

## Technical Bulletin

### No: 133 – Post Fader Patch Point for Millenium Series Console

The standard channel patch point available on a 5-pin connector (J-8) is Pre-Fader and Pre-ON/OFF Switch.

**A Post-Fader, Post-On/Off Switch** patch point can be obtained on the Millenium series console at integrated circuit U8 pin 1 (left), and U8 pin 7 (right) on the six channel input board. The connection should be made after C35 and C36 and isolated by a  $2.0 \Omega \frac{1}{4} w$  resistor. Access to the leads of this capacitor is only via the underside of the large 6-input circuit board. This wiring must be duplicated for every channel that a Post-Fader, Post-On/Off Switch patch point is required.

**To obtain a Post-Fader, Pre On/Off Switch** patch point, the wiring in the paragraph above must be performed, as well as disabling the On/Off switch control of the VCA's\*. The easiest way to do this is by removing a resistor from the Six Channel Control Board. The channel will still be turned off at U9 and U10 but the level up to that point will still be controlled by the fader. This wiring must be duplicated for every channel that a Post-Fader, Pre-On/Off Switch patch point is required.

Remove R11 for Channels 1,7,13  
Remove R30 for Channels 2,8,14  
Remove R48 for Channels 3,9,15  
Remove R66 for Channels 4,10,16  
Remove R84 for Channels 5,11,17  
Remove R102 for Channels 6,12,18

\*The gain of the DBX VCA's, U5 and U6, is controlled by the fader DC voltage at J9-15. The voltage at J9-15 is controlled at two sources; the fader and Q10 on the input control card. When the channel is turned on, a voltage is fed to the base of the Q10 from U2 pin 4 to turn the transistor off and allow the fader to control the gain. When the channel is turned off the voltage on the base drops to turn Q10 on and pull the voltage at J9-15 high, which causes the gain of the VCA's to reduce to a minimum level. The voltage, which controls the base of Q10, is also fed to the PGM select, AUD select and MONO select switches. When this voltage drops to a low level, the PGM, AUD and MONO buses are de-selected at U10 and U9.



601 Heron Drive  
Logan Township, NJ 08085  
Phone: 856-467-8000 • Fax: 856-467-3044  
<http://www.radiosystems.com>