

INSTALLING THE TB-4 WITH A MULTI-POLE TALKBACK SWITCH

On some consoles, the talkback switch is multi-pole which means that when its button is pushed, several contacts are made mechanically inside the switch (4 contacts – or poles – on the drawing at right).

To be able to “remote” such a talkback, a modification is required so that the actual switching is made by an electronically controlled relay rather than by a mechanically activated switch. The talkback operation is unchanged since the original switch is still used but in the modified layout the switch now activates the installed relay.

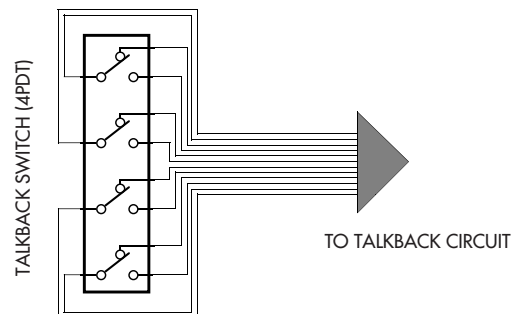


Figure A - ORIGINAL LAYOUT

MODIFICATIONS INSTRUCTIONS

1. Disconnect the switch from the talkback circuit:

- If the switch has wires connecting it to the circuit board (as with *Neve 80 series* consoles): cut the wires (be sure to document each wire before cutting them) - see figure B
- If the switch is mounted on the circuit board (as with the *Trident 80* or *Soundcraft 600* console): de-solder the switch and remove all its internal sliding contacts except for one (it will be used to activate the relay); bend the leads connected to that one contact and solder the switch back in its place - see figure C. NOTE: Make sure the bent leads don't touch the pads that they were previously soldered into; use fish-paper for insulation if necessary.
- If the switch is PC mounted and the internal contacts are not removable: cut the PC traces connected to the switch.

2. Install the relay:

Select a relay of the same configuration as the talkback switch (4PDT in the illustrations) that can be powered by the DC voltage available on your communication module (a regulating diode can be used if needed).

Mount it near the talkback module and wire all its poles to the talkback circuit as the switch was in the original layout (in figure C, the relay's poles are wired to the switch pads; solder wires on foil side after modified switch is in place).

Select one of the poles of the talkback switch to activate the relay; connect its common lead (2) to ground and its normally open lead (1) to the coil's minus side (-); connect the DC voltage to the plus side of the coil (+).

NOTE: USE LED OR LAMP POWER AND GROUND, NOT AUDIO!
To avoid pops and clicks, put a damping diode (1N4001) and a capacitor (.1µf disc) across the coil.

3. Install the TB-4 communicator:

Connect one of the 3 Communicator's relays in parallel with the console's switch. Use pins 1 and 2 on the communicator's terminal strip (normally open position).

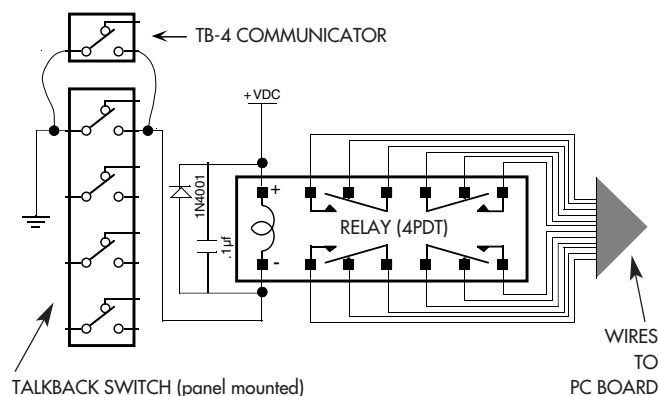


Figure B - MODIFIED LAYOUT 1

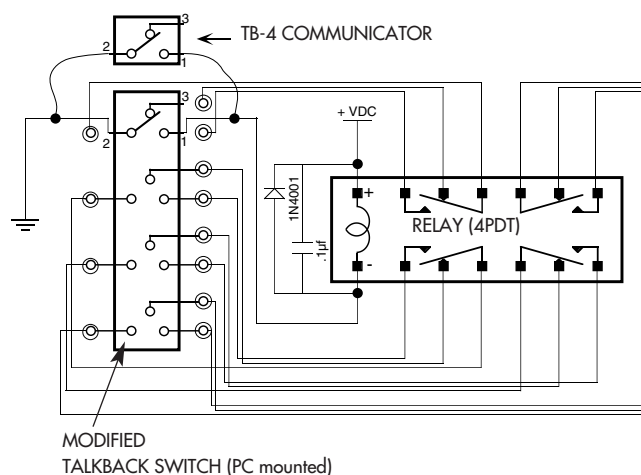


Figure C - MODIFIED LAYOUT 2