Technical Bulletin
No: 116 – Post Fader, Pre On/Off Switch Patch Point

Model: RS-6/12/18/24 **No:** 116

Subject: Post Fader, Pre On/Off Switch Patch Point **Date:** 03/15/95

Symptom: Certain customers may required patch point audio which can be controlled by the fader but not by the channel on/off switch.

Solution: Patch into the audio path after the fader controlled VCA's and disable the on/off switching effect on the audio at this point.

Procedure: A post-fader pre on/off switch patch point can be obtained on the RS Series console at U8 Pin #1 (left) and U8 Pin #7 (right) on the six channel input board. The patch should be made after C35 and C36 and isolated by a 2.0k ohm ¼ W resistor.

The gain of the DBX, VCA's, U5 and U6 is controlled by the fader DC voltage at J9-J15. The voltage at J9-J15 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 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-J15 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, and select and Mono select switches. When this voltage drops to a low level the PGM, AUD and Mono Busses are deselected at U10 and U9.

To obtain a post-fader pre on/off switch patch point the On/Off switch control of the VCA's must be disabled. The easiest way to do this is by removing resistor R34 from the input control card. The channel will still be turned off at U9 and U10 but the level up to that point can still be controlled by the fader.

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