be used.

The receiver and microphone must be both set to the same frequency. Unless someone has messed with the frequency setting, the numbers displayed in both the microphone and receiver displays will be the same.



NOTE: Always inform the user that they should NOT turn the microphone on or off. Tell them that the microphone volume will be adjusted in the control booth so that when the microphone is not in use it will not transmit stray sounds.

Audio-technica Lavalier and Head Set

The audio-technica microphone system has a remote transmitter pack that can have either a lavalier or a head set microphone attached.

- To attach either the lavalier or head-set, grasp the cord by the black section near the end of the cord. Insert the cord into the transmitter connector and rotate it until the cord snaps in place. To remove the cord, grasp the silver ring near the end of the cord and pull gently.
- The audio-technica remote transmitter has a power/mute switch that is behind a sliding cover on the unit. The switch must be held down until the power comes on.



When the power on the remote transmitter is on, the receiver display will show a line of bars representing the battery charge state.

The receiver and transmitter must be both set to the same frequency. Unless someone has messed with the frequency setting, the numbers displayed in both the microphone and receiver displays will be the same.



Once the microphone is on, each time the power/mute switch is pressed, the transmitter status will be toggled between on and mute. If you have really good eyes, it is possible to see the word MUTE on the transmitter LCD display when it has been toggled to mute.

- After the transmitter has been turned on, the sliding cover should be moved to protect the power/mute switch from accidental pressing.

If the transmitter is either off or on mute, a red ALERT light will appear on the receiver. (This light takes a few seconds to appear after the microphone status has changed.)

- The wireless microphone volume should be tested by having the user speak normally.
-
- ✓ Always inform the user that they should NOT turn the microphone on or off. Tell them that the microphone volume will be adjusted in the control booth so that when the microphone is not in use it will not transmit stray sounds.

Playing Vespers Pre and Post Videos

There are pre and post Vespers videos available on both a DVD and on mp4 files on the Booth Laptop computer and the Booth Tower computer.

Playing Vespers Pre and Post videos using the Mediasonic DVD player

Figure 1 shows the **Mediasonic DVD Player**. It is located below the switches for the wireless microphones.

When the Mediasonic DVD player is turned on it will appear as a video device on the Blackmagic ATEM multiview display.

WARNING: Always use the **OPEN/CLOSE** switch on the Mediasonic player. Forcing the player tray to close by pressing on the tray is likely to damage the mechanism and destroy the player.

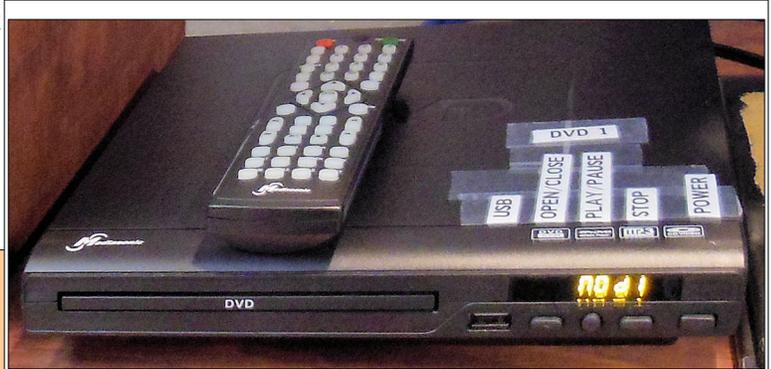


Figure 1: The Mediasonic player.

- ✓ Insert the Vespers Pre and Post video DVD into the Mediasonic player.
- ✓ Select the Mediasonic player selection button on the Blackmagic ATEM.
- ✓ To send the **Mediasonic** player video to the **Preview** display, press the appropriate switch on the Blackmagic ATEM.



Figure 2: The Blackmagic ATEM.

The Mediasonic player menu should appear on the Preview window of the Blackmagic ATEM.

- ✓ Use the Mediasonic remote control to select the desired video.
 - ✓ Press play-Pause on the Mediasonic remote control, and as soon as the video shows the title screen press play-Pause on the Mediasonic remote control to pause the video.
- ✓ Press the **Cut** (or **Auto**) button on the Blackmagic ATEM.

This moves the Mediasonic **Preview** display to **Program** on the Multiview display.

The Blackmagic ATEM Program output is sent to the Projector.

- ✓ Adjust the sound volume using the appropriate input on the Sound Board.

(NOTE: The Blackmagic ATEM Program output also is sent to Channel 6 of the V800 video mixer.)



Playing Vespers Pre and Post videos using a computer

The VLC player can be used to play both audio and video files. Please review the section describing the VLC interface.

The VLC Interface

Figure 3 shows the VLC display.

- The Title Bar shows the current file name and the name of the application.
- The Menu Bar contains drop down menu options.
- The Play/Pause tool toggles between playing and pausing the file. [Pressing the Spacebar will also toggle Play/Pause.]
- The Chapter Jump tools (on either side of the stop tool) jump between Playlist entries.
- The Stop tool will quit playing items from the Playlist.
- The Full Screen tool will toggle full screen mode on and off.
- The Extended Settings tool opens an Adjustment and Effects dialog box.
- The Playlist tool opens the playlist dialog box.
- When the Toggle Loop tool is selected, the system will replay the current Playlist.
- The Random Selection tool will cause list entries to be played in random order.
- The Track Slider along the bottom edge of the display shows the current time location of playback. The left side of this bar shows the current time, and the right side of this bar shows the total length of the selection. The Track Slider can be dragged to any time location.
- The Volume Slider can be dragged to adjust the audio volume.

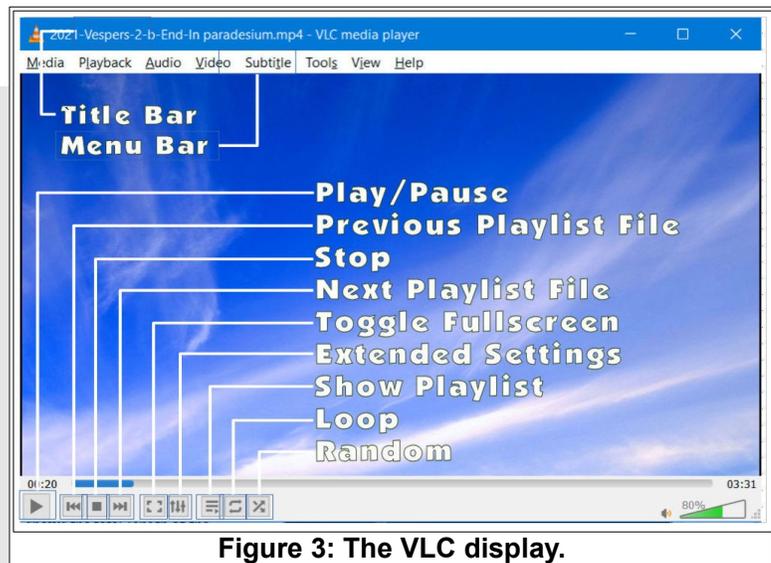


Figure 3: The VLC display.

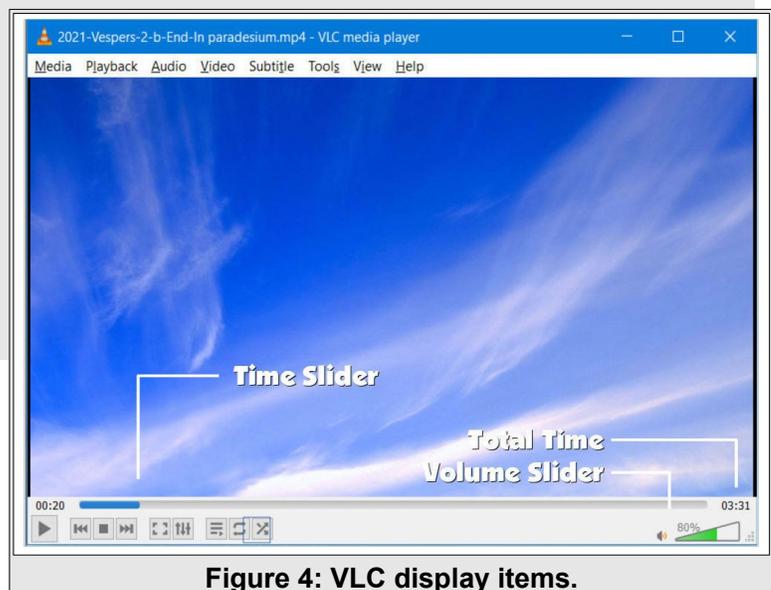


Figure 4: VLC display items.



Opening the VLC Player with the Vespers Pre-Post Playlist.

- ✓ Double click on the Vespers Pre-Post desktop shortcut. [You can also right click on the shortcut and select Open.]

This will start playing the first selection on the Playlist.

- ✓ Press the Spacebar to stop playback.
- ✓ Select the Toggle Playlist tool on the bottom horizontal toolbar to open the Playlist. [See Figure 3.]
- ✓ Double click on the desired selection.
- ✓ Adjust the volume using the appropriate fader control on the soundboard.
- ✓ Press the Spacebar to stop Playback.
- ✓ Drag the time location slider back to the beginning of the selection. [See Figure 4.]
- ✓ Toggle the Full Screen option ON.
- ✓ At the appropriate time, press the Spacebar to start playback.
- ✓ At the end of the selection, press the Spacebar to stop playback.
- ✓ Repeat the process to select and play the post Vespers selection.

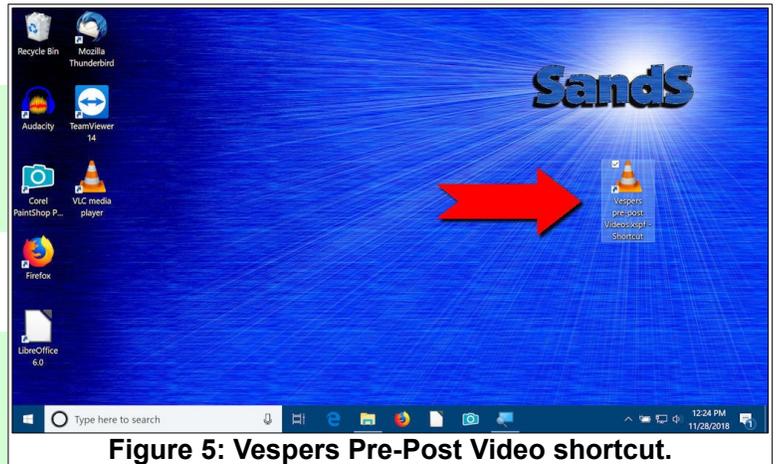


Figure 5: Vespers Pre-Post Video shortcut.

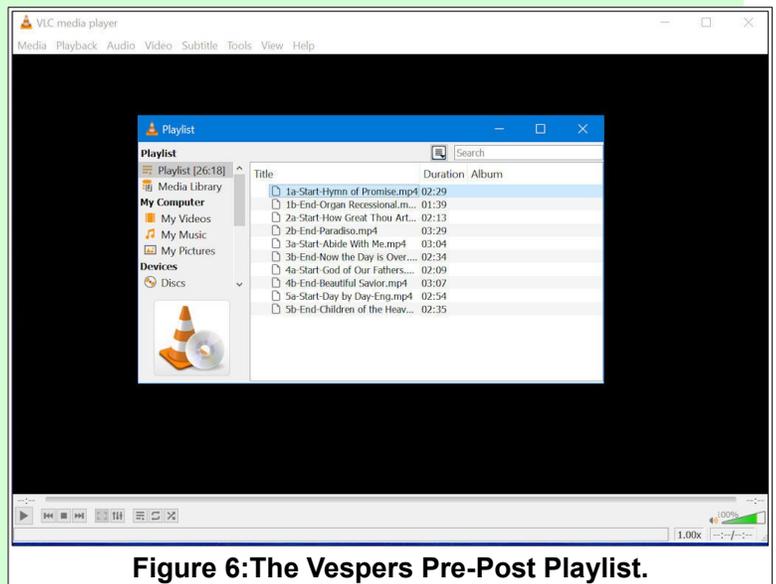


Figure 6: The Vespers Pre-Post Playlist.

NOTE: When the VLC player is in full screen mode, moving the mouse will open a player control tool bar near the bottom of the display. This toolbar will disappear when the mouse pointer is moved away from the toolbar. This toolbar has a tool to exit full screen mode.

Using the V800 Video Mixer

The Roland V-800HD Video Mixer provides for sending video to the Sight and Sound program. There are up to 8 different video inputs. Each of these can be previewed on one part of the monitor, and at the desired time, the preview video can be sent to the program video output.

Although there are a lot of different options available on the V-800HD, it can be used to simply switch between the current video input to a second video input.



IMPORTANT: Use the following procedure for turning the V-800HD on and off.

V-800HD Powering ON

- ✓ Turn ON the V-800HD.
- ✓ Wait for the lights to stop flashing... it takes a while. (The Memory #1 light should be green when the V-800HD is through booting up.)
- ✓ Turn ON the video sources (Cameras, Video Players/Recorders, Computers, ATEM, etc.).
- ✓ Turn ON output devices (Projector) if required.

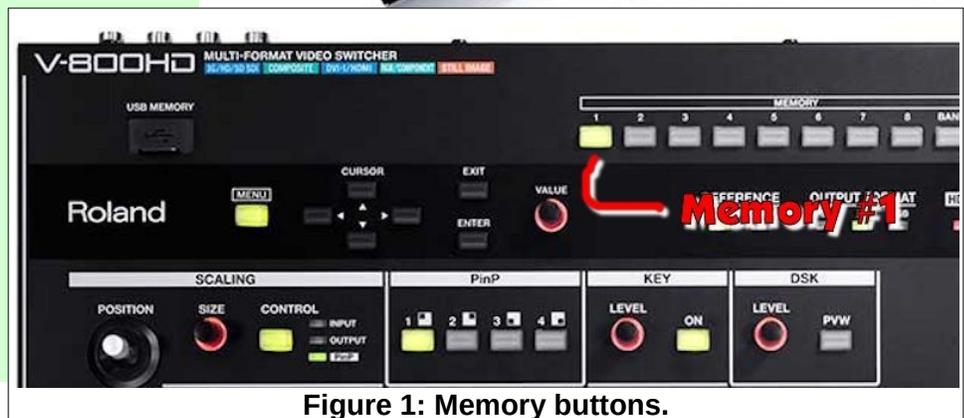


Figure 1: Memory buttons.

V-800HD Power OFF

- ✓ Turn off output devices (projector).
- ✓ Turn off DISTAMP
- ✓ Turn OFF V-800HD.
- ✓ Turn OFF Other switches.

Additional memory options are available that change the program, preview, additional video input options, and frame store contents.



Basic Operation

The V-800HD video display is divided into 10 sections. The upper half shows the current program on the right side of the screen and the left side of the screen shows a preview of the next display.

The lower half of the display shows the currently available video sources.



Figure 2: The multiview display.

The V-800HD has two rows of buttons for selecting video sources.

The **CUT** button is used to make an instant switch between preview and program video sources. The **AUTO** button will fade between sources using a pre-set amount of time for the **TRANSITION**. The default of 1.0 seconds is typically used.

There is a **FADER T-bar** that can be used to switch from the video input selected on one row of buttons to the video input selected on the second row of buttons. The **FADER T-bar** is typically used together with one of the **Wipe** options discussed later.

The first of two rows of 10 buttons controls the current **Program** output. Available video inputs have a green input status light. The current selected **Program** input button has a red

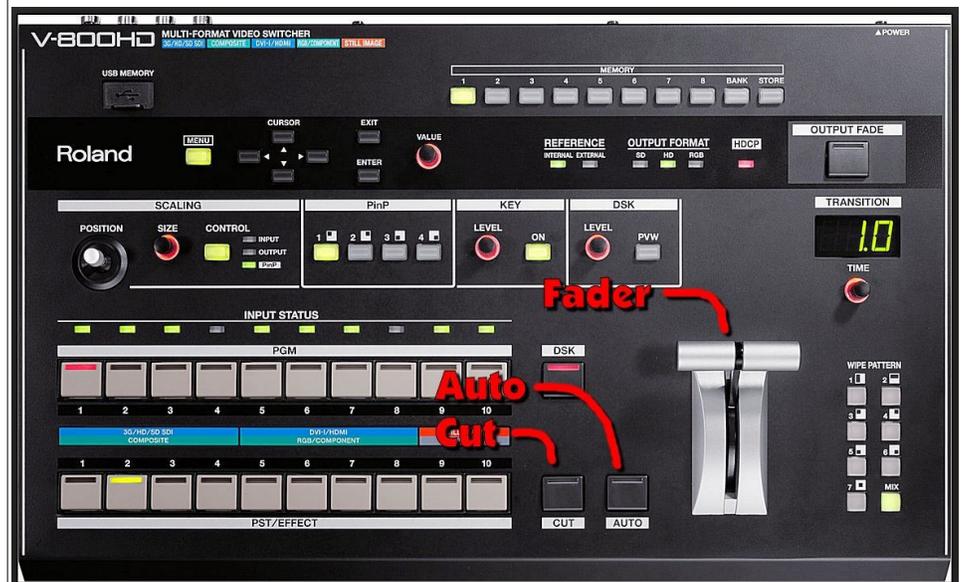


Figure 3: Auto and Cut buttons.



Figure 4: Program and Preview buttons.



light. The bottom row of 10 buttons control the **Preview**. The currently selected preview input has a green light.

Example

Let's assume that Camera 1 has been selected in the top row of buttons. Camera 1 video will be shown in the **Program** section (the right side) of the monitor. If Camera 2 is selected in the second row of buttons, its video will be shown on the Preview section (the left side) of the monitor. When the **CUT** or **AUTO** button is pushed, the **Program** video will change from Camera 1 to Camera 2.

For basic video mixing, the **CUT** or **AUTO** button is used to switch between video sources selected on the two rows of buttons. The **FADER T-bar** control is typically used to control Wipe positions.

Auto Transition Time

To change the length of time for an **Auto** transition, adjust the amount of time shown in the **TRANSITION** time display by turning the **TIME** knob found just below the time display.

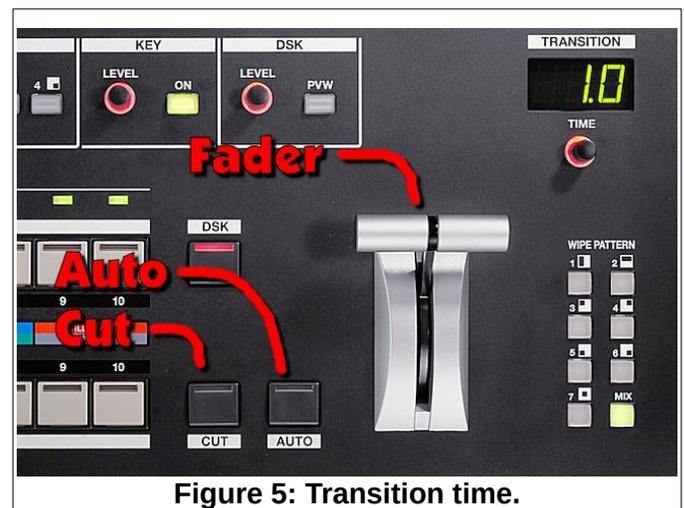


Figure 5: Transition time.

Wipe Patterns

There are 8 different wipe patterns available. These are selected by pressing buttons near the lower right corner of the **V-800HD**.

In most cases, the basic **MIX** option should be selected. In special cases, it may be desirable to use one of the geometric wipe patterns.

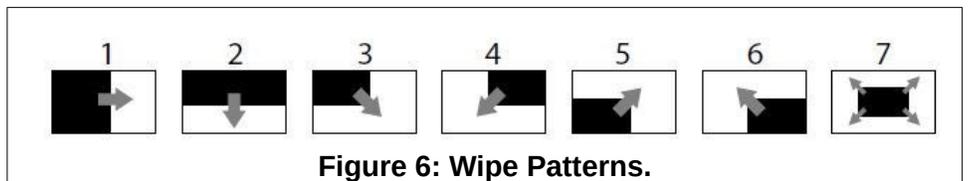


Figure 6: Wipe Patterns.

Fade to Black

At the end of a program, and before switching BVTV from the Sound Booth to the Administration Building, you should fade to black. This is done by pressing the **OUTPUT FADE** button near the upper right corner of the **V-800HD**.

Pressing the **OUTPUT FADE** button a second time returns to the current program video.

Picture in Picture Displays

There may be times when it is desirable to mix two images on the screen at the same time (**PinP**). For example, during Vespers hymn singing, some



Figure 7: Output Fade.



operators like to show the accompanist in one corner of the display while panning over the audience. Here is an example of how it can be done.

- ✓ Set the camera that shows the audience on the top row of video selection buttons (the background).
- ✓ Set the camera that shows the accompanist on the bottom row of video selection buttons.
- ✓ In the PinP section of the V-800HD, select the PinP style, and preview the results.
- ✓ In the **SCALING** section of the V-800HD, press the **CONTROL** button until the **PinP** option is selected.
- ✓ Use the **SIZE** knob to adjust the **PinP** image size.
- ✓ Use the **POSITION** joystick to move the **PinP** image to the desired location.
- ✓ Use **AUTO**, **CUT** or **FADER** to send the composite preview image to the program.
- ✓ To turn off the **PinP** image, press the selected **PinP** button to make the PinP image disappear.

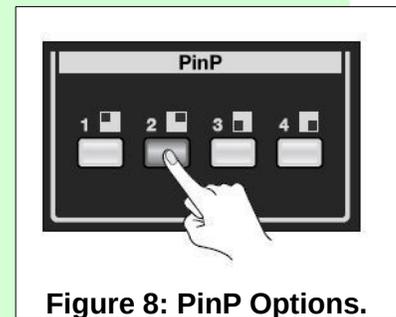


Figure 8: PinP Options.



Figure 9: Scaling Options.

Superimposing Text

To superimpose text over a background video, a video source containing text that has a solid black background must be available. This can come from a frame store on button 9 or 10, or the booth computer.

- ✓ Set the program video source on the top row of video selection buttons (the background).
- ✓ Set the text video source on the bottom row of video selection buttons.
- ✓ Press the **KEY** Selection button **ON** button.
- ✓ If necessary, adjust the **LEVEL** knob until the preview shows the desired effect.
- ✓ Use **AUTO**, **CUT** or **FADER** to send the composite preview image to the program.
- ✓ Press the **KEY** Selection button remove the overlay.

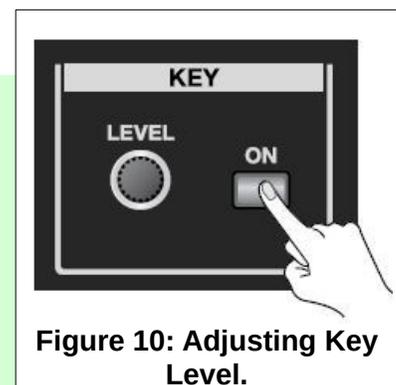


Figure 10: Adjusting Key Level.

Enlarging the Source Picture

There may be times when you want to zoom in (enlarge) the source picture. For example, when a computer display is being used and you want to zoom in on a part of the display.

- ✓ In the **SCALING** area of the V-800HD, press the **CONTROL** button until the **INPUT** option is selected.



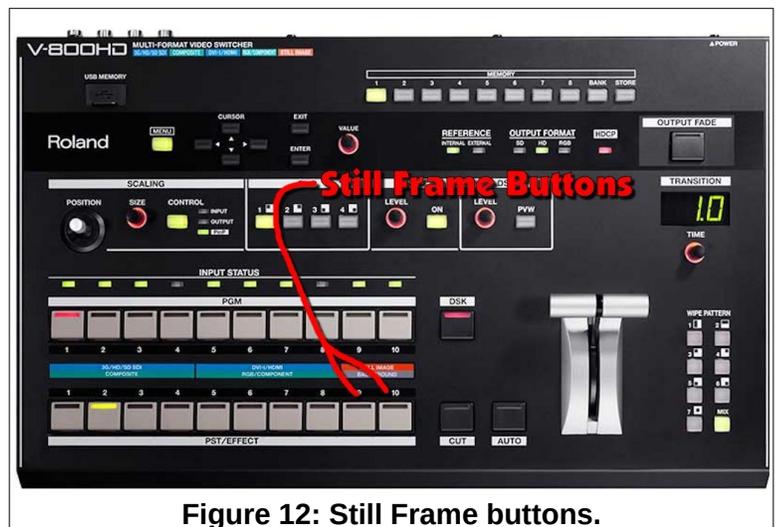
Figure 11: The Scaling function.



- ✓ Use the **SIZE** knob to change the scale.
- ✓ Use the **POSITION** joystick to move the scaled image.
- ✓ Use **AUTO**, **CUT** or **FADER** to send the preview image to the program.
- ✓ When you are through using the enlarged image, use the **SIZE** and **POSITION** options to return the source image to its original size and location.
- ✓ Press the **CONTROL** button until no options are selected.

Using Frame Store Still Images

There are several still images available in the frame store of the V-800HD (unless someone has changed or removed them). Different **MEMORY** buttons can save different image options from the frame store.



- ✓ To use the still frames, select either **9** or **10** on the preview row of buttons, then use **AUTO**, **CUT** or **FADER** to send the preview image to the program.



Programming Memory Buttons

NOTE: Programming the memory buttons on the V-800HD is a messy process, and should not be undertaken by anyone who is not interested in learning about complex technical details.

The V-800HD has 8 **MEMORY** buttons, a **BANK** select button, and a **STORE** button. Each time the V-800HD is started, it defaults to **MEMORY BANK 1**.

What is stored in each memory is the configuration of Channel video inputs, including which frame store images have been assigned to Channels 9 and 10.

In the illustration shown here, the Program has been set to Channel 9 (which has been set to the frame store image shown), the Preview has been set to Channel 3 (Camera 3), and Channel 6 is showing the output from the ATEM.

This reflects the memory settings for the currently selected **MEMORY** button. Here is how to store settings for a particular memory button.

NOTE: Do not change the settings for MEMORY # 1. Since this is the default startup setting, others will depend on the settings for this memory and will be confused and/or annoyed by any changes.

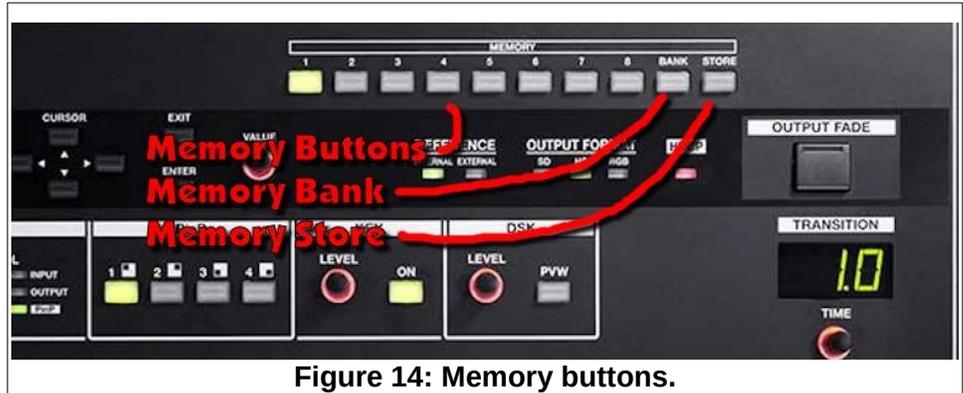


Figure 14: Memory buttons.



Figure 15: Typical memory setup.

Creating a memory setting

Memory **BANKS** are reserved for each S&S Team by number.

- ✓ Select the desired **MEMORY BANK** by pressing the **BANK** button.
- ✓ Press the **MEMORY** button that will be used for the new settings.

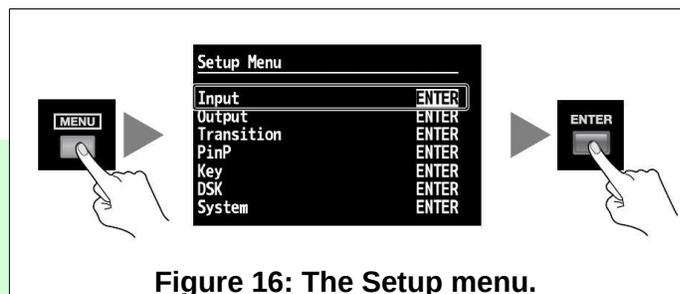


Figure 16: The Setup menu.



- ✓ On the V-800HD, press the **MENU** button, use the **CURSOR** to select the Input option, then press **ENTER**.
- ✓ Use the **CURSOR** to select channel 9, then use the **VALUE** knob to select the Still Image input type.
- ✓ Press the **MENU** button and select the desired still frame.
- ✓ Repeat the previous steps for Channel 10.

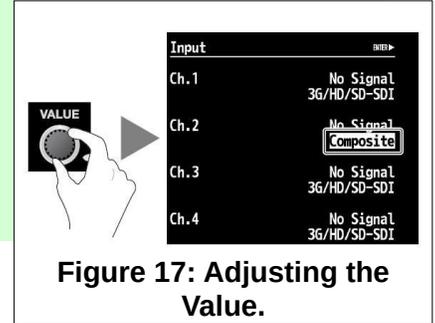


Figure 17: Adjusting the Value.

Now that the settings have been adjusted, it is time to store them.

- ✓ Press the **STORE** button, then press the desired **MEMORY** button. (The previously selected button will flash.)
- ✓ Use a Channel List worksheet to record the settings.

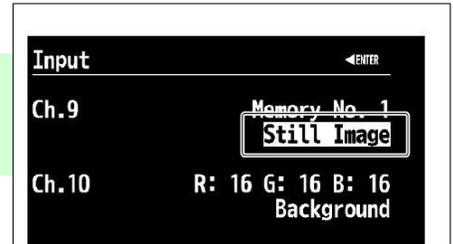


Figure 18: Setting a memory.

V-800HD Channel List	
	Memory Bank Number: <u> 9 </u>
	Prepared by: _____
1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	Frame Store-1: _____
10	Frame Store-2: _____
→	→ Program Channel: _____; Preview Channel: _____

PT Joy 54 Instructions

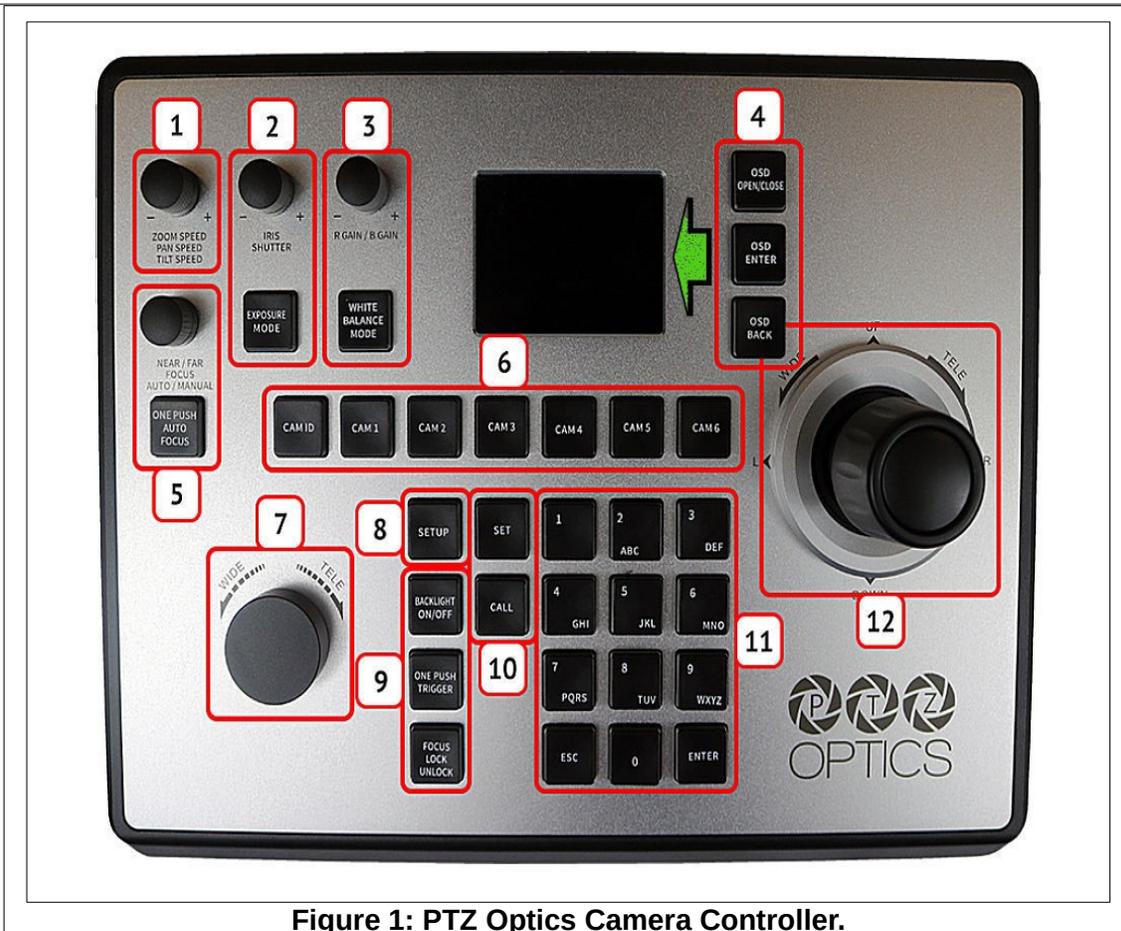


Figure 1: PTZ Optics Camera Controller.
Control Function Layout

1. Zoom and Pan speed. Push down to switch function.
2. Exposure Control
3. White Balance Control
4. OSD (On Screen Display) options. OSD refers to the small info display window.
5. Focus Control.
6. Camera select buttons.
7. Zoom Control.
8. Setup button.
9. Fine Tune Video Control.
10. Preset buttons, 1 to 0.
11. Keypad.
12. Joystick Controller.

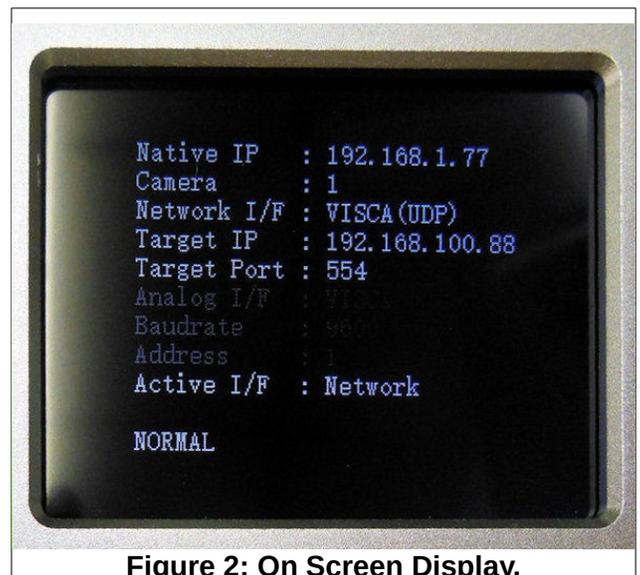


Figure 2: On Screen Display.



- To select a camera: press camera button (6). Current selected camera number will appear in the OSD.
- Use the Joy Stick (12) to pan; left, right, up, down.
- Turn the Joy Stick knob (12) to zoom in and out.
- Use the Wide-Tele knob (7) to zoom in and out.
- You can pan with the Joy Stick and at the same time zoom with the Wide-Tele knob.
- To select a preset, press number button 1 through 0 (11).
- To change or set a preset, first adjust the camera to the desired position. Then press and hold the desired preset button until the preset note in the on screen display window disappears.

Button & Dial Descriptions

The below descriptions will describe the buttons and dials available on the controller.

1. Speed Control

The Speed Control section allows you to adjust the speed at which you pan, tilt, and zoom the camera.

a. [SPEED] Knob

Twist the Speed Control knob to increase or decrease the set control speed.

Press the Speed Control knob in to cycle through zoom, pan, and tilt speeds options.

Zoom Speed Range: 1 - 7

Pan Speed Range: 1 - 24

Tilt Speed Range: 1 - 20

2. Exposure Control

The Exposure Control section allows you to adjust the exposure settings of the camera.

a. [IRIS / SHUTTER] Knob

Twist the [IRIS / SHUTTER] knob to adjust the Iris / Shutter value.

Press the [IRIS / SHUTTER] knob to toggle between Iris and Shutter adjustments.

b. [EXPOSURE MODE] Button

Press the [EXPOSURE MODE] button to cycle through Exposure modes.

Options include: Auto, Manual, Shutter Priority, Iris Priority, & Brightness Priority.

3. White Balance Control

The White Balance Control section allows you to adjust the white balance settings of the camera.

a. [R GAIN / B GAIN] Dial

Twist the [R GAIN / B GAIN] knob to adjust the Red Gain / Blue Gain value.

Press the [R GAIN / B GAIN] knob to toggle red gain and blue gain adjustment control.

b. [WHITE BALANCE MODE] Button

Press the [WHITE BALANCE MODE] button to cycle through the White Balance Modes.

Options include: Auto, Indoor, Outdoor, One Push, & Manual.

4. Camera OSD Control



The Camera OSD Control section allows you to open and adjust the camera's on screen display menu.

a. [OSD OPEN / CLOSE] Button

Press the [OSD OPEN / CLOSE] button to open and close the on screen display menu.

Move the joystick up, down, left, and right to traverse the camera's OSD menu.

b. [OSD ENTER] Button

Press the [OSD ENTER] button to select an OSD menu option.

c. [OSD BACK] Button

Press the [OSD BACK] button to go back an OSD menu option.

5. Focus Control

The Focus Control section allows you to adjust the focus value of the camera.

a. [NEAR / FAR FOCUS] Dial

Twist the [NEAR / FAR FOCUS] dial to focus the camera's image on your scene.

Press the [NEAR / FAR FOCUS] dial in to toggle Auto Focus and Manual focus modes.

b. [ONE PUSH AUTO FOCUS] Button

Press the [ONE PUSH AUTO FOCUS] button to automatically focus the image on the scene while staying in Manual Focus mode.

6. Camera Select

The Camera Select section allows you to select a camera to control.

a. [CAM ID] Button

The [CAM ID] button allows you to select any camera on the controller using the alpha-numeric keypad.

b. [CAM #] Button

The [CAM #] button allows you to quickly select a camera to control.

Options include: 1 - 6

7. Zoom Control

The Zoom Control sections allow you to zoom the camera in and out of the scene.

a. [FINE TUNE ZOOM] Knob

The [FINE TUNE ZOOM] knob allows you to finely zoom the camera in and out at the lowest speed (1) setting.

8. Controller OSD Setup

The Controller OSD Setup allows you to adjust the settings of the controller.

a. [SETUP] Button

Press the [SETUP] button to open the joystick's OSD menu.

Refer to the Joystick OSD Menu Control section of this guide for more information.

9. Fine Tune Video

The Fine Tune Video section allows you to quickly change the camera's video settings.

a. [BACKLIGHT ON / OFF] Button

Press the [BACKLIGHT ON / OFF] button to toggle the camera's backlight compensation mode.



b. [ONE PUSH TRIGGER] Button

Press the [ONE PUSH TRIGGER] button to trigger the camera to calculate the scene's white balance value.

c. [FOCUS LOCK / UNLOCK] Button

Press the [FOCUS LOCK / UNLOCK] button to lock or unlock the camera's focus value from the current position.

10. Preset Control

The Preset Control section allows you to set and call presets of the cameras.

a. [SET] Button

Press the [SET] button to set a camera preset. Use the alpha-numeric keypad to set a preset number.

b. [Call] Button

Press the [CALL] button to call a camera preset. Use the alpha-numeric keypad to call a preset number.

c. Quick set preset shortcut

Press and hold a number on the alpha-numeric keypad for 3+ seconds to set a camera preset in the current location for that preset number.

d. Quick call preset shortcut Quickly press a number on the alpha-numeric keypad to call a camera preset.

Refer to the Setting and Recalling Presets section of this guide for more information.

11. Alpha-numeric Keypad

The alpha-numeric keypad allows you to use many of the controller features that require numbers and letters, such as adding a camera from the controller OSD.

12. Joystick Controller

The joystick controller allows you to pan, tilt, and zoom (twist) the camera. The control speed is affected by the Speed Control dial settings.



Blackmagic ATEM Studio Overview



Figure 1: The ATEM TV Studio HD front panel.

The Blackmagic ATEM is a live video switch that allows for smooth selection of video sources. In the Sight and Sound setup, the main **Program** output of the Blackmagic ATEM video switch is sent to the **Projector**. The output is duplicated and sent to **channel 6** on the **V800** video mixer.

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



Figure 2: The multiview monitor.

NOTE: The Blackmagic ATEM is connected to the multiview monitor through an **HDMI switch** that switches between the ATEM and the booth tower computer. The HDMI switch is below the monitor. The HDMI switch has two options. The HDMI switch has a 10 second delay when it's button is pressed. **Wait for it.**

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.

Figure 2 shows the ATEM in use. Input connections *at the time of this photo* are as follows.

-) No input connected.
-) No input connected.
-) DVD Mediasonic Player.



-) No input connected.
-) V800.
-) No input connected.
-) WALL HDMI.
-) Booth Tower Computer.

Using the Blackmagic ATEM switches.

The Blackmagic ATEM switches are associated with the multiview monitor images as follows:

The bottom row of images is associated, from left to right, with buttons 1 to 4.

The top row of images is associated, from left to right, with buttons 5 to 8.

The button colored **red** shows its source in the **Program** section of the multiview monitor.

The button colored **green** shows its source in the **Preview** monitor.

When a button is pressed, that input source button will appear **green** and the source image will appear in the **Preview** section of the multiview monitor. Also, the source that appears in the **Preview** section of the multiview monitor will have a green border. The source that appears in the **Program** section of the multiview monitor will have a **red** border.

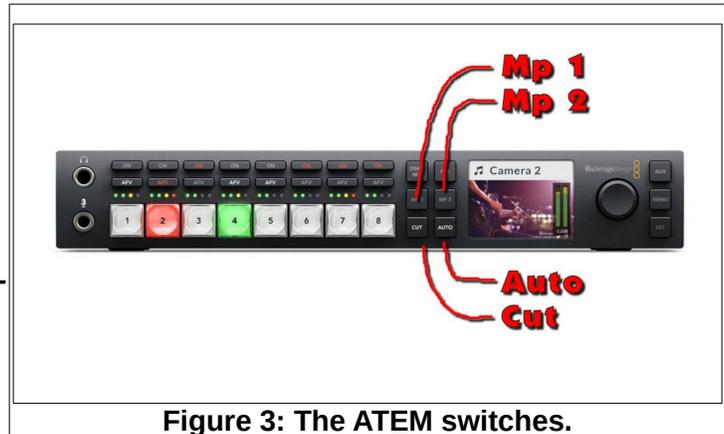


Figure 3: The ATEM switches.

To move the **Preview** source to the **Program** section of the multiview monitor, press the **Cut** or **Auto** button on the front of the Blackmagic ATEM.

There are two active frame stores associated with the **MP 1** and **MP 2** buttons. Selecting one of these buttons will put that frame store image in the **Preview** section of the multiview monitor. The contents of the frame stores can be changed by using the Blackmagic ATEM control software that can be installed on any computer connected to the local Ethernet switch.

NOTE: the source shown on the **Program** section of the multiview monitor will be sent to **CH 6** of the **V800** video mixer.

To place a source in the **Program** section of the multiview monitor:

- ✓ Select the desired source button.
- ✓ Press the **Cut** or **Auto** button to move the desired source to the **Program** section of the multiview monitor.

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.

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

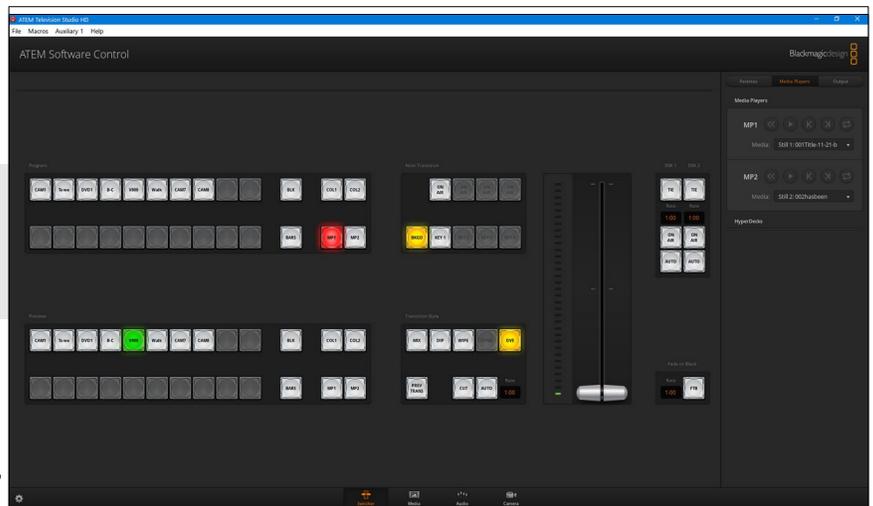


Figure 3: ATEM Software Control display.



➤ an output from the V800 Video Mixer.



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.

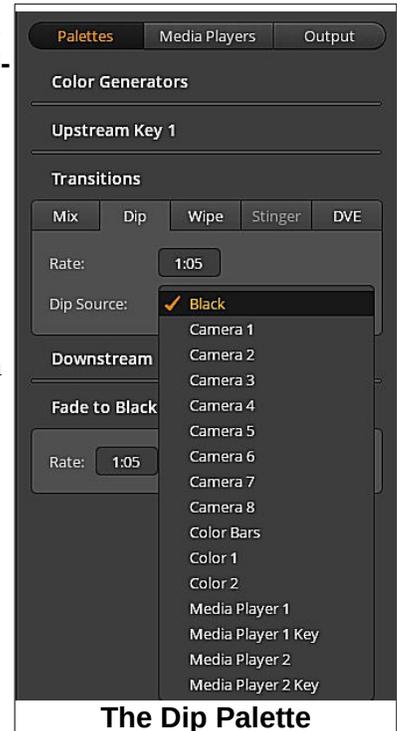
There are four **Transition Styles** available when the Auto or T-Bar functions are used, **MIX**, **DIP**, **WIPE**, and **DVE**.

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.

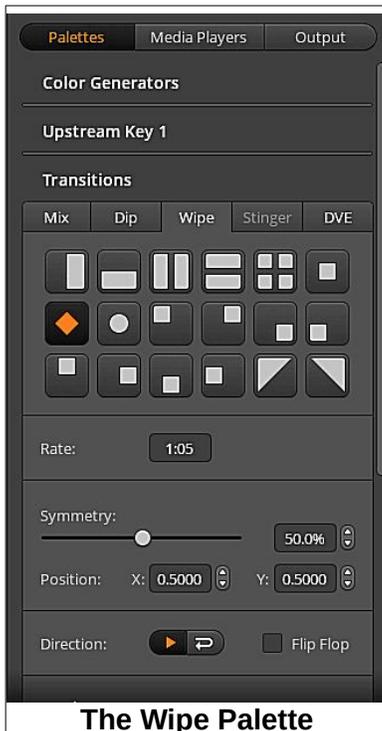
The **DIP** button fades from **Program**, to the currently select **DIP Source**, to the **Preview** display when the **Auto** button is selected. The **DIP source** is selected using a drop down list from the **Dip Palette**.

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** 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 Wipe Palette



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.

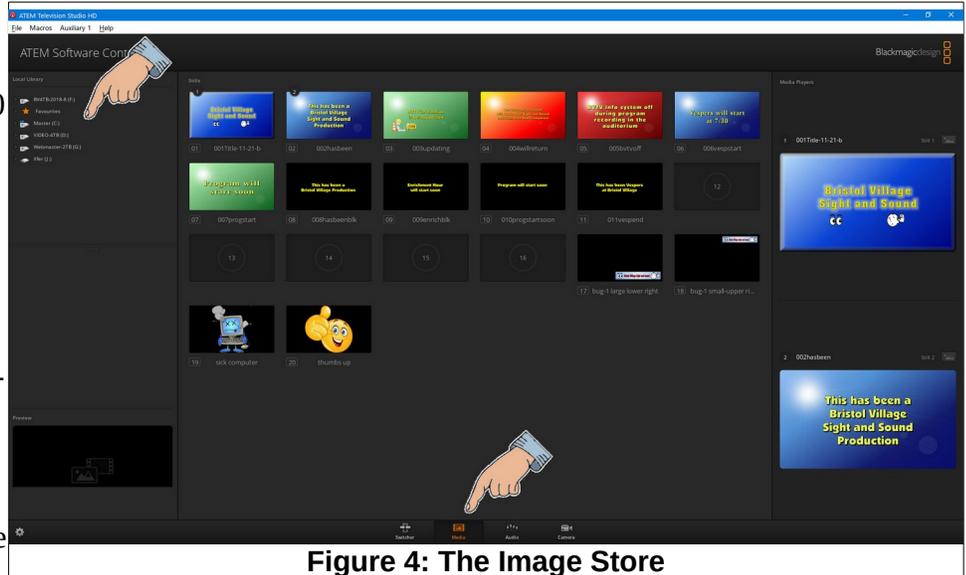


Figure 4: The Image Store

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

Using OBS Studio

Introduction

The two basic concepts to understand are **Scenes** (1) and **Sources** (2). Figure 1 shows the basic OBS display in **Studio Mode** (3).

Scenes can contain one or more **Sources**.

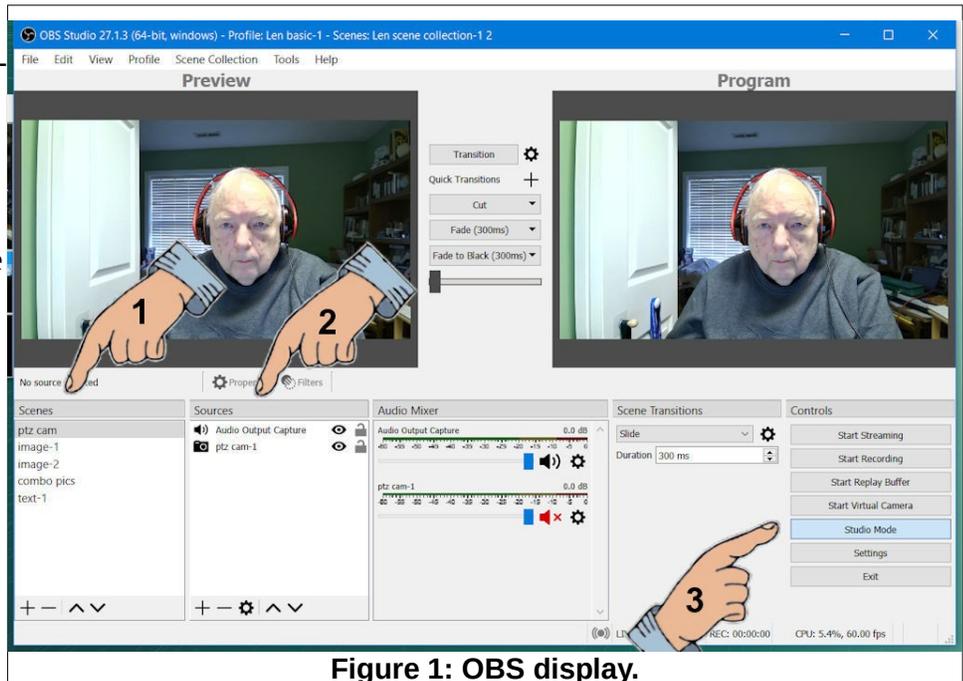


Figure 1: OBS display.

Studio Mode (see Figure 2) has **Preview** and **Program** windows.

When the **Transition** button (3) is selected (See Figure 2) the **Scene** shown in the **Preview** window will be moved to the **Program** window.

NOTE: The **Program** window shows what will be recorded.

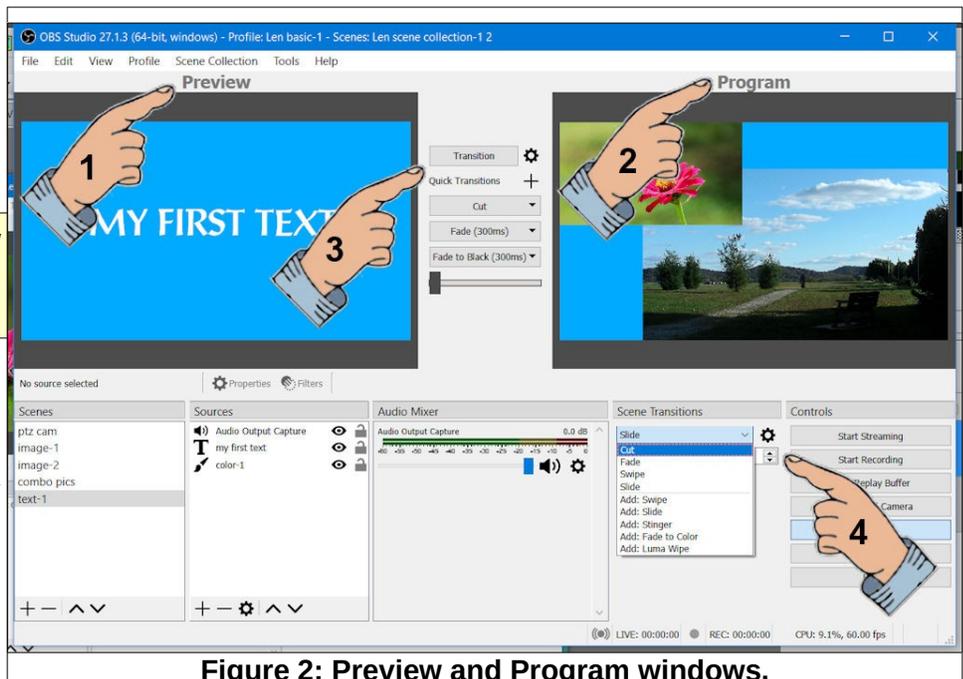


Figure 2: Preview and Program windows.

When the **Transition** button is selected, the current transition style will be activated. The **Transition style** can be selected from a pop down list (4).

Several **Quick Transitions** can be added to the **Quick Transition list** by selecting the **+** button (3). However, when the **Transition** button is selected, the Transition style set at (4) will be used.

Figures 1 and 2 show that **5 Scenes** have been added. When a **Scene** is selected, the **Sources** for that Scene are listed.



In Figure 3, the **Scene** named **Image-1** has been selected. Selecting a scene puts that scene in the Preview window. The **Source list** shows that there are 2 sources in the Image-1 scene. Each item in the **Source list** can be visible or not by selecting the **eye icon**, or it can be locked or unlocked by selecting the **lock icon** (2).

The **Audio Mixer** list (3) shows the audio sources for the current scene in the **Program** window. In Figure 3 there are 2 audio sources listed, but one of them has been muted.

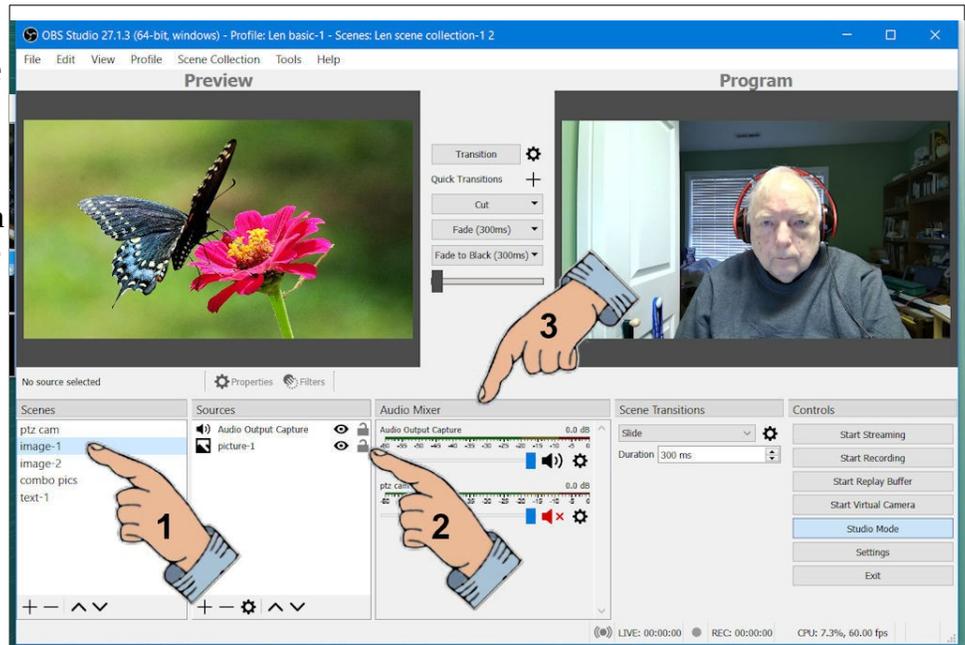


Figure 3: The Source list.

Creating a new scene

To create a new scene select the **+** in the scene list window (or, right click in the Scenes window and select **add**). This will open the **Add Scene** dialog box.

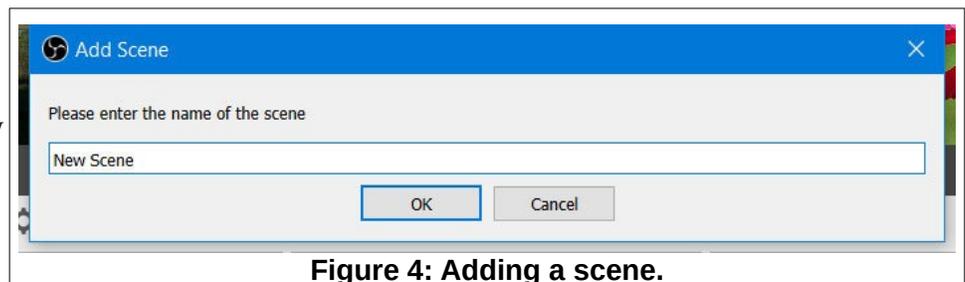


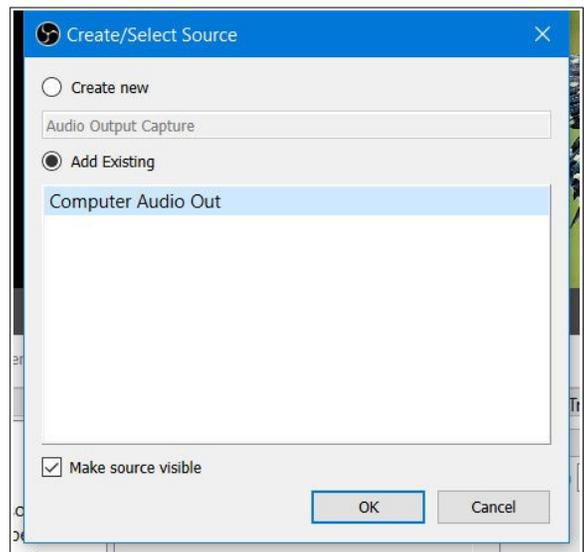
Figure 4: Adding a scene.



Once a new scene has been added, **Sources** must be added to the scene. To add a source select the **+** in the Sources list (or, right click in the Sources window and select **add**). This will open the source list options.

In this example, the **Audio Output Capture** option was selected. This opened the **Create/Select Source** dialog box. The **Add Existing** option was toggled on and the **Computer Audio Out** source was selected.

Earlier in this example, the **Computer Audio Out** source was added to a different scene. The





system keeps track of sources already added to scenes and makes them available when creating new scenes..

Next, a graphic image was added by selecting the **+** in the source list window and then selecting the **Image** option. The name for the new image was entered and then the **Browse** option was used to find a new image.

Figure 5 shows that a new image was added to the **New Scene**. The image was named picture 3. Figure 5 shows that picture 3 has been selected. There is a red border around the new image. The grab points can be used to resize the image, The image can also be dragged to a new position.

NOTE: If the **Alt** key is held down the grab points can be dragged to **crop** the image.

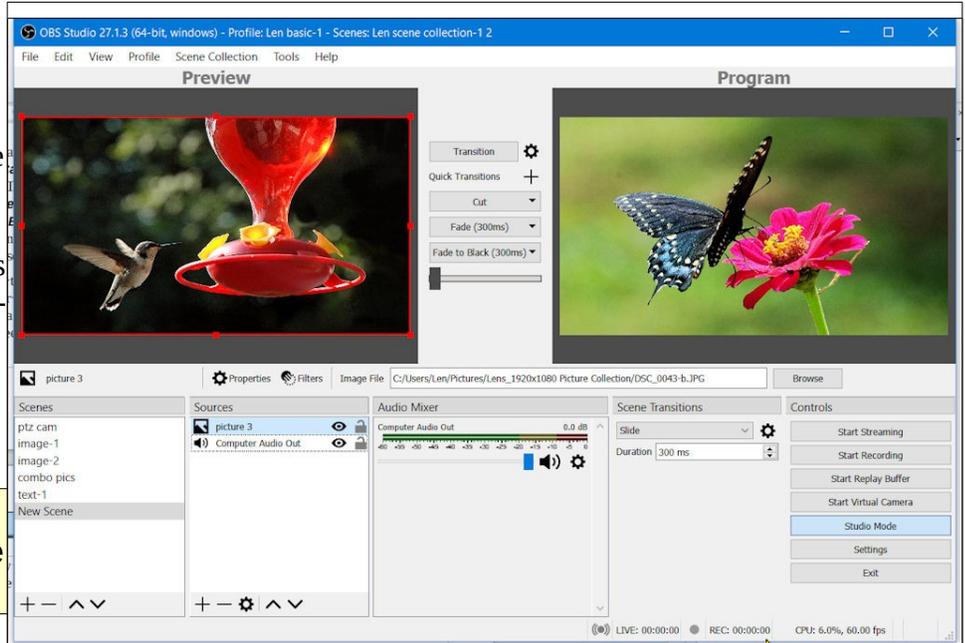


Figure 5: Adding an image

More than one image source can be added to a scene. Figure 6 shows that a new image was added to the scene and it has been resized, cropped and moved.

A **Color Source** was also added to the **New Scene**. The color was adjusted and, when the source was selected it was **right clicked**, and then the **Order** option was selected and it was **Moved to Bottom**.

By using the **arrows** at the bottom of the sources window, images can be moved in front of or behind other images.

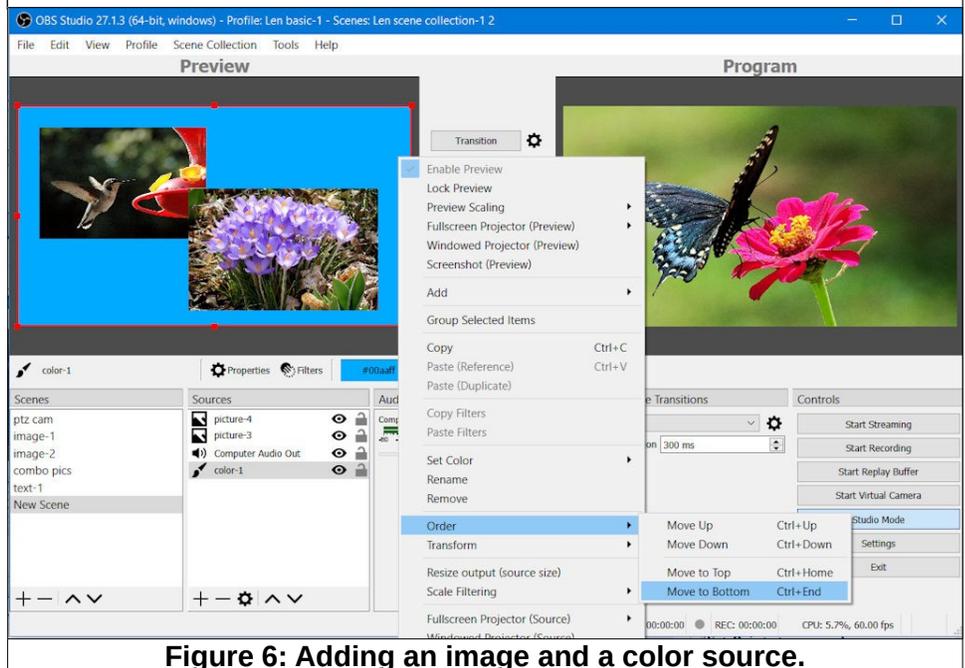


Figure 6: Adding an image and a color source.



The Multiview Window

Figure 7 shows that a Multiview window has been added to the display by selecting **View, Multiview (Windowed)**.

The available scenes are displayed below the Preview and Program windows. If you select a scene in the Multiview window, it will be moved to Preview.



Figure 7: The Multiview display.

Saving your scenes

To save a collection of scenes, from the Menu Bar, select **Scene Collection, Export**.

Figure 7 shows the Multiview window added to the display.

Stage Lighting

The Smartfade is connected to a switch labeled Stage on the power strip under the counter. The Smart fade power should come on when this switch is pressed.

- ✓ To turn on the Smartfade power, press the Power button. Wait for the lights on the control board to stop flashing then, if stage lights are not on, press the Blackout button.



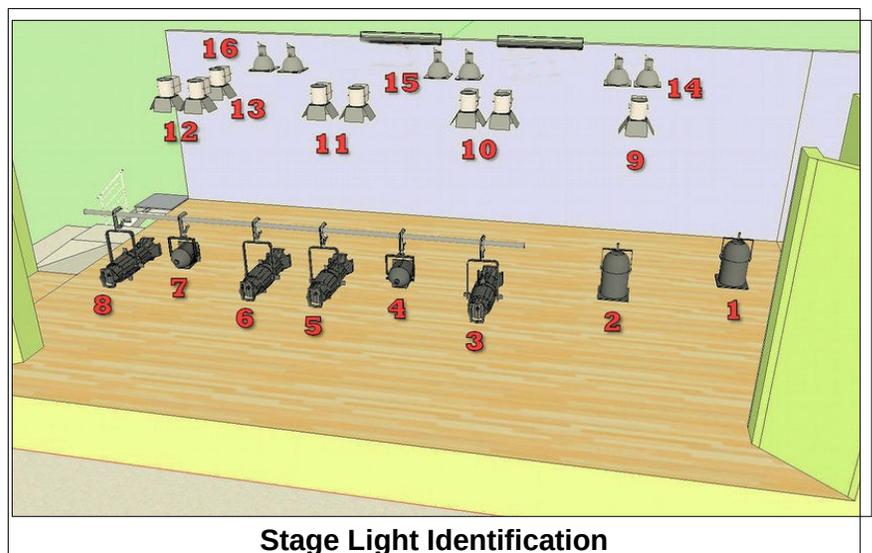
If the Smartfade does not start in Two Scene Mode, the power must be turned off and the Smartfade must be restarted. When the power is turned back on the power switch must be held down for more than 5 seconds. The wheel is then used to select Two Scene Mode.

- ✓ To turn off the Smartfade power, first press the black out button to turn off all lights, press the on/off button, and then press the ^ button to confirm.



Using the Smartfade control system

Light controls on the Smartfade board are assigned to 16 lights as shown in the illustration.



Stage lights

A light bar containing 6 spot lights (3 through 8) is mounted in front of the stage.



Two spot lights (1-2) are mounted on the ceiling near the sound booth.

Eight spot lights (9 through 16) are mounted above the stage. The Smartfade control board on the counter near the sound booth door controls these 16 lights.

There is a set of 6 work lights mounted over the stage. These are controlled either by wall switches in the sound booth or by wall switches near the stairs that lead to the rear of the stage.

There are 3 fluorescent lights over the rear area of the stage. These are controlled by a wall switch in the sound booth.

- Lights 1 and 2 are for lighting a presenter located in front of the stage during power point or other presentations that use the projection screen.
- Lights 3 through 7 are located on a light bar in front of the stage. These are used to light typical stage programs.
- Lights 4 and 7, together with the back light 13, are used to illuminate the lectern when it is placed on the marks on the left side of the stage. This is a typical Vespers arrangement.
- Lights 3, 5, 6, and 8 are used to illuminate different parts of the stage.
- Light 13 is used to back light on-stage presenters who are using the lectern when it is located to the left front side of the stage (for Vespers and other similar programs).
- Lights 9 through 16 are located over the stage.
- Light 9 is used for the piano when it is on the right side of the stage (as viewed from the audience).
- Lights 10, 11, and 12 illuminate the front portions of the stage.
- Lights 14, 15, and 16, illuminate the area behind the blue curtains and are used to light groups on the risers.

Using the Smartfade in two scene mode

The most direct and simple application of the Smartfade control board is when it is set in two scene mode. Actually, to make things even simpler, when the Smartfade is in two scene mode, only one scene needs to be used.



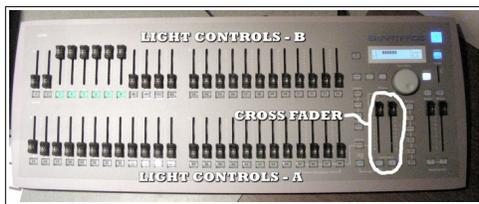
The Smartfade control board has 2 sections of 24 sliders (but only 16 are currently in use) each labeled A and B. The light control board can be set to operate in a fashion similar to the camera mixer. The camera



mixer has an A side and a B side along with a T-bar that is used to change the active camera from the A setting to the B setting.

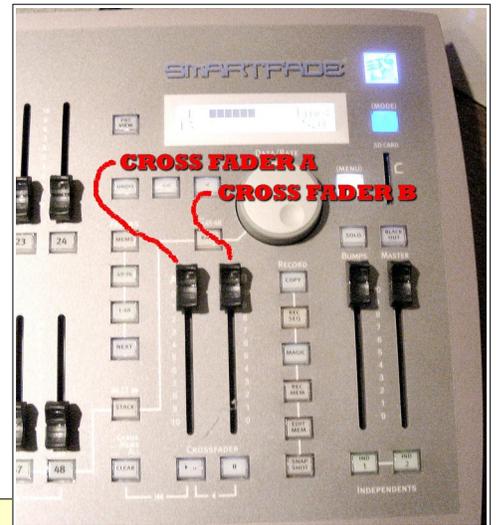
Similarly, light settings can be changed from the A settings to the B settings by moving the A-B cross fader controls together. The trick is to set the B sliders to the first desired light setting and the A sliders to the second desired setting. When the A-B cross fader sliders are moved together, the lighting will change between the A settings to the B settings.

In the illustration to the right, the A and B crossfaders have been moved to the upper position. Close examination of the number scale along the cross fader slider paths will show that in this position A is at 0 and B is at 10.



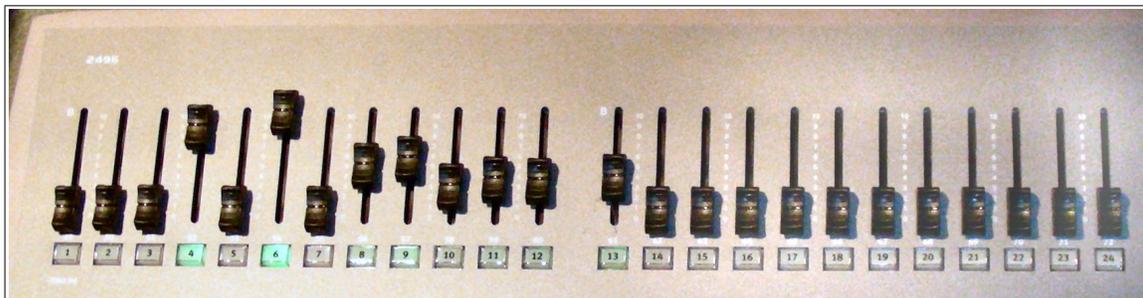
The illustration to the left shows the B light controls have the sliders for front spots 3 through 8 turned on full, and the A sliders off. In this situation, moving both cross fader sliders

together downward from the position shown will dim lights 3 through 8 from full to off.



NOTE: There is a time delay setting (shown in the LCD panel) that controls how fast the lighting change takes place after the cross faders have been moved.

Example Practice Set up



- ✓ Turn off stage and room lighting.
- ✓ Set the crossfader pair to the top position, then set the B faders similar to the illustration above and observe the lighting effects.
- ✓ Set the A faders all to 0.
- ✓ Move the A-B crossfader pair up and down to switch between spots on and off and observe the effect.



Use the Lighting Worksheet

The Lighting Worksheet makes it easy to set and record program lighting. Worksheets can be saved for reference for future programs.

Bristol Village Sight and Sound Lighting Worksheet NOTE: Left-Right refers to view from in front of stage. Values are in the range of 0 to 10					
Program _____			_____		
Light	Function	Value	Light	Function	Value
Scene #2 (Smartfader B)			Scene #1 (Smartfader A)		
1	Presentation Station		1	Presentation Station	
2	Presentation Station		2	Presentation Station	
3	Front Spot Right		3	Front Spot Right	
4	Right Fresnel (short spot) Lectern		4	Right Fresnel (short spot) Lectern	
5	Front Spot Center Right		5	Front Spot Center Right	
6	Front Spot Center Left		6	Front Spot Center Left	
7	Left Fresnel (short spot)Lectern		7	Left Fresnel (short spot)Lectern	
8	Front Spot Left		8	Front Spot Left	
9	Over Stage Front Right		9	Over Stage Front Right	
10	Over Stage Front Center Right		10	Over Stage Front Center Right	
11	Over Stage Front Center Left		11	Over Stage Front Center Left	
12	Over Stage Front Center Left		12	Over Stage Front Center Left	
13	Lectern Rear Highlight		13	Lectern Rear Highlight	
14	Over Stage Rear Right		14	Over Stage Rear Right	
15	Over Stage Rear Center		15	Over Stage Rear Center	
16	Over Stage Rear Left		16	Over Stage Rear Left	
17	Right Color Strip Green		17	Right Color Strip Green	
18	Right Color Strip Blue		18	Right Color Strip Blue	
19	Right Color Strip Yellow		19	Right Color Strip Yellow	
20	Right Color Strip Red		20	Right Color Strip Red	
21	Left Color Strip Green		21	Right Color Strip Green	
22	Left Color Strip Red		22	Left Color Strip Red	
23	Left Color Strip Blue		23	Right Color Strip Blue	
24	Left Color Strip Yellow		24	Right Color Strip Yellow	

Power Off

The Smartfade is connected to a switch on the power strip under the counter. **The following step must be completed before turning off the power strip switch.** Otherwise you will find that after you think everything has been turned off, the stage lights will still be on.

- ✓ To turn off the Smartfade power, first press the blackout button, press the Smartfader power button, and then press the P button to confirm.

If you do not press the Blackout button before turning the power off, the stage lights will stay on.

Using the Obey Wireless Lighting Controller

The Obey controller is used to adjust the four colored light strips that wash the back sound wall of the stage, and also the slim par 12 light.

- ✓ Turn on power to colored light strips.



Figure 3: The Obey 40 D-Fi Controller.

The colored light strip power switch is located on the back wall of the stage between the two circuit breaker panels.

- ✓ Turn on power to the Obey controller.
If the controller is transmitting properly, a small green signal light will be flashing rapidly (not blinking).
- ✓ Slide all faders to their bottom positions.



✓ Select a Scene switch.

The scenes have been programmed as shown in Figure 2.

Once a scene has been selected, the light display can be modified. For example:

- ✓ Select Scene 4.
- ✓ Turn on the Fixture 2 and 3 buttons.
- ✓ Move the DIM fader up to adjust fixture brightness.
- ✓ Move a RED, GREEN, or BLUE fader up to mix colors.

Scene	Fixture 1	Fixture 2	Fixture 3	Fixture 4	Fixture 5
1	Red	Red	Red	Red	
2	Green	Green	Green	Green	
3	Blue	Blue	Blue	Blue	
4	Red			Red	
5	Green	Red	Red	Green	
6	Red	Green	Blue	Yellow	
7	Orange	Purple	Light Blue	Green	Red
8					White

Figure 4: Scene Table.

Settings – For reference only, or use if settings have been messed with.

The DIP switches for the Obey Controller must be set as shown in the setup illustration. The BV system is set to channel 1.

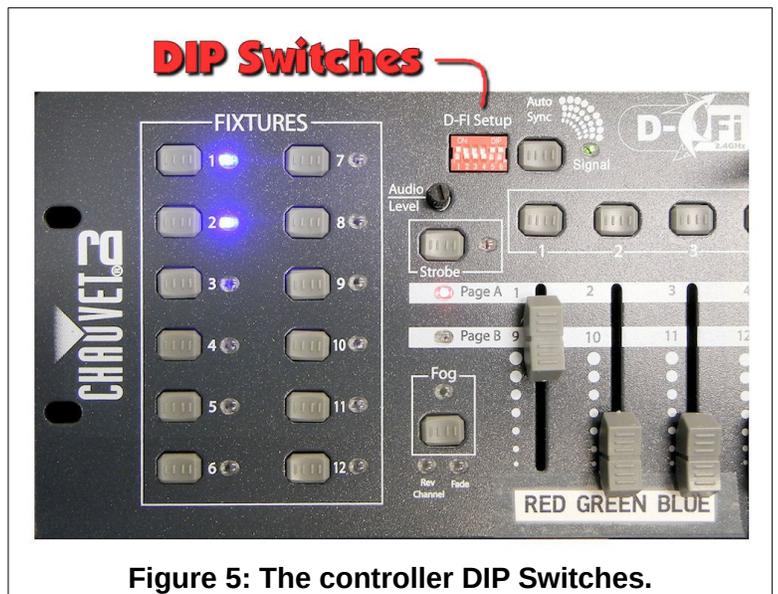
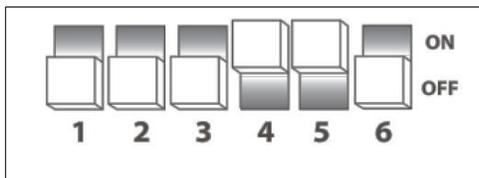


Figure 5: The controller DIP Switches.

The USB Adapters are inserted into the lighting fixtures, and fixture settings are controlled through buttons on the back of the fixture.

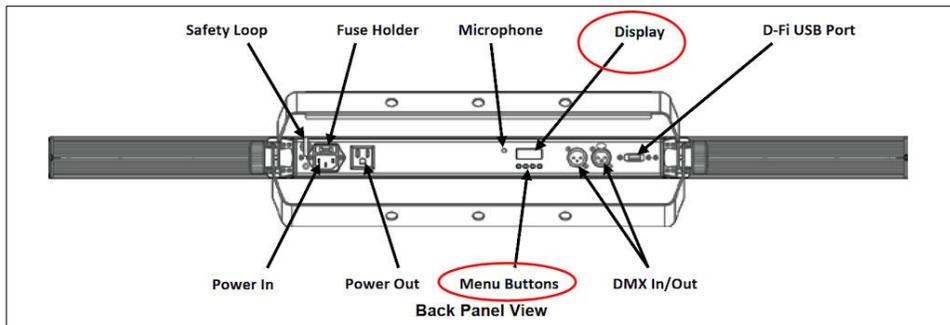
- USB Adapter DIP switches should all be set to channel 1.



Figure 6: The USB adapter.



Pressing the fixture Menu button cycles through the various options. Here are the settings for the BV system.



➤ All fixtures must be set to 8 channel mode.

➤ Each fixture must have an address according to the fixture number table.

✓ To set the fixture address, do the following:

- Press the fixture Menu button until 8-CH appears, then press Enter.
- Press the UP or Down button until the desired fixture address appears.
- Press Enter.
- Repeat these steps for each fixture.

Fixture	Address
1	1
2	17
3	33
4	49
5	65
6	81
7	97
8	11

Figure 7: Fixture Addresses.



Figure 8: Setting address for Fixture 2.

Notes: The USB adapters have an indicator light. When they are ready to receive signals from the Obey controller, they should show a blinking light. This light will have a fast blink when the fixture is receiving a signal.



The Obey controller has a signal indicator light. This light will have a fast blink when the controller is ready to transmit signals.

Controlling fixture light colors.

- ✓ Move the 8 fader sliders all to the bottom position.
- ✓ Press the desired Fixture selection buttons.
- ✓ Move the DIM fader up, then move the RED, GREEN. and/or BLUE faders up to adjust the light color.

Programming Scenes

Scenes are combinations of lighting settings from the fixtures that are stored in the Obey controller by programming each scene.

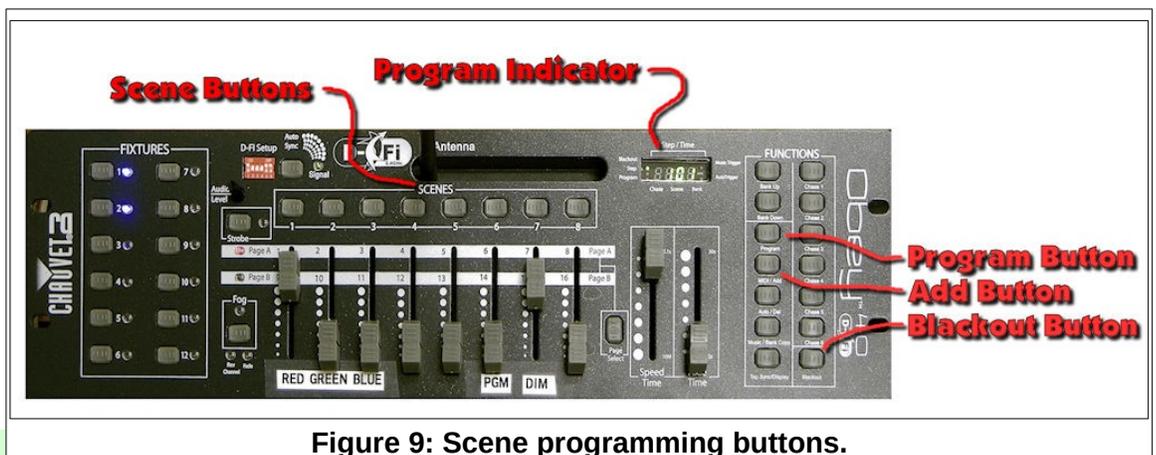


Figure 9: Scene programming buttons.

- ✓ Activate Program mode by holding the Program button down for 3 seconds. The indicator light should be on after this step.
- ✓ Select one or more fixtures and adjust the lights. Press the Add button followed by the desired Scene button. The controller will flash lights to show the scene has been stored.
- ✓ Repeat this process for each desired scene.
- ✓ Exit Program mode by pressing the Program button for 3 seconds.

Note: When you Exit Program mode the system will automatically enter Blackout mode.



Creating a multi colored display.

Here is a trick for using a Scene to create a display of red-blue-red with 4 fixtures.

- ✓ Activate Program mode by holding the Program button down for 3 seconds.
- ✓ Create a Scene with fixture 1 and 4 set to red.
- ✓ Exit Program mode by pressing the Program button for 3 seconds.
- ✓ Press the new scene button.
- ✓ Turn on fixture 2 and 3 and adjust the color to blue.

Using the SlimPAR T12 BT

The SlimPAR T12 BT is a round shaped wireless light identified as Fixture 5 in the Obey controller.

The channel for this fixture should be set to CH8 and the fixture address to d65.

- ✓ Turn on the Wireless light controller (Obey 40).

When the Obey controller is transmitting and receiving wireless signals, the indicator light will show a fast blink.

- ✓ Turn on (or plug in) the SlimPAR T12 BT.
- ✓ On the Obey controller, move all faders to the down position.
 - ✓ On the Obey controller, select the fixture 5 button.
 - ✓ On the Obey controller, move the DIM fader up.
 - ✓ On the Obey controller, move the RED, GREEN, and/or BLUE faders up.



To create a white light, move the RED, GREEN, and BLUE faders all the way to the top.
Use the DIM fader to control brightness.

Editing Vespers Videos

Introduction

Since the last DVD recorder died, recording Vespers programs using a DVD recorder has no longer been an option. Most Vespers videos since November, 2021 have been recorded using the **OBS Studio** software and saving the recording to an **mp4** file on an external hard drive. When copies have been requested by the presenter, or through orders from the Nook, the original file must be edited. Once the program has been edited, it can be delivered either on a flash drive, or burned on a DVD using the **DVD Architect** software found on the **Media Station** computer in the Computer Room.

Most Vespers programs start with, and end with, Vespers Pre and Post videos played from a DVD. The DVD resolution is limited to 720x480. The vespers programs recorded using **OBS Studio** have an HD resolution of 1920x1080. In order to make the final edited Vespers program consistent throughout, the Pre and Post videos sections of the recording should be replaced on the edited version.

NOTE: if the Pre and Post videos were played from a computer rather than a DVD, it will not be necessary to replace the Pre and Post sections during editing.

The free **Davinci Resolve** software, available on the Computer Room **Media Station**, makes editing relative easy.

Transferring the Video

Transferring the video to the **Media Station** computer can be done either by copying the **mp4** file to a flash drive, or by temporarily moving the external hard drive to the **Media Station** computer and copying and pasting files to the appropriate file folder.

The 2021 file folder for Vespers programs is found on drive **G** of the **Media Station** computer.

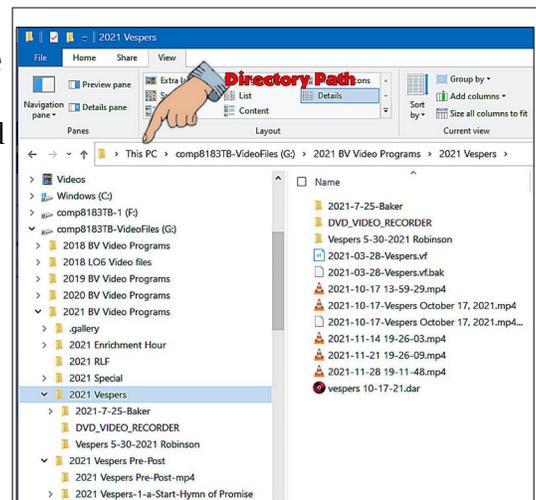


Figure 1: Directory Path on Media Station computer.

Editing the Video

✓ Open **Davinci Resolve**.

When Davinci Resolve is opened on the Media Station computer you should see several Project Folders on the display.

✓ Locate the **Vespers** folder and **double click** on the folder.

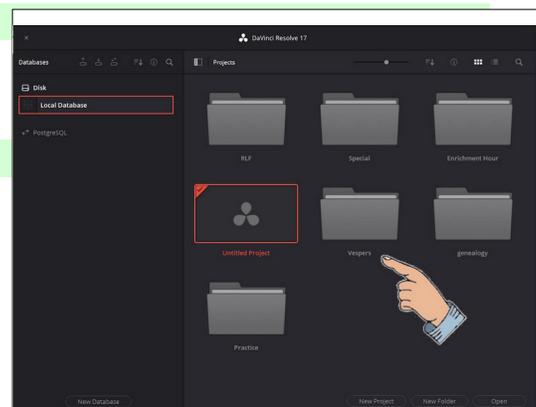


Figure 2: Davinci Resolve Project Folders.



- ✓ When the **Vespers** Project folder is open, **double click** on the **New Project** option.
- ✓ Enter a **name** for the new project and select **Create**.

This will open the **Davinci Resolve** program display.

Setting the Davinci Resolve preferences

There are a number of preferences in Davinci Resolve that can be changed by the user. If you want to verify that the preferences in your system are the same as those used in this document, do the following:

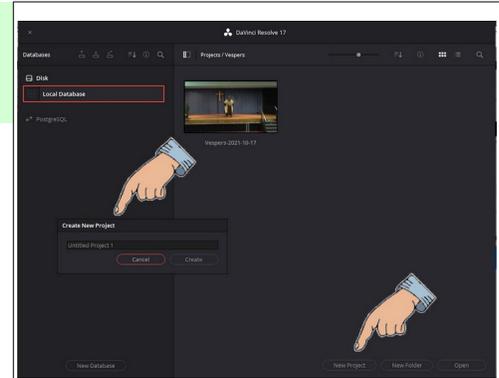


Figure 3: Creating a new project.

- ✓ From the **upper left** corner of the display, select **Davinci Resolve, Preferences**.

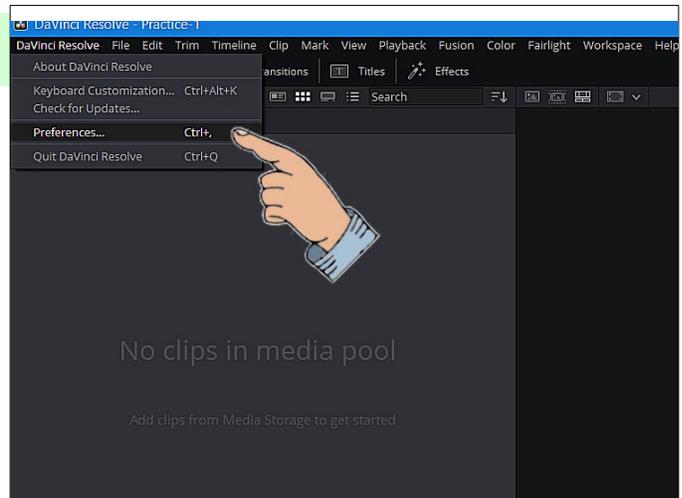


Figure 4: Selecting the Preferences option.

- ✓ In the **Editing** dialog box, select **User, Editing**.
- ✓ In **User, Editing** dialog box, verify or set the following values.
 - Standard generator duration **8**.
 - Standard transition duration **3**.
 - Standard still duration **10**.

These values can be changed during editing, but the above values provide a starting point.

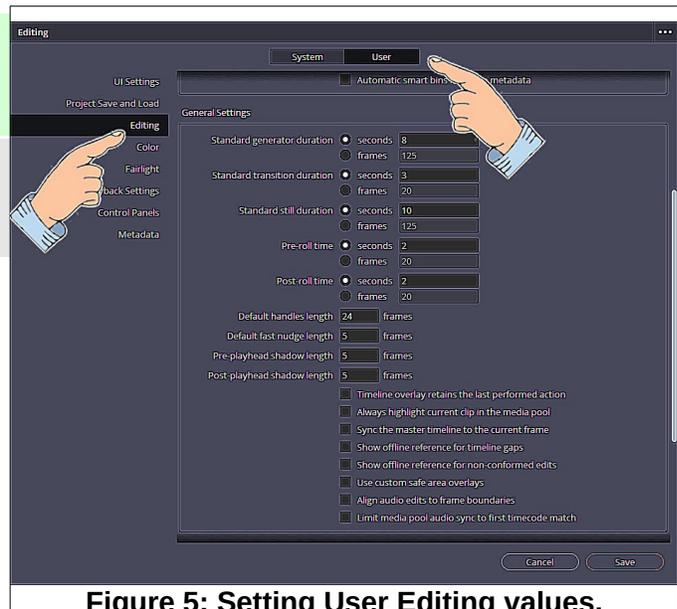


Figure 5: Setting User Editing values.



The **Davinci Resolve** display has a row of Workspace Page options along the bottom edge of the display. Each of these options displays a different workspace ‘page.’

✓ Select the **Edit** option.

Observe the **Media Pool** area in the upper left portion of the display. The Media Pool contains all of the files (including video, audio, and image files) available for use in the current project. The Media Pool can be populated several ways.



Figure 6: The Davinci Resolve display.

- **Right clicking** in the Media Pool opens a context menu that includes an **Import Media** option.
- Media files can be copied from a File Explorer window (**Ctrl+C**) and pasted (**Ctrl+V**) into the Media Pool.
- Media files can be dragged and dropped into the Media Pool.

Figure 7 shows files being dragged and dropped from a File Explorer window into the Media Pool.

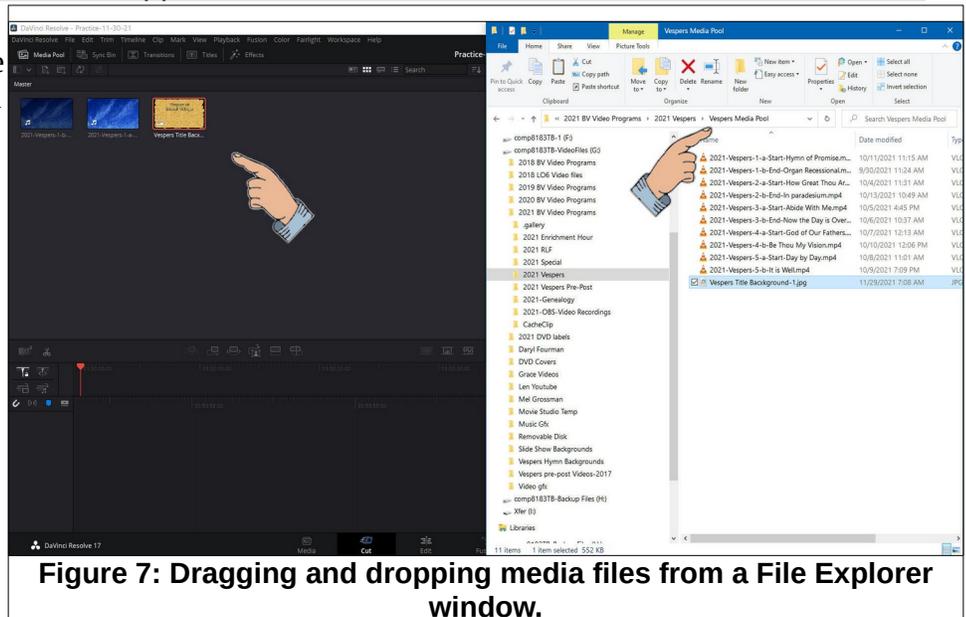


Figure 7: Dragging and dropping media files from a File Explorer window.



Figure 8 shows importing a Vespers mp4 file into the Media Pool. The process being used was as follows:

- The mouse was used to **right click** in the **Media Pool** area.
- **Import Media** was selected from the context menu.
- The Import Media dialog box was set to the file folder that contained the desired mp4 file.
- The **Open** button was selected.

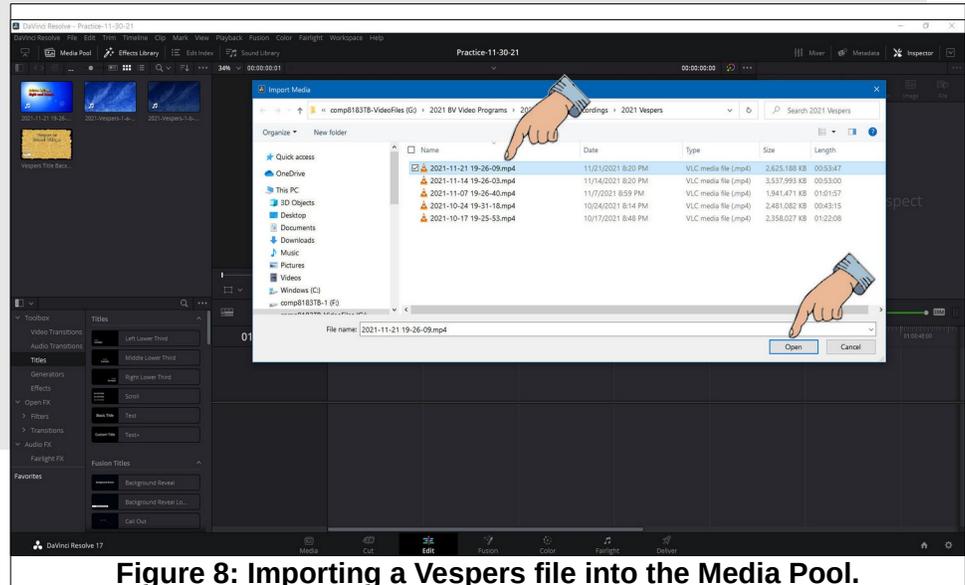


Figure 8: Importing a Vespers file into the Media Pool.

There are two possibilities for editing Vespers videos. The first situation is where a DVD was played for the Vespers Pre and Post videos. The second possibility is when the Pre and Post videos were played from a computer. The difference is that the resolution of DVD videos is 720x480 and this does not match the 1920x1080 resolution of the OBS recording. If a DVD was used for the Pre and Post videos, that section of the mp4 file should be replaced by the original 1920 x1080 Pre and Post video files.

If the Pre and Post videos were played from a computer, the next steps can be omitted.

Files can be imported from this folder: **G:\2021 BV Video Programs\2021 Vespers\Vespers Media Pool**

- ✓ Import the original mp4 Pre and Post video files into the Media Pool.
- ✓ Import the Vespers Title graphic-1.jpg file into the Media Pool.
- ✓ Import the Vespers mp4 file to be edited into the Media Pool.



The Media Pool should now look similar to Figure 9.

If you drag the cursor across the thumbnail view of video files, you will see a preview of the video at the position of the cursor.

Once the Media Pool has been populated, the editing process can begin.

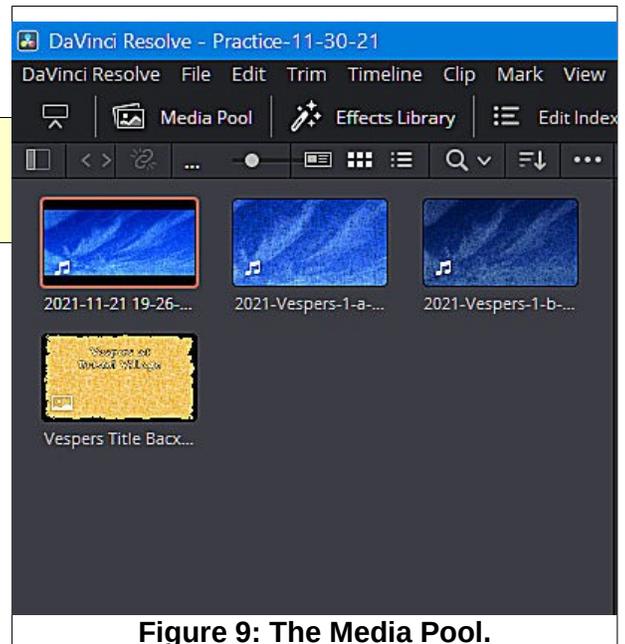


Figure 9: The Media Pool.

Figure 10 shows the title graphic image has been dragged to the timeline.

✓ Drag the title graphic image to the timeline.

The red arrow with a vertical line is the timeline cursor. This can be positioned anywhere on the timeline

You should get into the habit of saving your work after each significant edit. This way, if you mess things up you can always close the project without saving and reopening it with the last saved version.

✓ Press **Ctrl+S** to save your project.

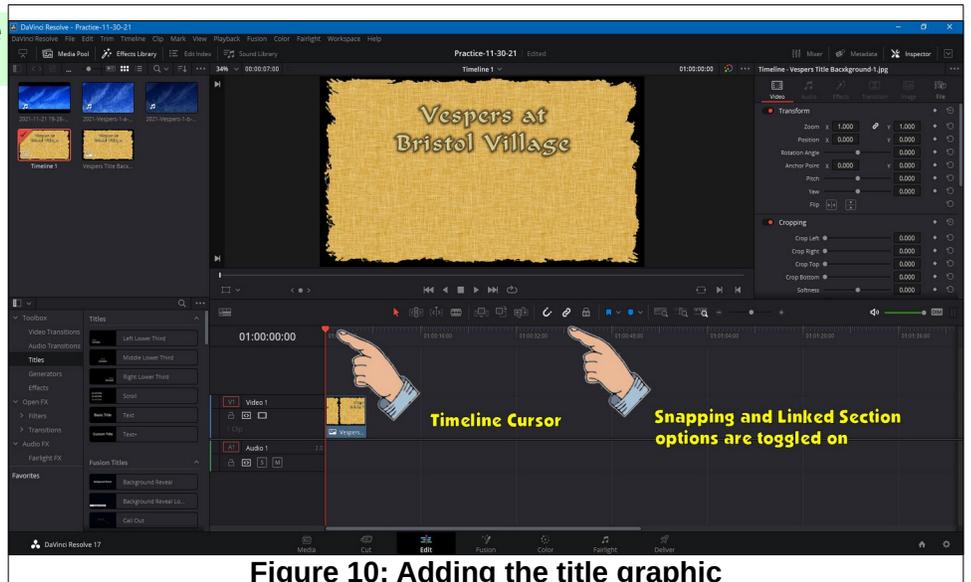


Figure 10: Adding the title graphic



Next, some basic text will be added that will be superimposed over the title graphic image.

Figure 11 shows the text options.

- First, the **Effects Library** must be toggled on #1,
- In the Effects Library, the **Titles** option must be selected #2,
- In the Titles area, the **Basic Text** option should be selected #3.

When the above options have been selected, a text object can be dragged to the timeline.

- ✓ Drag a **text object** to the timeline (just above the title image) and drop it on the Video 2 track..

The Video 2 timeline track will appear as you drag the text object onto the timeline.

Figure 12 shows a text object dragged to the timeline. This was done by clicking and dragging the text tool #1 to the timeline #2.

- ✓ Place the timeline cursor on the text object.

When the text object is selected, the Inspector window #3 provides a number of options for setting text parameters.

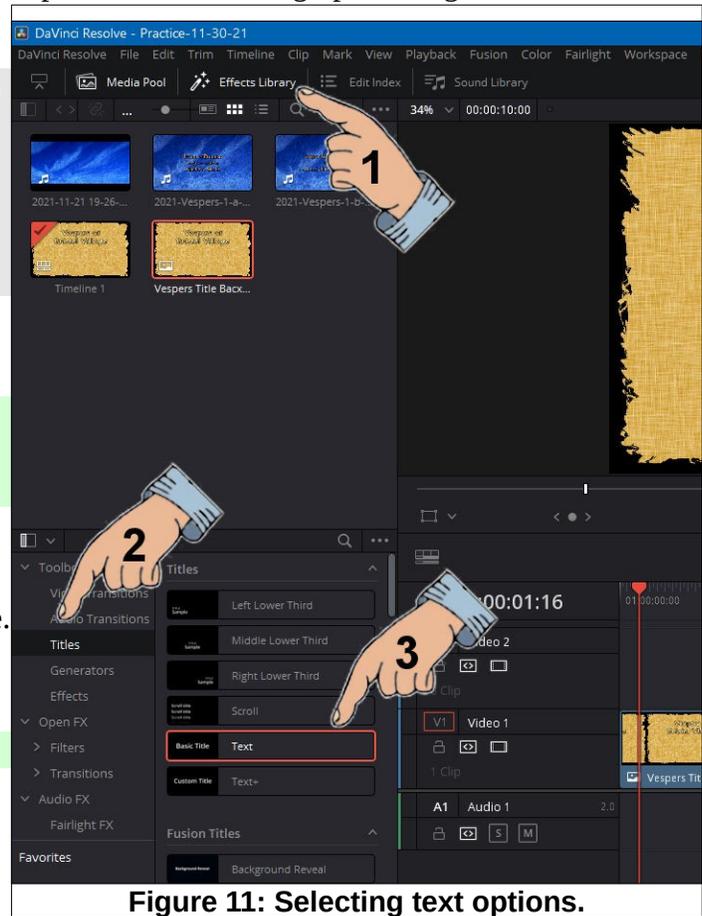


Figure 11: Selecting text options.

Next, the text object **Inspector** will be used to set the text parameters.

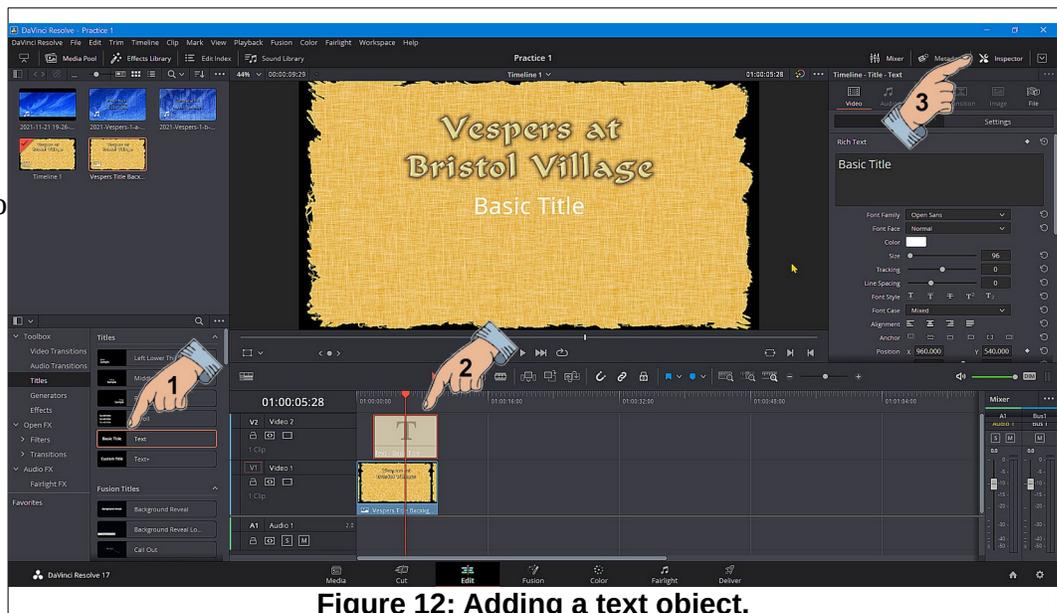


Figure 12: Adding a text object.



Figure 13 shows the *Inspector* when the text object has been selected.

There is a tool in the upper right corner of the display that will expand or contract the *Inspector* size.

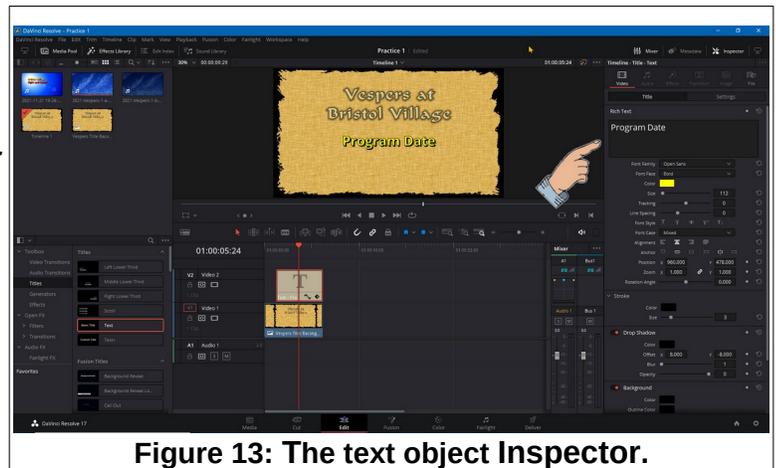


Figure 13: The text object Inspector.

The parameters for the title object have been set as follows:

- The text was changed to Program Date.
- The Font Face was set to Bold.
- The text Color was set to yellow.
- The Size was set to 112.
- The Alignment was set to Center.
- The Y Position was set to 478.
- The Stroke color was set to Black.
- The Stroke Size was set to 3.
- The Drop Shadow was enabled.
- The Drop Shadow X Offset was set to 8.
- The Drop Shadow Y Offset was set to -8.
- The Drop Shadow Blur was set to 8
- The Drop Shadow Opacity was set to 95.

✓ Edit the **Title** text to be similar to Figure 14.

✓ Press **Ctrl+S** to save your project.

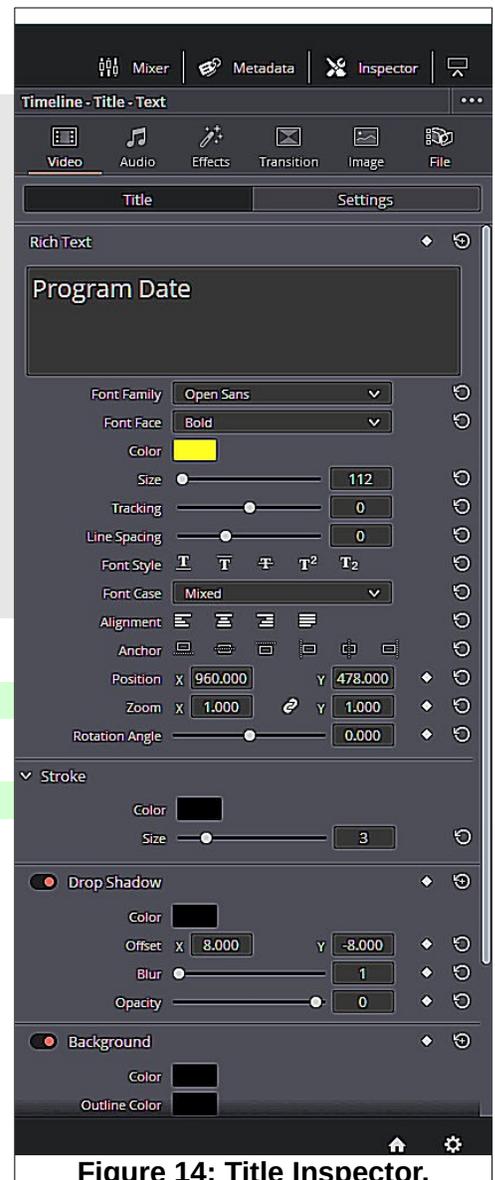


Figure 14: Title Inspector.



Adding a video to the timeline

The next section is only to be used when the Pre and Post Vespers DVD videos were used. If the Pre and Post Vespers videos were played from a computer it is not necessary to add the Pre and Post Vespers mp4 files.

- ✓ **Drag and drop** the **Pre Vespers video** from the **Media Pool** to the **timeline**.

Figure 15 shows the timeline after adding the Pre Vespers video. If the **Snap** tool is toggled on it will be easy to place the mp4 file next to the title image with no gap between the two.

Now it is time to add the program mp4 file to the timeline. Observe the timeline scroll bar along the bottom edge of the display this can be dragged to reposition the timeline view.



Figure 15: Adding the Pre Vespers video.

- ✓ **Drag and drop** the **program mp4 file** from the **Media Pool** to the **timeline**.
- ✓ Use the **zoom controls** to adjust the **timeline view**.

- ✓ Place the **timeline cursor** at the point where the **prelude begins** (#1 in Figure 16).

Zooming in and adjusting the timeline position will help locate the desired location. Also, the left and right cursor control arrows on the keyboard can help fine tune the timeline cursor.

Pressing the **spacebar** will **start** and **pause** playing the video clip.

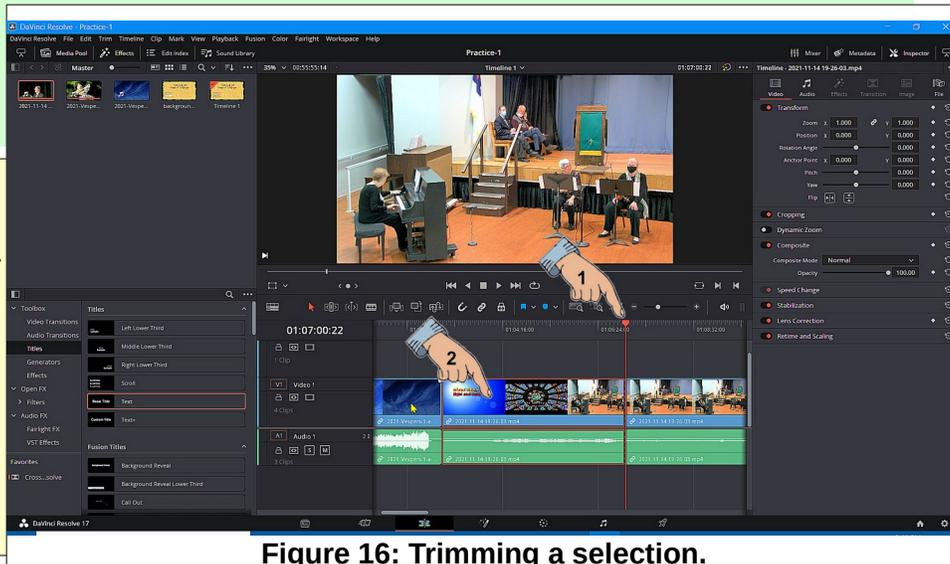


Figure 16: Trimming a selection.

- ✓ Use the shortcut **Ctrl+I** to split the video.
- ✓ Click somewhere in the section of video to be removed #2. (There should be a red border around the selected object.)
- ✓ Press the **Delete** key to remove the selection.



The system will **auto ripple** the selection. This means that when a selection is deleted from the middle of a timeline, the following video will automatically be moved to fill the gap.

Next, the end of the mp4 program video will be trimmed.

- ✓ Move the timeline cursor to the end of the **postlude**. (Typically there may be audience applause that should be included.)
- ✓ Press **Ctrl+I** to split the video.
- ✓ **Select** and delete the unwanted ending of the video.
- ✓ **Drag and drop** the **Post Vespers** video to the end of the timeline.



Figure 17: Trimming the end of the video.

To finish the video, let's add the title graphic and title text to the end of the program.

Observe the **Go to previous edit**, and **Go to Next edit** tools as noted in Figure 18. These can be used to quickly jump between edit points in the timeline.

- ✓ Go to the **beginning** of the timeline and zoom in on the title graphic and title text objects.
- ✓ Select the **title graphic** and **title text** objects. (Select an object, hold the **Ctrl** key down, and select another object.)
- ✓ With the two objects selected press **Ctrl+C** to copy the objects.
- ✓ Go to the end of the timeline and zoom in.
- ✓ With the timeline cursor at the end of the video, press **Ctrl+V** to place copies of the title graphic and text objects.

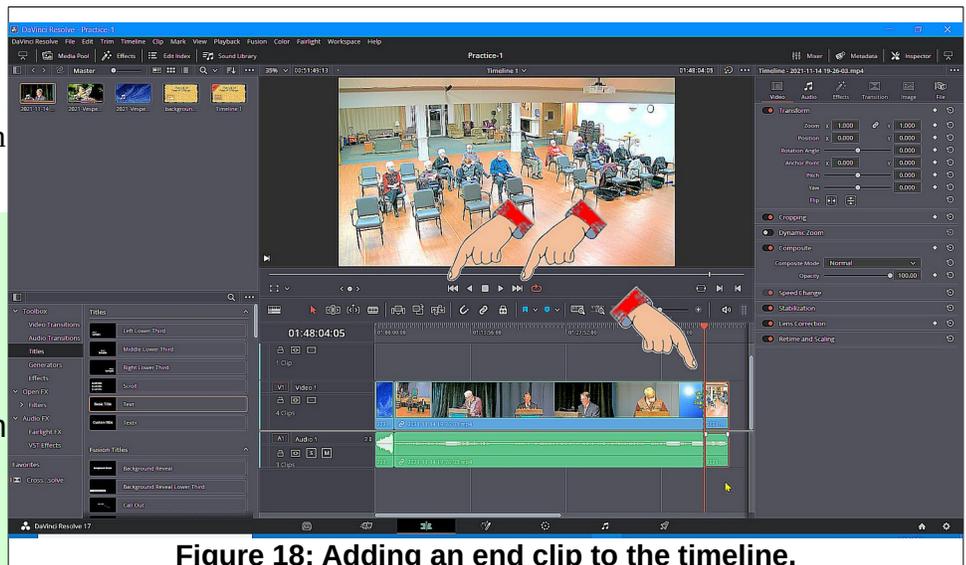


Figure 18: Adding an end clip to the timeline.

This finishes placing all of the objects for the program. An improvement can be made by adding a **transition** to the cuts between program objects.



✓ Press **Ctrl+S** to save your project.

Adding transitions

✓ Select an object, then press **Ctrl+A** to select all of the objects.

✓ In the **Toolbox** area select **Video Transitions**.



Figure 19: Adding transitions.

✓ **Right click** on **Cross Dissolve**.

✓ Select **Add to Selected Edit Points and Clips**.

✓ Select **Trim Clips**.

If you play the video, there will be a smooth transition between clips.

There are a number of adjustments that can be made to **transitions**. For example, Figure 20 shows that a **Cross Dissolve** transition has been selected.

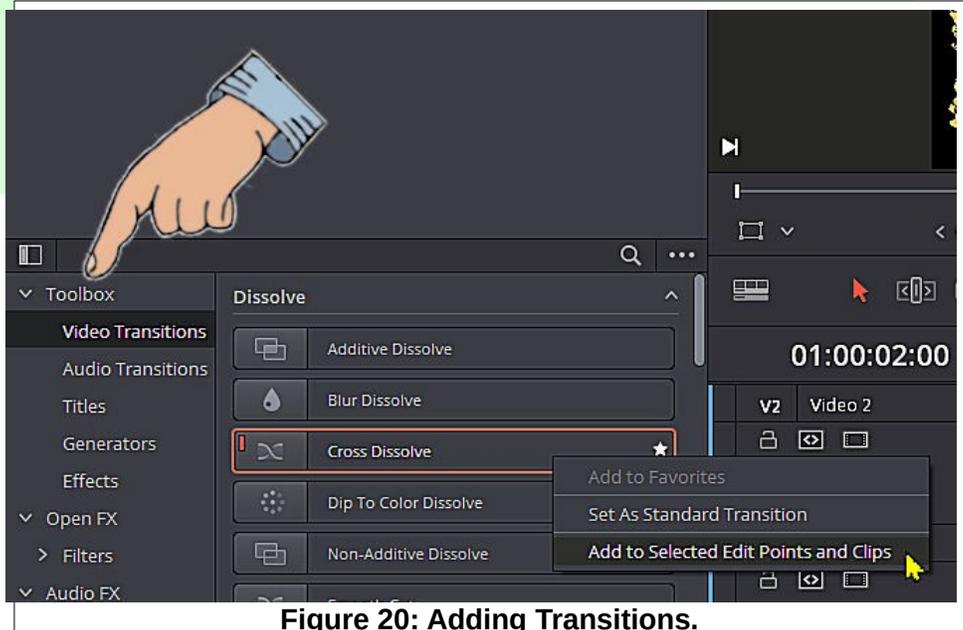


Figure 20: Adding Transitions.



In Figure 21 a cross dissolve transition has been selected. The **Duration** has been set to **2** seconds, and the **Ease** option has been set to **In & Out**.

- ✓ Press **Ctrl+S** to save your project.

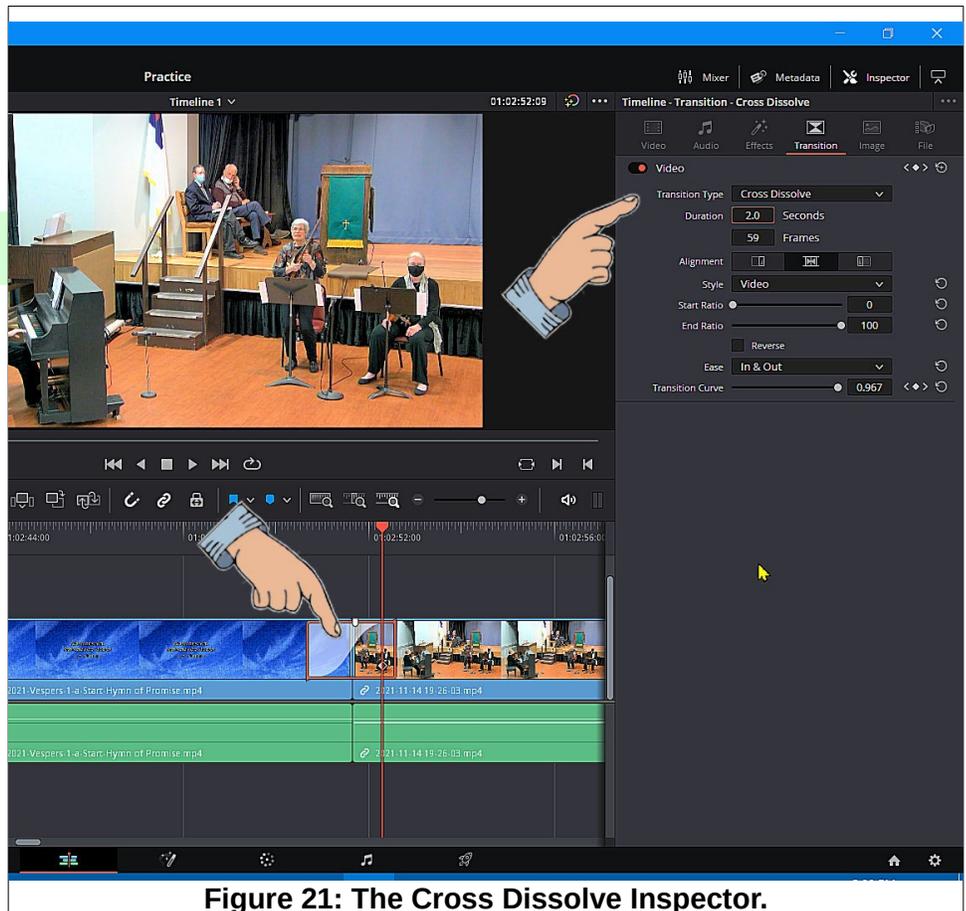


Figure 21: The Cross Dissolve Inspector.

Exporting an mp4 file

Once the editing is finished, an mp4 file can be generated.

Figure 22 shows the procedure for rendering the mp4 file.

- ✓ #1 Select the **Deliver** page.
- ✓ #2 Set the **file name** and **browse** to the desired file location.
- ✓ Set the **format** to **mp4**.
- ✓ #3 Select **Add to Render Queue**.
- ✓ #4 Observe the **Job List**.
- ✓ #5 Select **Render All**.



Figure 22: Rendering an mp4 file.



Fixing Audio volume issues.

There are times when different parts of a program have different sound volumes. These issues can be fixed using Davinci Resolve. Here is an example.

Figure 23 shows that the sound volume for the Vespers Pre Video is much louder than the Vespers program.

- ✓ Select the clip for volume adjustment.
- ✓ In the *Inspector* area, use the volume slider to change the volume of the clip.

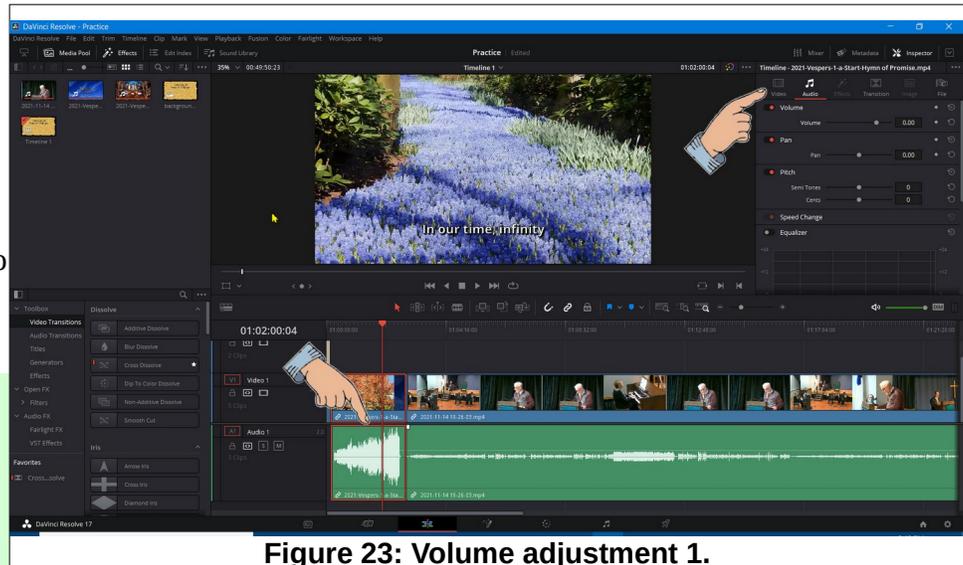


Figure 23: Volume adjustment 1.

NOTE: You can also fine tune the volume by entering a value in the volume text box. Also, the height of the sound track can be adjusted by dragging the bottom edge of the track.

In Figure 23, the spoken portion of the program is not as loud as the hymn. To fix this, a new clip can be created.

- ✓ Place the timeline cursor at the end of the desired new clip and press **Ctrl+I**.
- ✓ Select the new clip and adjust the volume.
- ✓ Repeat this process until the timeline shows uniform volume throughout.

Figure 24 shows that the volume in the different clips has been adjusted to match.

The improved version can now be rendered to an mp4 file.

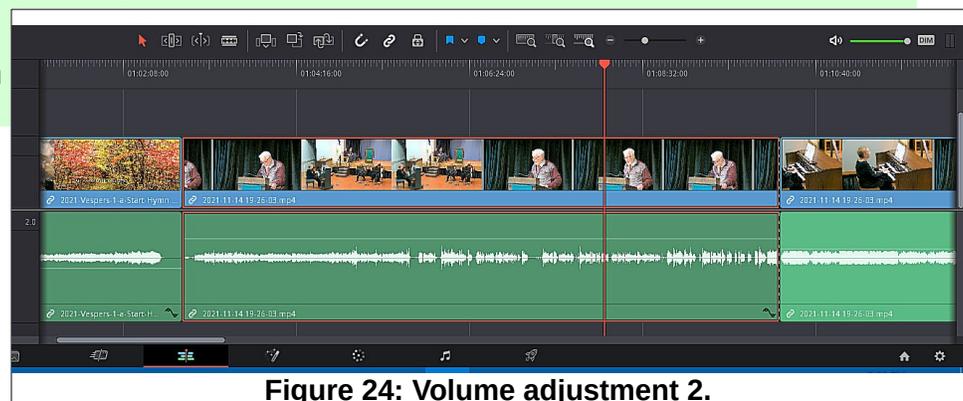


Figure 24: Volume adjustment 2.

Using the VLC Player

The VLC player can be used to play both audio and video files.

The VLC Interface

Illustration 1 shows the VLC display.

- The **Title Bar** shows the current file name and the name of the application.
- The **Menu Bar** contains drop down menu options.
- The **Play/Pause** tool toggles between playing and pausing the file. [Pressing the **Spacebar** will also toggle Play/Pause.]
- The **Playlist** tools (on either side of the stop tool) jump between Playlist entries.
- The **Stop** tool will quit playing items from the Playlist.
- The **Full Screen** tool will toggle full screen mode on and off (pressing the **F** key will also toggle full screen mode.).
- The **Extended Settings** tool opens an Adjustment and Effects dialog box.
- The **Playlist** tool opens the playlist dialog box.
- When the Toggle **Loop** tool is selected, the system will replay the current Playlist.
- The **Random Selection** tool will cause list entries to be played in random order.
- The **Time Slider** along the bottom edge of the display shows the current time location of playback. The left side of this bar shows the current time, and the right side of this bar shows the total length of the selection. The **Time Slider** can be dragged to any time location.
- The **Volume Slider** can be dragged to adjust the audio volume.

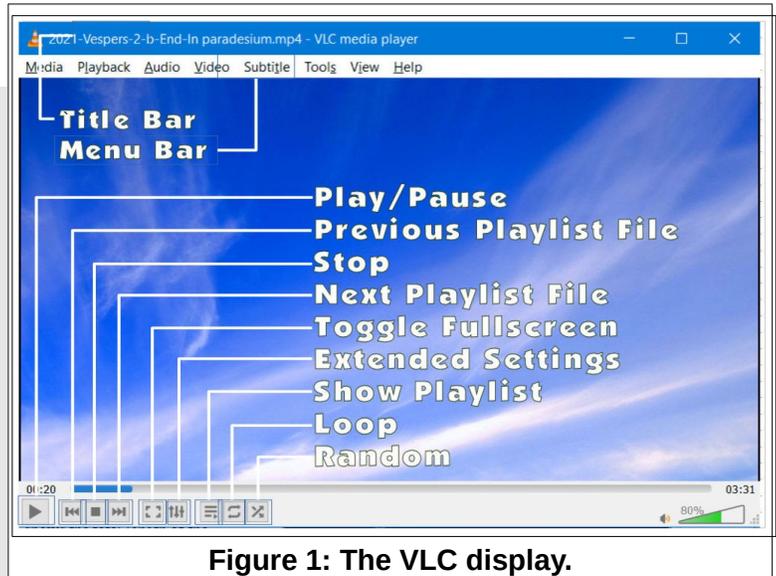


Figure 1: The VLC display.

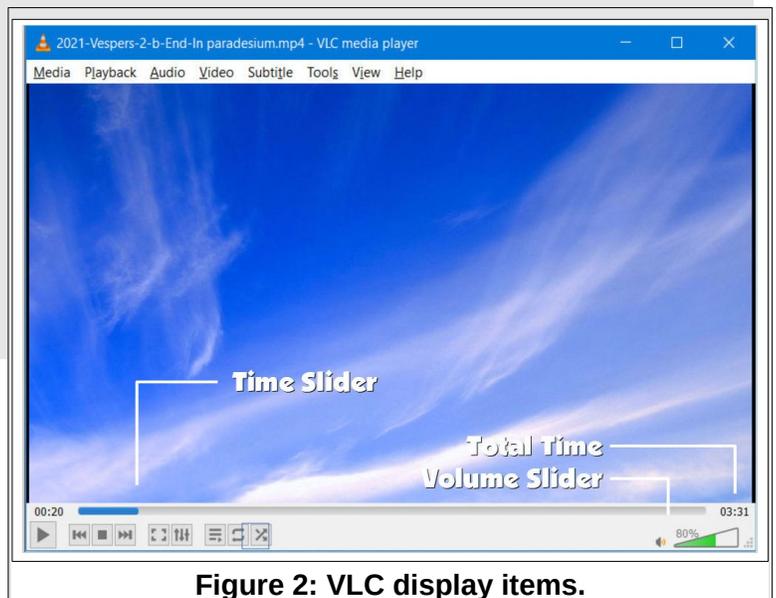


Figure 2: VLC display items.



Opening the VLC Player with the Vespers Pre-Post Playlist.

- ✓ **Double click** on the Vespers Pre-Post desktop shortcut. [You can also right click on the shortcut and select Open.]

This will start playing the first selection on the Playlist.

- ✓ Press the **Spacebar** to stop playback.
- ✓ Select the Toggle Playlist tool on the bottom horizontal toolbar to open the Playlist. [See Figure 1.]
- ✓ **Double click** on the desired selection.
- ✓ Adjust the volume using the appropriate fader control on the soundboard.
- ✓ Press the **Spacebar** to stop Playback.
- ✓ Drag the **Time Slider** back to the beginning of the selection. [See Figure 2.]
- ✓ Toggle the **Full Screen** option **ON** or press the **F** key).
- ✓ At the appropriate time, press the **Spacebar** to start playback.
- ✓ At the end of the selection, press the **Spacebar** to stop playback.
- ✓ Repeat the process to select and play the post Vespers selection.

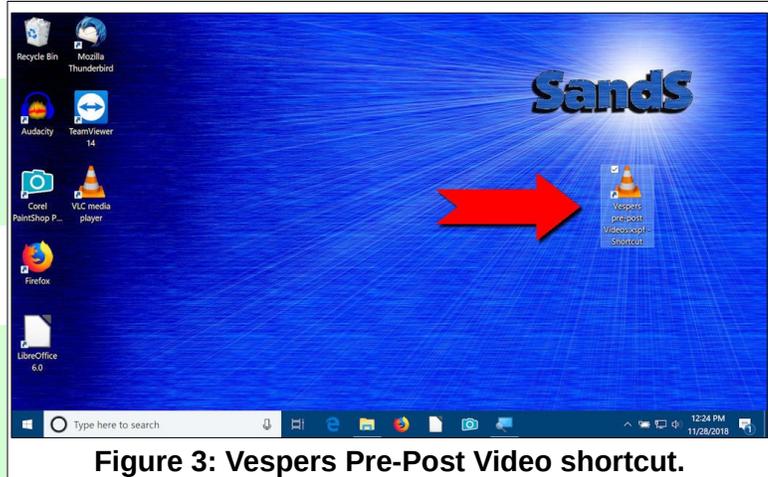


Figure 3: Vespers Pre-Post Video shortcut.

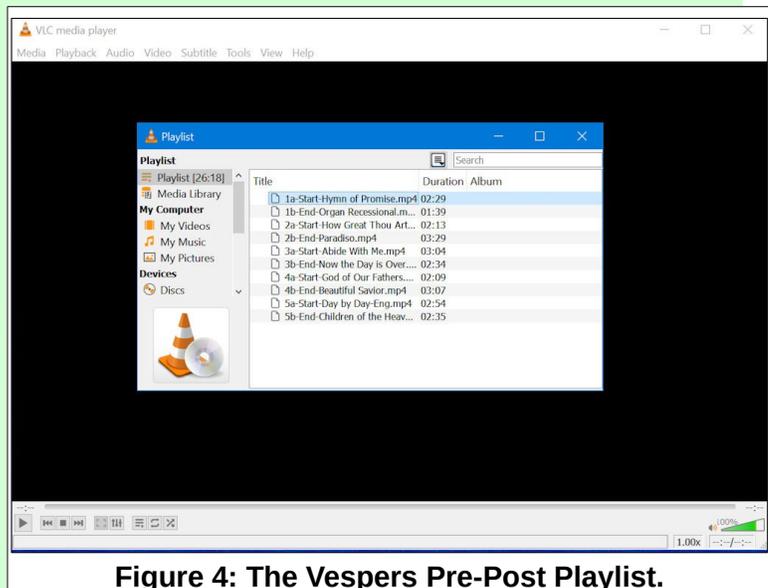


Figure 4: The Vespers Pre-Post Playlist.

NOTE: When the VLC player is in full screen mode, moving the mouse will open a player control toolbar near the bottom of the display. This toolbar will disappear when the mouse pointer is moved away from the toolbar. This toolbar has a tool to exit full screen mode.



Creating a Playlist

An easy way to create a Playlist is to open the Playlist window on one half of the computer display and open a File Explorer window in the other half.

- ✓ **Double click** on the VLC shortcut to open the VLC player window.
- ✓ In the VLC player window select **View, Playlist**.
- ✓ Press the **Windows key** plus the right cursor control arrow to force the VLC playlist window to fit the right half of the display.
- ✓ Press the **Windows key** plus the E key to open a File Explorer window.
- ✓ Press the **Windows key** plus the left cursor control arrow to force the File Explorer window to fit the left half of the display.

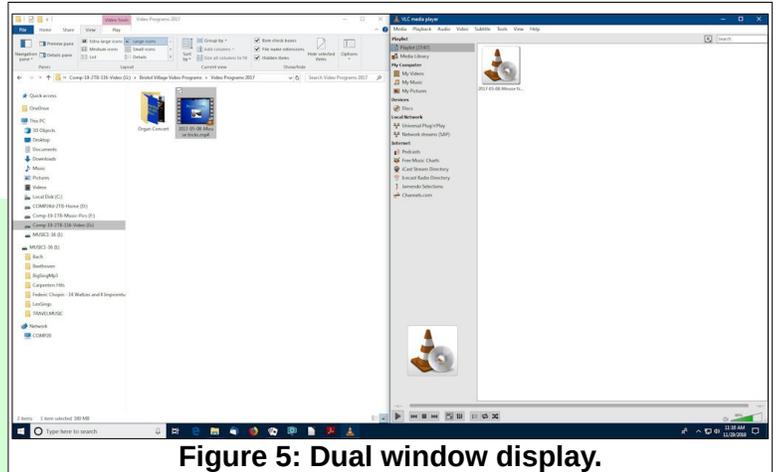


Figure 5: Dual window display.

Your display should now look similar to Figure 5.

- ✓ Locate the desired file using the File Explorer window.
- ✓ Drag and drop the desired file in the playlist window.
- ✓ Repeat this for all desired files.

Saving a Playlist

If you would like to save the Playlist, do the following.

- ✓ After creating a playlist, switch to the VLC Player window.
- ✓ From the **Menu Bar**, select Media, Save playlist to File.
- ✓ Adjust the **Save playlist as...** dialog box to show the directory path and folder where you would like to save your file.
- ✓ Enter a new file name and then select **Save**.

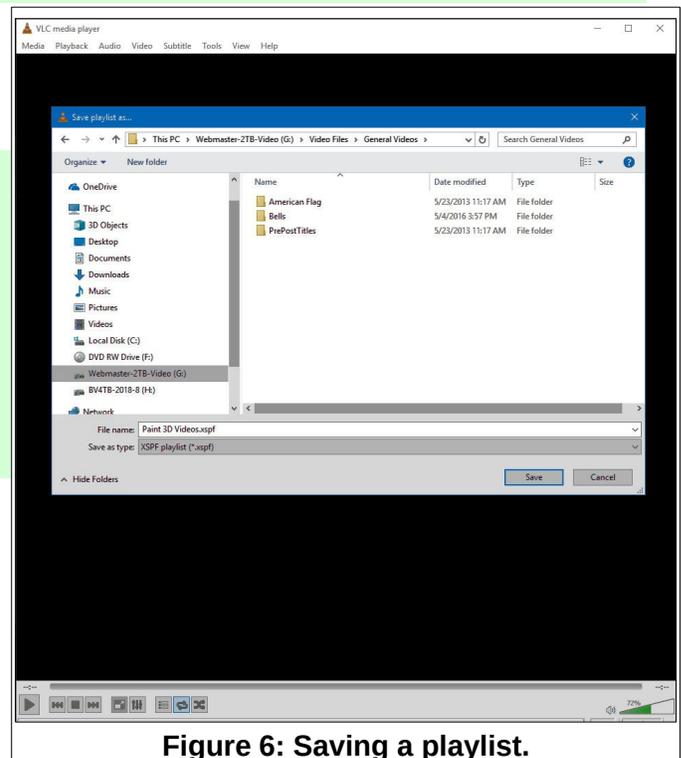


Figure 6: Saving a playlist.

