

ECHOlabs 2500 Switcher Tutorial



- 1.) Input Sources
- 2.) Preview, Program and Insert Bus
- 3.) Transitions
- 4.) Keying

INPUT SOURCES CONTROL ROOM MONITORS

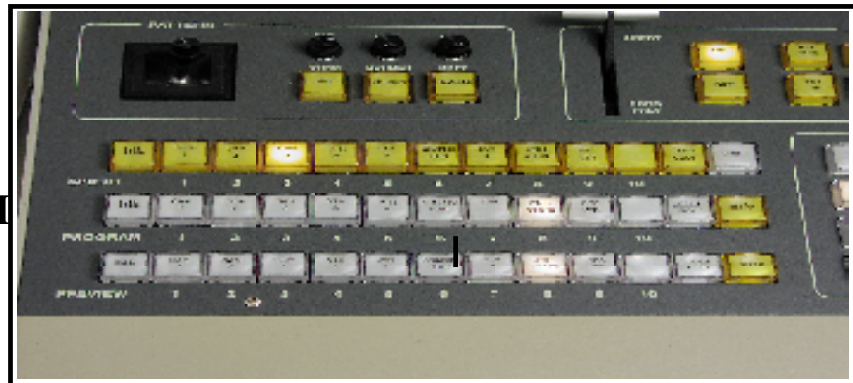
VTR A a) VRT B a) C/G
 b) ADO b) Still Store



CAM 1 CAM 2 CAM 3 PREVIEW PROGRAM STILLSTORE

PREVIEW, PROGRAM and INSERT BUS

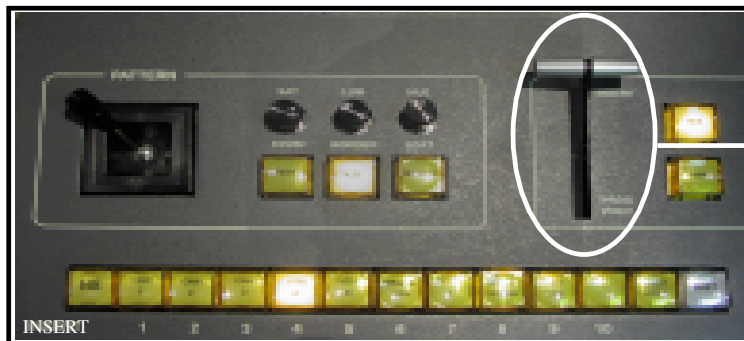
INSERT
PROGRAM
PREVIEW



Buttons from left to right: BLK, CAM1(Input 1), CAM2(Input2), CAM3(Input3), VTR A(Input4), VTR B(Input5), GRAPHIC GEN(Input6), DVE 1(input7), STILL STORE(Input8), REC VRT(Input9), Color Bars (Input 10), COL1/COL2, M/E (on preview & program busses only), SHIFT (on insert bus only)

The **PREVIEW BUS** allows one to view an input before it is “switched” to the program bus.

The **PROGRAM BUS** allows the user to select the input or video source that goes on “air” or is recorded.



**Mixed Effects
Fader Bar**

The **INSERT BUS** is the top row of all yellow buttons directly above the PROGRAM BUS. This row can only be activated if the M/E or “mixed effects” button is pressed on either the PREVIEW or PROGRAM BUS. Also, in order to use this bus, the fader bar directly above must be in the top position, which is labeled insert.

TRANSITIONS OR HOW TO SWITCH

There are 3 ways to transition or switch from one source to another. You can either **WIPE**, **DISSOLVE**, or **CUT**.

To perform a **CUT**, make sure the input you wish to transition to is selected on the preview bus and is on the preview monitor. Push the “**CUT**” button in the “**TAKE**” area of the switcher. This will instantaneously transfer what is on the preview bus and monitor to the Program bus and monitor

To perform a **WIPE** or **DISSOLVE (MIX)**, press the appropriate button in the “**TAKE**” area. The **MIX** button creates a dissolve transition between the preview bus and the program bus. The **WIPE** button accesses the wipe generator to create a wipe transition between the preview and program busses. To change the **WIPE** pattern, type in 1 to 30 on the keypad, then hold down the **SHIFT** button on the **INSERT** bus and the **PATTERN** button located in the “**PATTERN**” area..

To activate either the **MIX** or **WIPE** function simply push the **AUTO** button. The **AUTO** button performs the transition within a pre-designated amount time. To perform the action manually use the **FADER** or **T-BAR**.

To change the rate of the **AUTO** transition for the Mix or Wipe function, select the **MIX** or **WIPE** button, enter the number of frames or time duration of the transition, press **RATE**. Rates for **MIX** and **WIPE** can be set separately.



KEYING

Keying is the process of cutting a hole in a video picture and filling it with another picture. The first action is called “cutting” or ‘Key select”. The second is called “filling” or “Fill select”.

There are two main types of keying on this switcher. **UP-STREAM KEYING** and **DOWN-STREAM KEYING**.

UP-STREAM KEYING is the process of adding your key effect before your program bus. This allows you to preview the effect before it is aired or recorded.

DOWN-STREAM KEYING adds the effect to the picture after the program bus. It is the last signal added before going “on-air” or to the record machine.

To perform an **UP-STREAM KEY**:

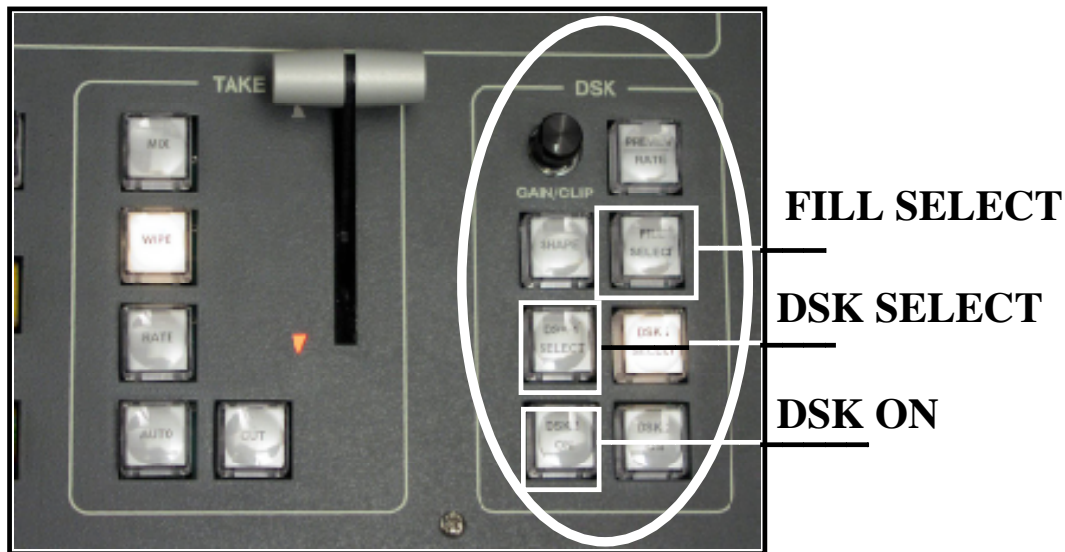
- 1.) Press the **M/E** button on the Preview bus.
- 2.) Select the input you wish to key over on the **INSERT** bus.
- 3.) Press which **KEY** (Key Select 1 or 2)
- 4.) Press **FILL SELECT**. To select a source use the + or - on the key pad. (The Key Select is programmed to follow the selection made by the Fill Select)
- 5.) Activate the key by pushing the “**KEY ON**” button.
- 6.) Set the “**GAIN**” by holding the “**Shift**” key down on the “**Insert**” bus and adjusting the **Gain** knob.
- 7.) Set the “**CLIP**” level by rotating the clip knob.

(The desired result with the Gain and Clip is a crisp clearkey without affecting the background picture)



REMEMBER: Always turn off your key by pressing the “**ON**” button again.

DOWN STREAM KEYING



DOWN STREAM KEY (DSK) adds a key effect to your video signal **AFTER** the program bus. Performing a **DOWN STREAM KEY** is the same as an up stream key. You select which key (Only DSK SELECT 1 works) and then the FILL SELECT. You can only preview the effect by holding the shift button and pressing the PREVIEW/RATE button. A better method if you planning on using the DOWN STREAM KEY is better to set GAIN and CLIP before the program or recording starts.

REMEMBER: Always turn off your key by pressing the “ON” button again.