TAIT T800 II MODS FOR ASTERISK INTERFACE

RX MODS:

Background:
Need to bring out raw discriminator to the main D range.
Pin 6 is used for “AUDIO 1” and is set for de-emphasis.
Pin 8 is used for EXT SPEAKER.
Pins 1-4 are used for LINE O/P.
There is no extra spare pin on the Main D range so the primary serial port on pin 7 will be used for DISC. O/P. Serial port can be used through the secondary D range on the module.
This mod will not affect the ability to program the modules in the rack.

T835 MODS:

1) Remove R808 on the MCU area to isolate the main serial com port from Pin 7 on D range. See Figure 1.
2) Connect a wire from P207 to P252 or P254 or “AUDIO 2” in the audio processor. This will put Raw discriminator audio on the “Audio 2” bus and to Pin 7 on the main D range (Figure 2).
3) Set audio jumpers.
4) On the Back plane PCB (T800-50-000) set LN6 from the 1-2 position (Def) to 2-3. This will point the Rack serial port to the secondary D range connectors on the RF modules.

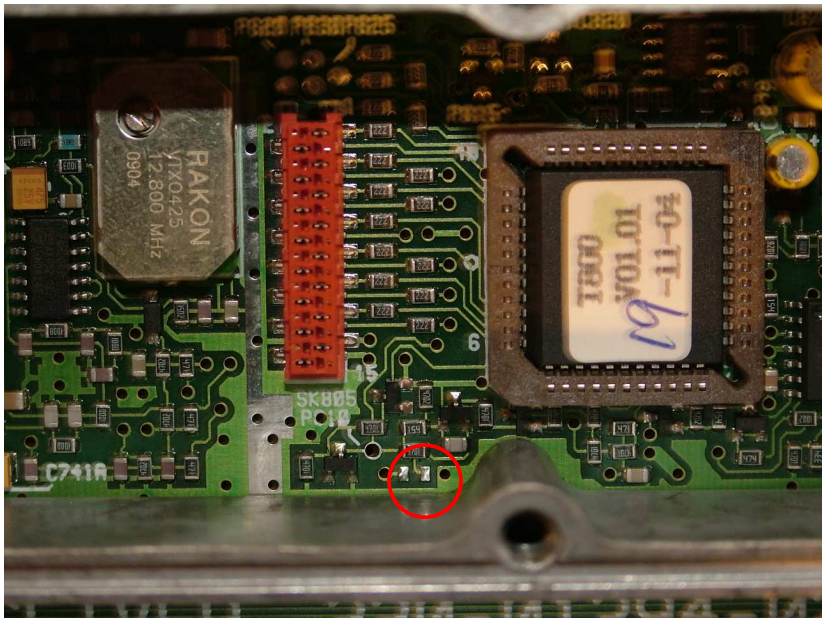


FIGURE 1: Remove R808

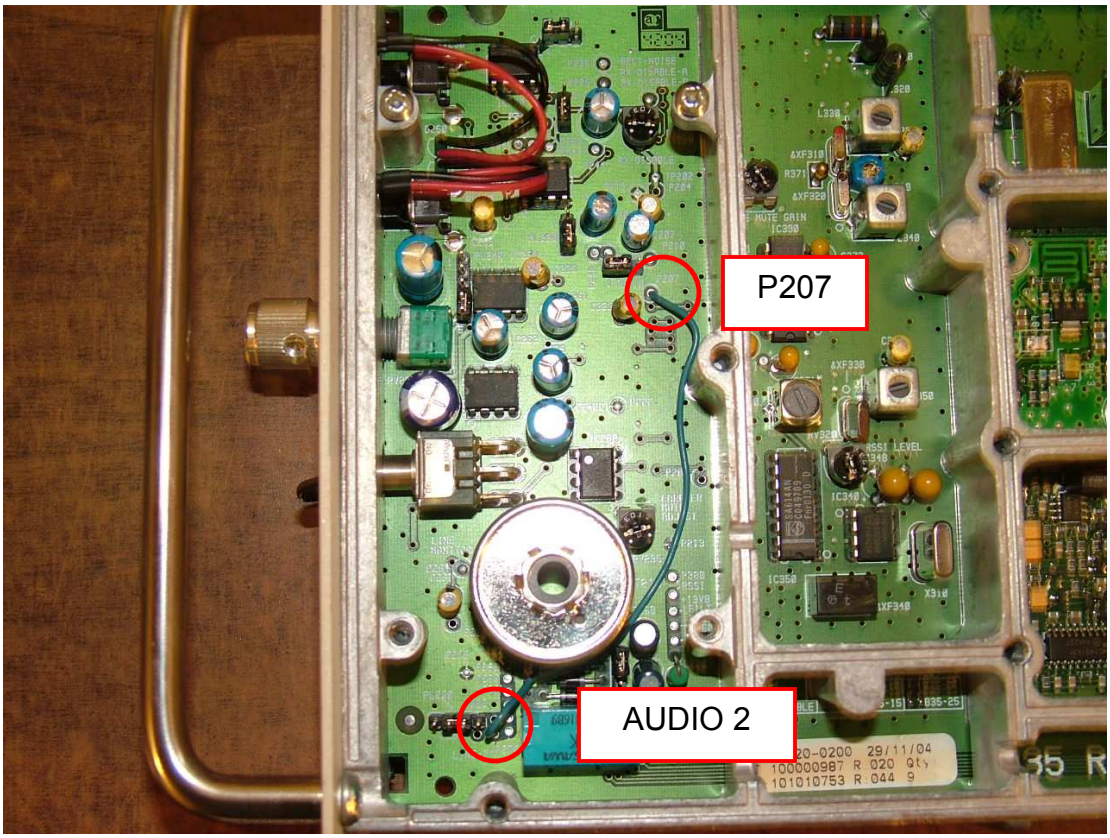


FIGURE 2: Install Wire From P207 to AUDIO2 or P252

TX MODS:

Background:

Pin 6 is used for “AUDIO 1” and is set for pre-emphasis. (Mic input)
Pin 8 is used for EXT PL IN but will accept direct mod with LPF of 5K. Hi drive level is required.
Pins 1-4 are used for LINE I/P.
There is no extra spare pin on the Main D range for the RX module so the primary serial port on pin 7 is used for Disc out. This line is shared via the back plane to pin 7 on the main D range on the TX module also.

Pin 7 must be isolated from the serial port and any audio buses internally.
The Serial port can be used through the secondary D range on the module.
This mod will not affect the ability to program the modules in the rack.

T836/7 MODS:

1) Remove R150 to isolate pin 7 on the main D range from AUDIO 1 and AUDIO 2 buss. This also isolates the exciter from Disc. Audio from the RX module via the back plane. See Figure 3.
2) Remove R808 in the MCU area to isolate the main serial com port from Pin 7 on the main D range (Figure 4).
3) Set jumpers.
4) On the Back plane PCB (T800-50-000) set LN6 from the 1-2 position (Def) to 2-3. This will point the Rack serial port to the secondary D range connectors on the RF modules.

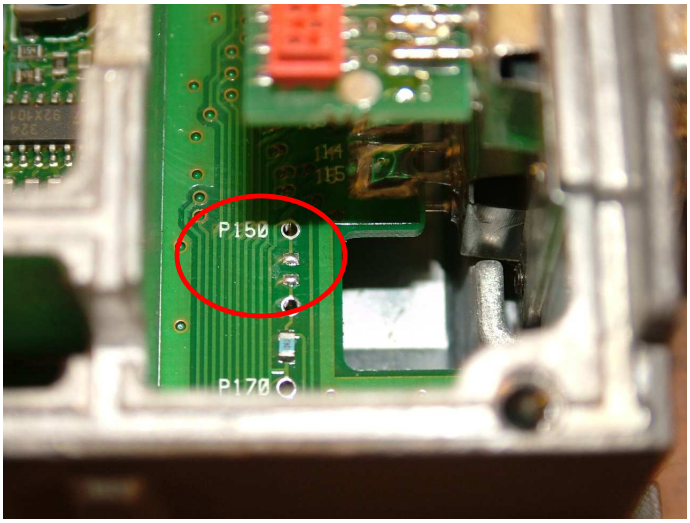


FIGURE 3: Remove R150 Near Main D Range

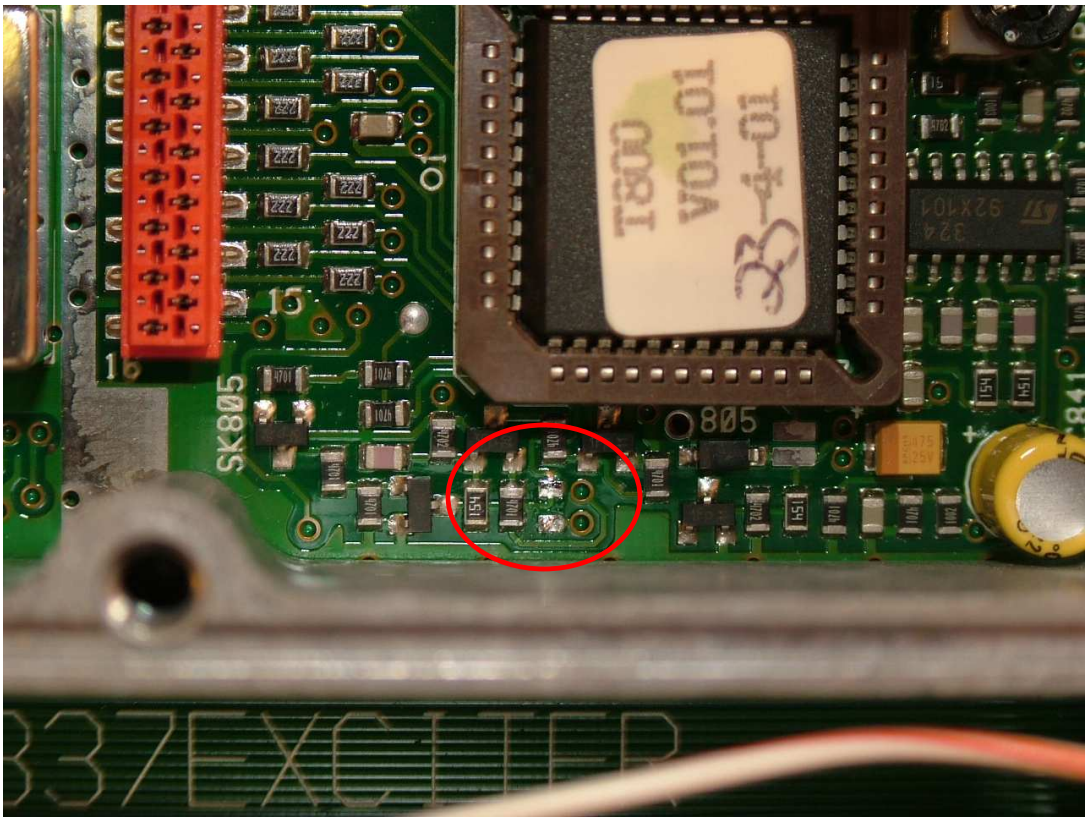


FIGURE 4: Remove R808 Near Micro

BACKPLANE MODS:

If the RF modules are installed in the T800 rack, then configure the back plane jumpers so that there is no internal audio crossover and isolate the PTT from COR.

Set jumpers as per Figure 5 and Table 1.

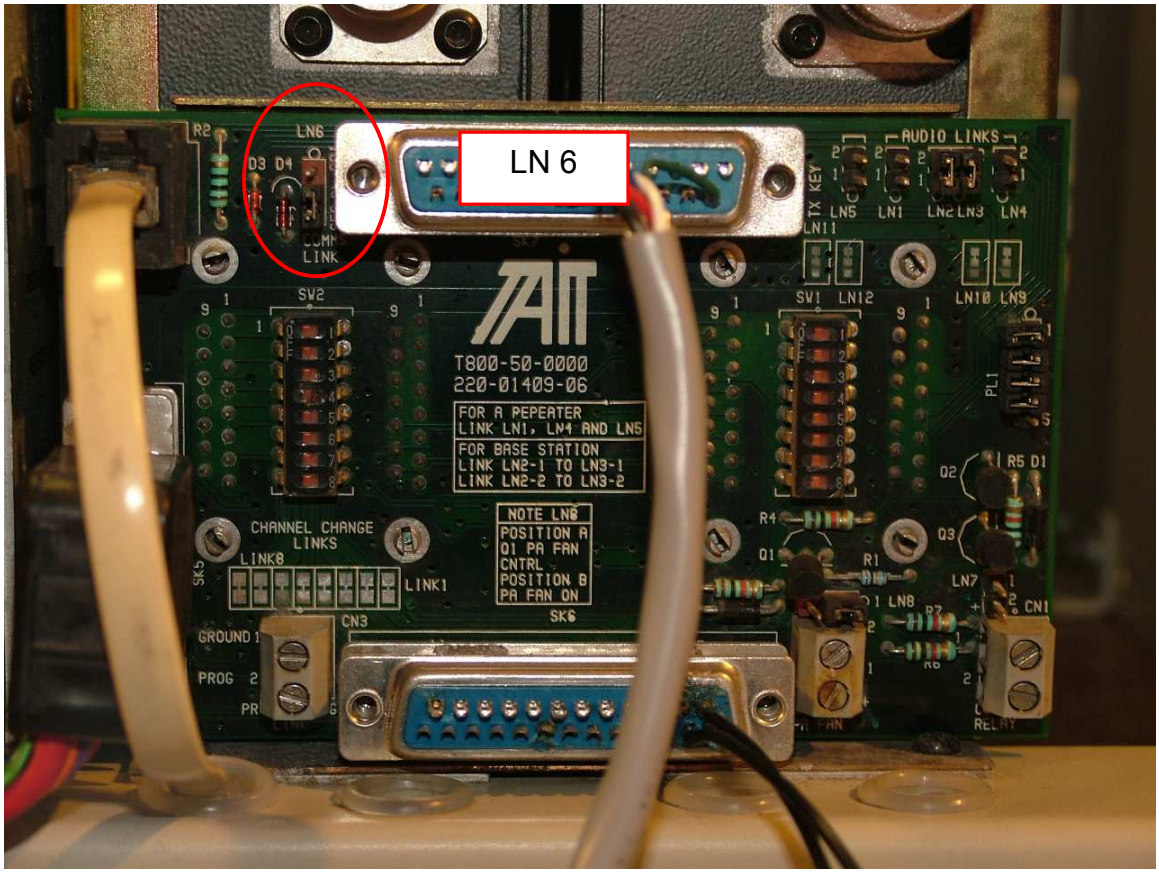


FIGURE 5: Back Plane Setup

LN 1	OUT	LN 5	OUT
LN 2	IN	LN 6	2-3
LN 3	IN	LN 7	OUT
LN 4	OUT	LN 8	2-3

TABLE 1: Back Plane Jumper Setting

Connect harness as shown in Figure 6 for interface to an external controller.

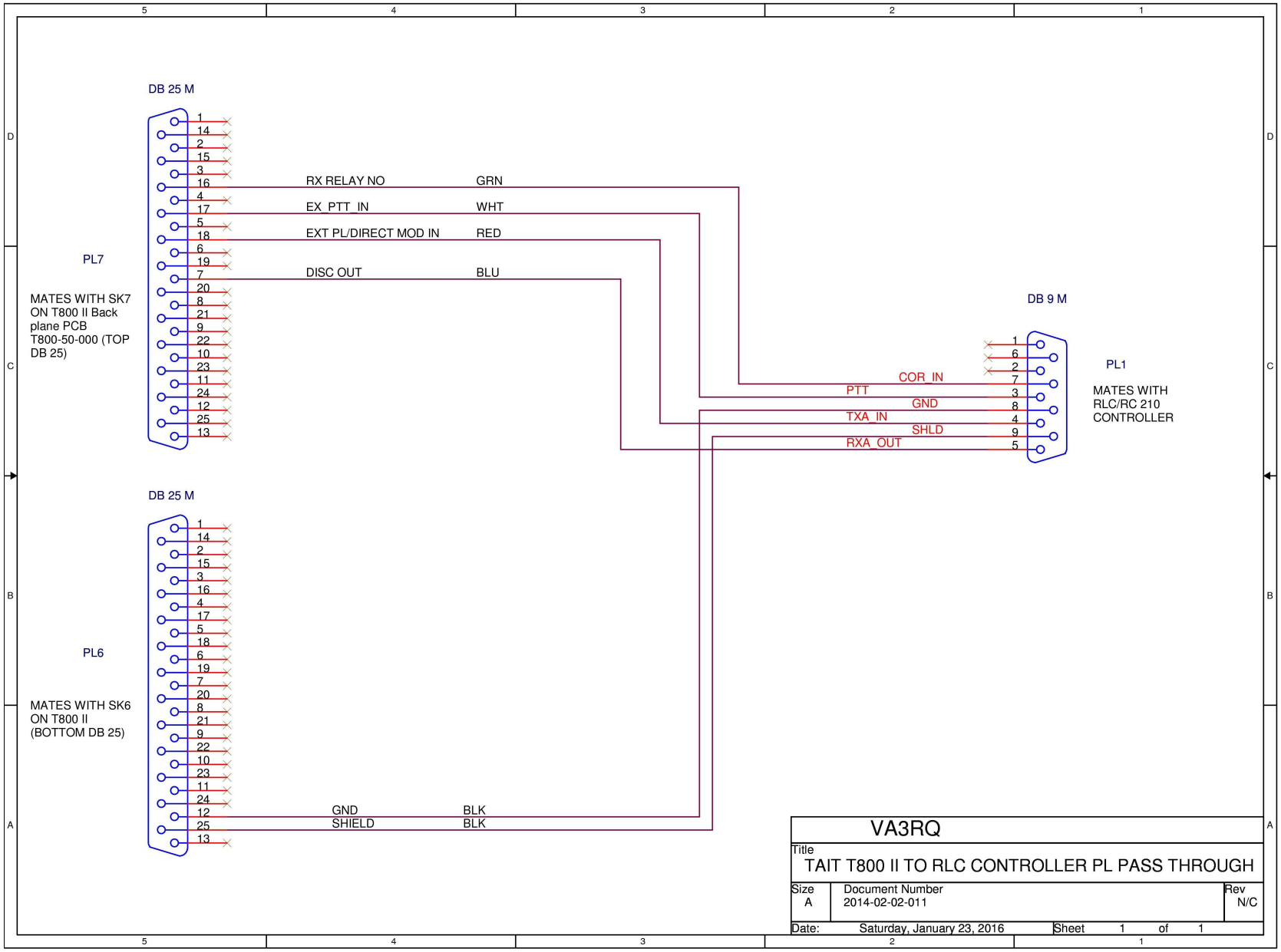


FIGURE 6: T800 II Interface Wiring Harness