

## **Extron Switcher Interface to HJT Model 250**

This appendix provides instructions on how to set up and configure the projector for proper operation with Extron Switchers 10+, 8, and 4LD.

The baud rate for the Extron switchers is 19200. Since Port A is locked to a baud rate of 9600, Port B should be used for Extron Switchers. The projector port assignment must be selected and the VIC channel assignment must be edited for a switcher.

To select the Baud Rate:

1. From the Main Menu, select #7, System, then #4, Comm. Setup.
2. From the Comm. Setup menu, select Port B Speed.
3. From the Speed selection list, select 19200.
4. Press Escape to go back to the Comm. Setup level.

To set the projector port assignment:

1. From the Comm. Setup menu, select Port B Device.
2. From the Device Type list, select #3, Switcher.
3. Turn power off at the remote control.
4. Wait until the Arc Lamp fans have stopped running, and provide a system “cold boot” by toggling the circuit breaker on the projector rear panel to Off, then back to On.

To edit the VIC channel assignment (see the Model 250 User’s Guide, Section 5.3.1 for more information on editing):

1. From the Channels list, select the channel that the switcher will be assigned to.
2. Press Mode. This is a toggle key that brings up a submenu for editing. (Pressing Mode again removes the submenu.)
3. Select Edit from the submenu and press Enter.
4. Use the right arrow key to toggle over to the third VIC column.
5. Press Enter and use the up/down arrow keys to select the current switcher channel number. Press Enter when the current switcher channel number is shown.
6. Press Escape to exit the Edit mode.

**Extron Switcher Configuration:** The Extron switcher must have two important parameters for it to work optimally. First, it must be in the “Master” mode. If in “Slave” mode, the display power and mute buttons are internally inhibited. Second, it must receive a projector “Power On” message. This message is sent routinely during a projector “Power On” sequence. If the “Power On” message is not received due to cabling problems, baud rate problems, projector configuration, or switcher emulation problems, the mute will not work properly. In addition, all Extron switchers must be configured to use HJT protocols and 19200 baud rate

(Hughes emulation). This is usually done at Extron and a “Configured for Hughes” sticker is placed on the back of the unit. The service manual for each unit describes how to reset the system to a state compatible with the HJT protocol, if necessary.

**Extron User’s manual inaccuracies:** Early revisions (up to Rev C) of the Extron Model 8 and 10 User’s Manual describe incorrect configuration procedures for setting Master mode. Specifically, the description shows that when switch 4 of the address switch block is set to the closed position it enables the configuration mode. The correct position for this switch is the opened position. A correct example for setting the Model 8 and 10 switchers is detailed below.

**Key Operational Differences between switcher models:** The switcher firmware for Model 8 and 10+ function differently from the Model 4 firmware. Switching on the Model 8 and 10+ always occurs independently of the projector. For example, when a channel switch is pressed on the Model 8 and 10+, the switcher automatically selects that channel after a short time period (~2 seconds). This channel switching occurs even if a projector is not connected to a switcher. When a projector is connected to a Model 8 or 10+ (and the communication interface is working properly) and a channel switch is pressed, the projector normally changes the channel **immediately** (before the 2 second time period has expired).

On the Model 4LD, there is no automatic channel switching. Channel switching is prohibited unless commanded by the projector. If the communication interface between the switcher and projector is not functioning properly, no channel switching occurs.

**Switcher to Projector Configuration Example:** The following provides an example of how to configure an Extron Model 8 Switcher to a Model 250 Projector:

1. Connect the switcher to the projector, Port B.
2. Set Comm. Setup to Port B.
3. Set the Port B baud rate to 19200.
4. Turn power off at the remote control (or PC).
5. Wait at least one minute, for the system to reach an “Off” state from Step 4, then toggle the circuit breaker on the rear panel to Off and then back to On.
6. Verify that the Model 8 Switcher internal dip switches are set to “Hughes Emulation” and the baud rate is set to 19200 (use the Extron manual to confirm this).
7. Turn power on to the Model 8 Switcher.
8. Set the Model 8 external “address” dip switch #4 to the open position.
9. Set the Model 8 external “address” dip switch #5 to the closed position.
10. Wait 10 seconds.
11. Set Model 8 external “address” dip switch #4 to the closed position.

12. Turn power on at the remote control.

13. Edit the VIC channel assignment (see section on VICs).

Note that Steps 8 and 11 are incorrectly stated in early versions (Rev C or earlier) of the Extron System 8 and 10 User's Manual. The correct steps are shown above.

**Failure Diagnostics:**

If the channel change, mute and power buttons on the switcher ALL do not work properly, check the cabling, baud rate, or emulation. This is an indication that data is not being sent properly between the switcher and the projector.

If the channel change buttons work, but the mute and power buttons do not, check the switcher master mode setting. This is an indication that the switcher is in slave mode.

If the channel change and power buttons work, but the mute button does not work, turn power off on the remote (or PC), wait until the Arc Lamp fans have stopped running, then toggle the projector circuit to Off. This problem is an indication that the switcher did not receive the projector "Power On" command.

