

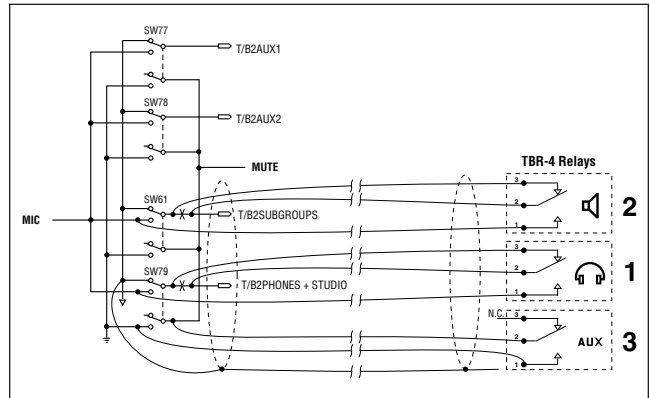
# Mackie 8 bus

## Installation instructions for the Brainstorm TB-4 Communicator

The talkback switches on the Mackie 8-Bus have two poles: one mutes the monitors and the other routes the mic to the talkback destination. You need to use 2 of the TB-4 relays to remote these switches, one for each pole.

To remote one Mackie TB switch only, connect the TB-4 receiver relays 1 & 2 (Headphones & Speakers) to each pole of the Mackie TB switch and set the TB-4 transmitter's selector switch to position 2 (arrows). In this position, the receiver's relays 1 & 2 are activated simultaneously.

To remote two switches on the Mackie, first modify your TB-4 receiver so that whenever relays 1 or 2 are activated, relay 3 is also activated (ask your dealer for a copy of TBR-4 Mod 1). Relay 1 will route the mic to destination 1, relay 2 will route it to destination 2 and relay 3 will mute the monitors. You can then select switch 1, switch 2, or both simultaneously on the transmitter.



Schematic Diagram for 2 TB switches

The schematic diagram above illustrates the connections required for remoteing the "Headphone + Studio" and "Subgroup" (Slate) switches. Cut the 2 traces where indicated ("X") and solder the wires. Since the wires carry line level audio (TB-mic), use a shielded cable to avoid hum.

### Installation

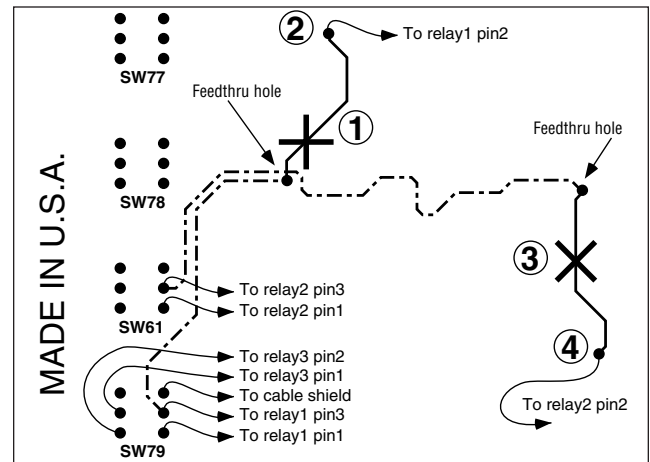
1. All the work can be done from bottom side. Turn console face down. Do not remove screws or knobs on top side. To remove the bottom cover:

- remove side covers (3 large screws)
- remove top & bottom row of screws (about 10)
- remove side small screws (3 or 4 per side) - re-install these first upon re-assembly

2. Locate the feedthru holes indicated on drawing at right (use a continuity tester to make sure you found the right one).

3. Cut the traces where needed: for SW79 (phones & studio) cut at "1"; for SW61 (Slate), cut at "3" (see drawing at right)

4. Use a punch to enlarge the small MIDI plastic plugged rear panel hole near the power entry connector.



Mackie 8 bus Communication module - Foil side  
(dotted lines represent traces on components side - solid lines, on foil side)

5. Install an 8 pin DIN panel connector (rear mount). The two screw holes may have to be filed open larger to make a clearance for the mounting screws.

6. Make the connections between the TB circuitry and the DIN connector: solder wires (5 or 8) and shield to the switch pads as indicated above and to pads "2" and "4" (if needed); solder the other ends to the DIN connector.

7. Make a cable to connect the TB-4 receiver screw terminals to the DIN connector; 5 wires for "Studio" only. Add 3 more wires for second function (i.e. Group Talkback). If necessary, the cable can be fairly long. We've run it over 30 feet with no problem. Recommended: 5 wire shielded flexible cable - Mogami 2002.