

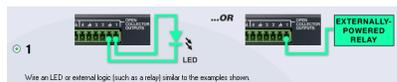
## Automix Matrix 780: Camera Following Through Logic Triggering

The Automix Matrix 780 from Symetrix is a complete, fully-optioned 12-channel automixer with eight submixes. The 780 is designed for applications such as courtrooms, government chambers, corporate boardrooms and houses of worship. These types of installations are often video integrated, so this tech tip will illustrate how to set up a 780 to trigger external logic so a video camera, for example, can follow an active microphone.

The 780 features 4 open collector outputs. These outputs can integrate with external logic and automation systems. The engineers at Symetrix have designed the 780 to save you time and money by inserting a feature into the External Controller Wizard that links the open collectors' states to a channel "on" LED in the gating automixer. Using this feature, you can trigger external 3rd-party devices based upon a channel's on status.

### Configuring the Open Collector Outputs:

1. Open the External Controller Wizard from the Tools menu of the 780 software. Click on Add New External Controller, select Open Collector Output, then click Next.
2. Name the output, choose Follow Gating Automixer Channel "ON" LEDs, then click Next.
3. From the Parameter drop-down menu, choose the channel you wish to trigger the logic, then click Next.
4. Now choose which output wiring configuration you will be using and click Next.



5. Determine in what state you would like the signal to go high (3V) or low (0V).
6. Click Next to program additional triggers (repeat steps above), otherwise click Finish.

### Dialing in the Automixer:

If you carefully configure the gating automixer for your environment, it will help guarantee that your logic outputs for video switching will be dialed in as well. Just as with the gating and mixing of the audio, you will want the video triggers to not "chatter" or toggle too quickly between high/low states.

First, set up the automixer to your liking for audio alone. (Refer to the "Automix" portion of the Help file in the 780 software for more information.) Then, check to make sure the logic output is acceptable to the receiving 3rd-party device based on these settings. You may need to make further adjustments to some of the automixer's parameters in the 780 software. Specifically, the hold time may need to be lengthened to avoid unwanted audio and/or camera "chatter." If possible, additional logic may also need to be performed on the receiving end device (downstream from the open collector outputs) so that the logic is optimized for whichever device(s) you are using to switch camera positions.

### Push data via RS-232 or Ethernet:

The 780, like all Integrator Series products, can be easily controlled by 3rd-party RS-232 or Ethernet controllers. Integrator Series products can also send out unsolicited control data to an external device. Any parameter that can be externally controlled can be set up to automatically send out their values when a change occurs. This method is referred to as "pushing data" and can be helpful for camera/video switching scenarios as well.

The channel on LED control numbers for the 780 are as follows:

194, 294, 394, 494, 594, 694, 794, 894, 994, 1094, 1194, 1294

Band 8 Gain	180	280	380	480	580	680	780	880	852	852	852	
Automixer Channels												
Channel Fader	190	290	390	490	590	690	790	890	990	1090	1190	1290
Channel Auto Button	191	291	391	491	591	691	791	891	991	1091	1191	1291
Channel Mute Button	192	292	392	492	592	692	792	892	992	1092	1192	1292
Channel Automix Priority	193	293	393	493	593	693	793	893	993	1093	1193	1293
Channel On LED	194	294	394	494	594	694	794	894	994	1094	1194	1294
Channel Gain Meter	196	296	396	496	596	696	796	896	996	1096	1196	1296
Post-Automix Meter	199	299	399	499	599	699	799	899	999	1099	1199	1299

The first digit in these controller numbers corresponds with the channel number. (These numbers are listed in the Controller Assignment Tables portion of the Help menu.)

To enable "pushing data" for these controller numbers, use the Push Enable command (PUE) followed by the number you wish to enable. For example, to enable the pushing of data from the channel "on" LED for channel 6, the command would read:

PUE 694

Refer to the Control Protocol section of the Help menu for detailed information.

