

3D Left-Eye/Right-Eye

In a typical 3D production workflow, two cameras feed left-eye and right-eye video signals to a Vision QMD or QMD-X Live Production Engine. The switcher processes the two video signals in parallel, applying transitions and effects to both video signals simultaneously. Left-eye and right-eye output video signals are fed out of the switcher and into a video converter that integrates the two video signals into a single 3D video feed.

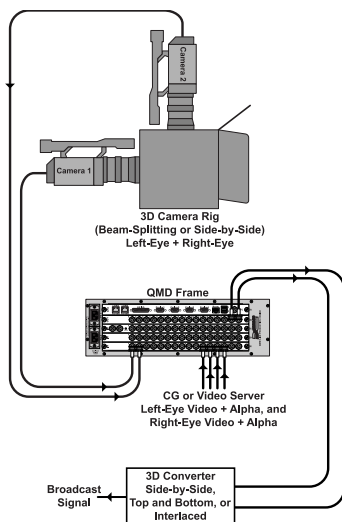


Figure 1: 3D Video Workflow

Parallel processing of the left-eye and right-eye video signals is accomplished using the Auto Follow feature of the Vision QMD/X Live Production Engines. This feature allows you to have one MLE process the left-eye video signal, and another MLE process the right-eye video signal.

Switcher Operation for 3D Production

When the switcher is configured for 3D production, actions performed on one MLE are repeated on the other MLE using the Autofollow feature. This means that you only have to control one of the MLEs, and the other will follow the commands you perform on the first one.

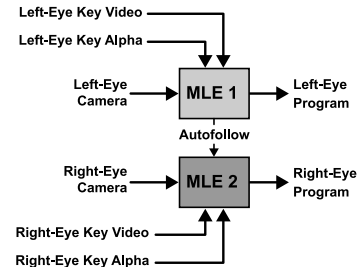


Figure 2: 3D Video Flow

Note the following limitation when working in a 3D environment:

- Auto follow actions only echo commands, and do not echo the state. For example, if a transition is performed on an MLE, the auto follow MLE also performs a transition, regardless of what is currently on-air on that MLE. If Key 1 is on-air on MLE 1 but off-air on MLE 2, the transition takes Key 1 off-air on MLE 1, but on-air on MLE 2.
- If a memory register contains different setting on each MLE, the local settings will be used. For example, if memory register 09 is recalled on the Echo From MLE, memory register 09 is also recalled on the Echo To MLE. These two memory registers may contain different commands.
- Squeeze & Tease[®] MD and Squeeze & Tease WARP[®] effects are not recommended for 3D productions as the output will appear flat. Squeeze & Tease effects, such as sphere or fly key, are not processed in 3D.

Switcher Configuration

To configure the switcher for 3D video production, you will set up autofollows between two MLEs, create bus maps for left and right video sources, and assign those bus maps to the two MLEs.

These procedures assume that you have cabled and mapped the video inputs from the cameras and external devices to the input BNCs on the switcher.

To Set up an Autofollow

In this procedure we are going to turn on the Autofollow option from the Personality Menu, and then set up MLE 2 to follow MLE 1. MLEs 1 and 2 are supported by the

same Video Processor, and MLEs 3 and 4 are supported by another.

This procedure assumes that you have a two (2) MLE QMD or QMD-X Live Production Engine with the same options installed for both MLEs.

Note: *If you have an Octane/QMD-X Live Production Engine, you should not set up auto follows between MLEs 1-4 and MLEs 5-8, as the available resources to these MLEs is not the same.*

1. Press **HOME > Setup > Personality**.
2. Use the **Option** knob to select **Autofolw Pnl**.
3. Use the **Value** knob to select **On**.

The switcher performs command echoing for control panel button presses. This includes memory recalls, transitions, and crosspoint button selection. Custom control or editor based commands are not included.

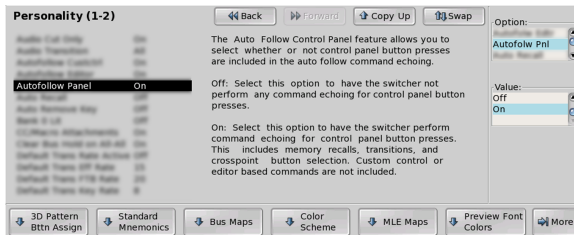


Figure 3: Auto Follow Panel — Personality Menu

4. Use the **Option** knob to select **Autofolw Cust**.
5. Use the **Value** knob to select **On**.

The switcher performs command echoing for the active custom control. Any commands recorded in the custom control for an MLE, bus, or Transition Module, will be echoed on the auto follow.

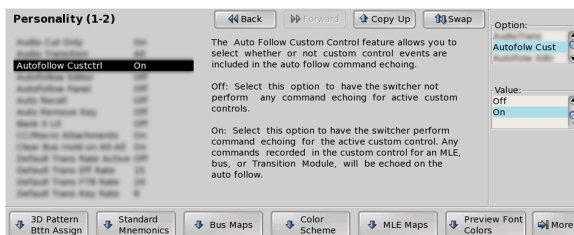


Figure 4: Auto Follow Custom Control — Personality Menu

6. Use the **Option** knob to select **Autofolw Editor**.

7. Use the **Value** knob to select **On**.

The switcher performs command echoing for external editor commands.

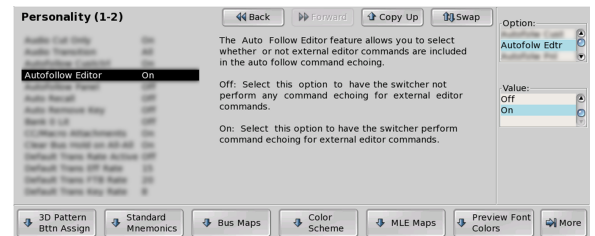


Figure 5: Auto Follow Editor — Personality Menu

8. Press **HOME > Setup > Personality > More > Auto Follow Setup > MLEs**.

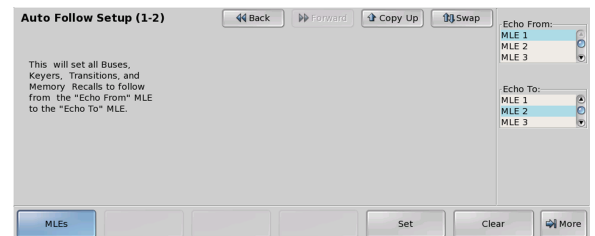


Figure 6: Auto Follow Setup Menu

9. Use the **Echo From** knob to select **MLE 1**. This is the MLE that you perform the actions on.
10. Use the **Echo To** knob to select **MLE 2**. This is the MLE that repeats the actions performed on MLE 1.
11. Press **Set** to apply changes.

Creating Left-Eye and Right-Eye Bus Maps

In this procedure, we are going to create bus maps for left-eye and right-eye video sources.

1. Press **HOME > Setup > More > Bus Map**.
2. Use the **Map** knob to select the Bus Map you want to use for left-eye video sources.
3. Press **Rename Map**.



Figure 7: Rename Map Menu

4. Enter the name **LeftEye** in the New Name field.
5. Press **Accept New Name** to assign the name to the Bus Map.
6. Use the **Map** knob to select the Bus Map you want to use for right-eye video sources.
7. Press **Rename Map**.
8. Enter the name **RightEye** in the New Name field.
9. Press **Accept New Name** to assign the name to the Bus Map.
10. Press **Edit Map**.



Figure 8: Edit Bus Maps Menu

11. Assign sources the Left-Eye bus map.
 - a) Use the **Map** knob to select the **LeftEye** bus map.
 - b) Use the **Button** knob to select the crosspoint buttons that you want to assign video signals to.
 - c) Use the **Source** knob to select the Input BNCs, or internal video signals, that you want to assign to the selected crosspoint buttons. These will be the left-eye only video signals.
12. Assign sources the Right-Eye bus map.

- a) Use the **Map** knob to select the **RightEye** bus map.
- b) Use the **Button** knob to select the crosspoint buttons that you want to assign video signals to.
- c) Use the **Source** knob to select the Input BNCs, or internal video signals, that you want to assign to the selected crosspoint buttons. These will be the right-eye only video signals.

13. Press **HOME** > **Confirm** to accept the changes.

To Assign a Bus Map

1. Press **HOME** > **Setup** > **Personality** > **Bus Map** > **Assign Bus Map** > **Individual Buses**.

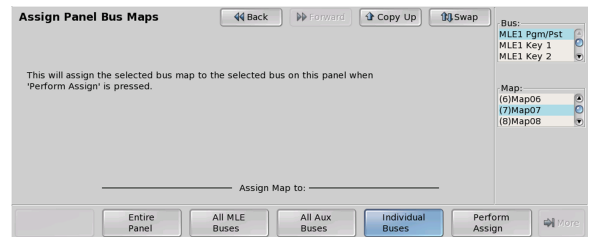


Figure 9: Assign Individual — Assign Panel Bus Maps Menu

2. Assign the LeftEye bus map to MLE 1.
 - a) Use the **Bus** knob to select the **MLE1 Pgm/Pst**.
 - b) Use the **Map** knob to select the **LeftEye** bus map.
 - c) Repeat this for all of the available buses on MLE 1, including Key and Utility buses.
3. Assign the RightEye bus map to MLE 2.
 - a) Use the **Bus** knob to select the **MLE2 Pgm/Pst**.
 - b) Use the **Map** knob to select the **LeftEye** bus map.
 - c) Repeat this for all of the available buses on MLE 2, including Key and Utility buses.

4. Press **Perform Assign** to assign the selected bus map to the bus.
Any action that you now perform on MLE 1 will be echoed on MLE 2 and the correct left-eye and right-eye video sources will be selected.