Replacing T800 Series I Equipment in TaitNet Trunked Networks with the Series II Equivalent

18 November 1999

Tait can no longer supply some T800 Series I radio equipment. This technical note explains what to do if a T800 Series I receiver, transmitter, or exciter that is part of a TaitNet trunked radio network needs to be replaced when Series I modules are no longer available.

You need to obtain the Series I compatible Series II equivalent of the module you want to replace (T8xx-xx-0300). The Series I compatibility enables the Series II module to fit into the T1500-56-232 (formerly T800-56) racks that house your trunked equipment. The modules must be modified as described below. (The existing fitting instructions for the T1500-50 and T1500-51 kits only apply to Series I equipment).

All modules need a second D-range. Transmitters or exciters need to be fitted with a T1500-51 trunking transmitter interface board. This technical note gives instructions for these modifications. Instructions and illustrations are for the T83x range but apply with minor variations to other ranges.

Components required

T1500-50 kit, containing the following:

1 x D-range plug assembly and wires
1 x D-range socket (not required)
2 x locating pins, nuts, and washers

T1500-51 kit, containing the following:

1 x T1500-51 PCB complete with wires and sockets
2 x M3 x 8 mm Taptite screws
1 x T800-03 auxiliary D-range kit containing the following:

1 x D-range plug assembly
1 x D-range socket (not required)
2 x locating pins, nuts, and washers

Note These components could be recovered from the Series I equipment being replaced.

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Modifying the Receiver

1. Remove the two screws and cover plate over the second D-range mounting hole.

2. Take the D-range plug assembly. Insert its brown and red wires through the hole and position the assembly with the same orientation as the D-range already fitted.

3. Fit the locating pins through the D-range and chassis, securing each with a nut and washer.

4. Connect the brown wire (Audio FFSK Out) to P244, as shown in Figure 1.

5. Connect the red wire (Line Monitor) to P284, as shown in Figure 2.

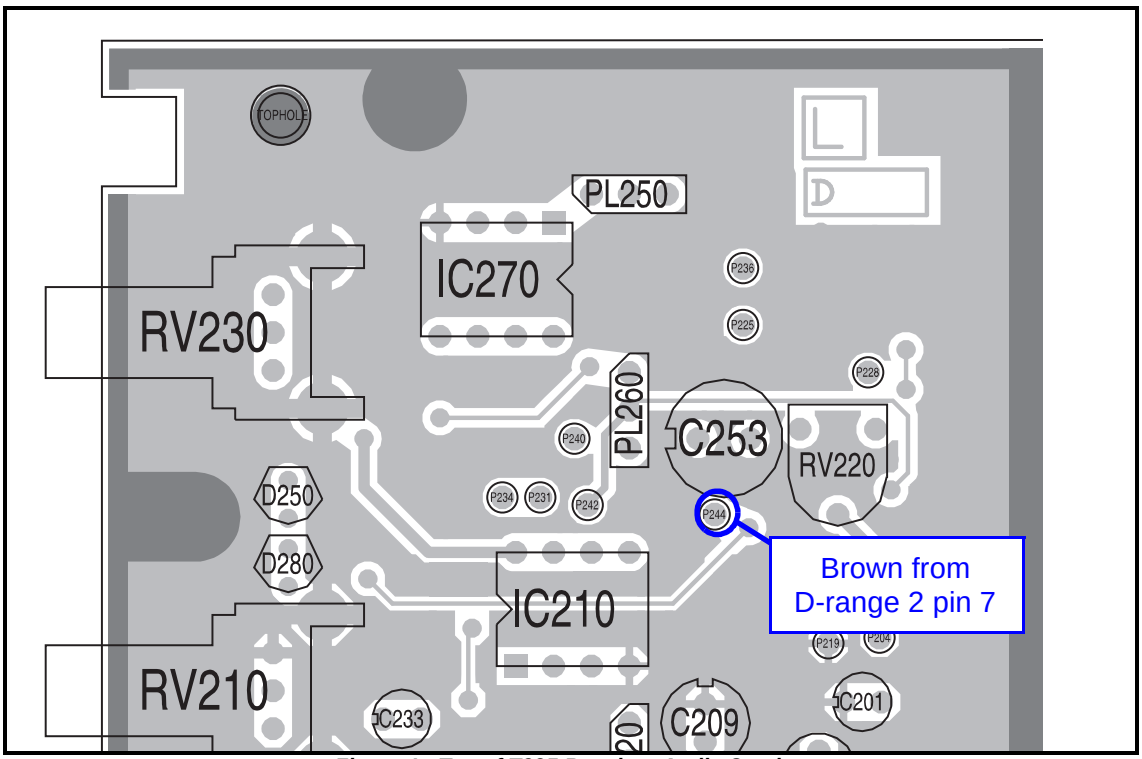

Figure 1 Top of T835 Receiver Audio Section

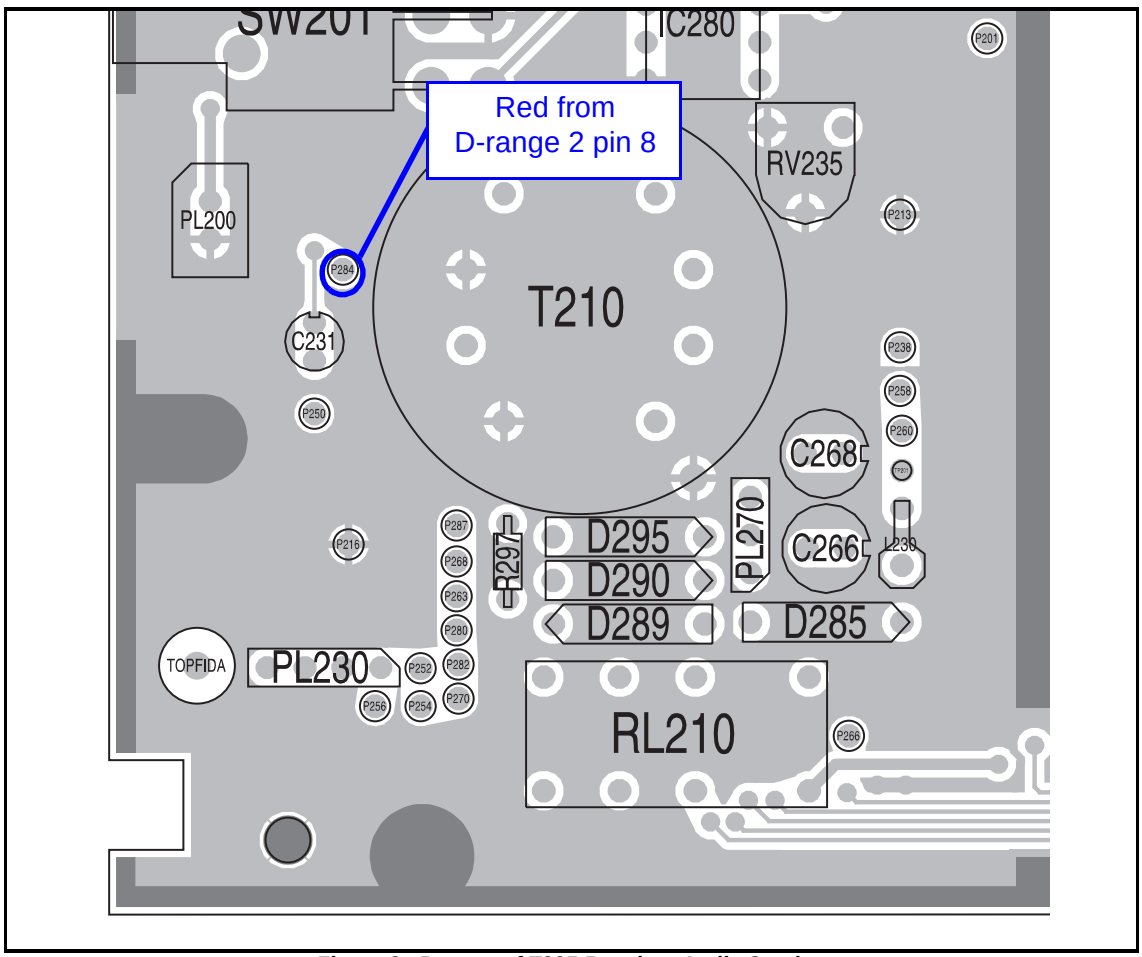

Figure 2 Bottom of T835 Receiver Audio Section

Modifying the Transmitter or Exciter

1. Remove the T800 transmitter top and bottom covers.

2. Remove the cover plate from the second D-range mounting hold and fit the auxiliary D-range plug with the supplied locating pins, nuts, and washers.

3. Remove the shorting links from L and E and fit them to B and H (see Figure 3).

4. Fit the connector with the blue and violet wires to L (see Figure 3).

5. Fit the connector with the yellow and green wires to E (see Figure 3).

6. Connect the blue wire (TX-EN-OPT) to P215 or P217 (see Figure 3).

7. Connect the red wire (+9 V) to P230, P240, or P239 (see Figure 3).

8. Connect the black wire (GND) to P259, P261, or P263 (see Figure 4).

9. Connect the green wire (EXT FFSK) to pin 7 of the second D-range.

10. Connect the white wire (EXT PTT) to pin 13 of the second D-range.

11. Using the supplied screws, mount the T1500-51 PCB component-side down on the top pair of lugs (those nearest the carrier switch).

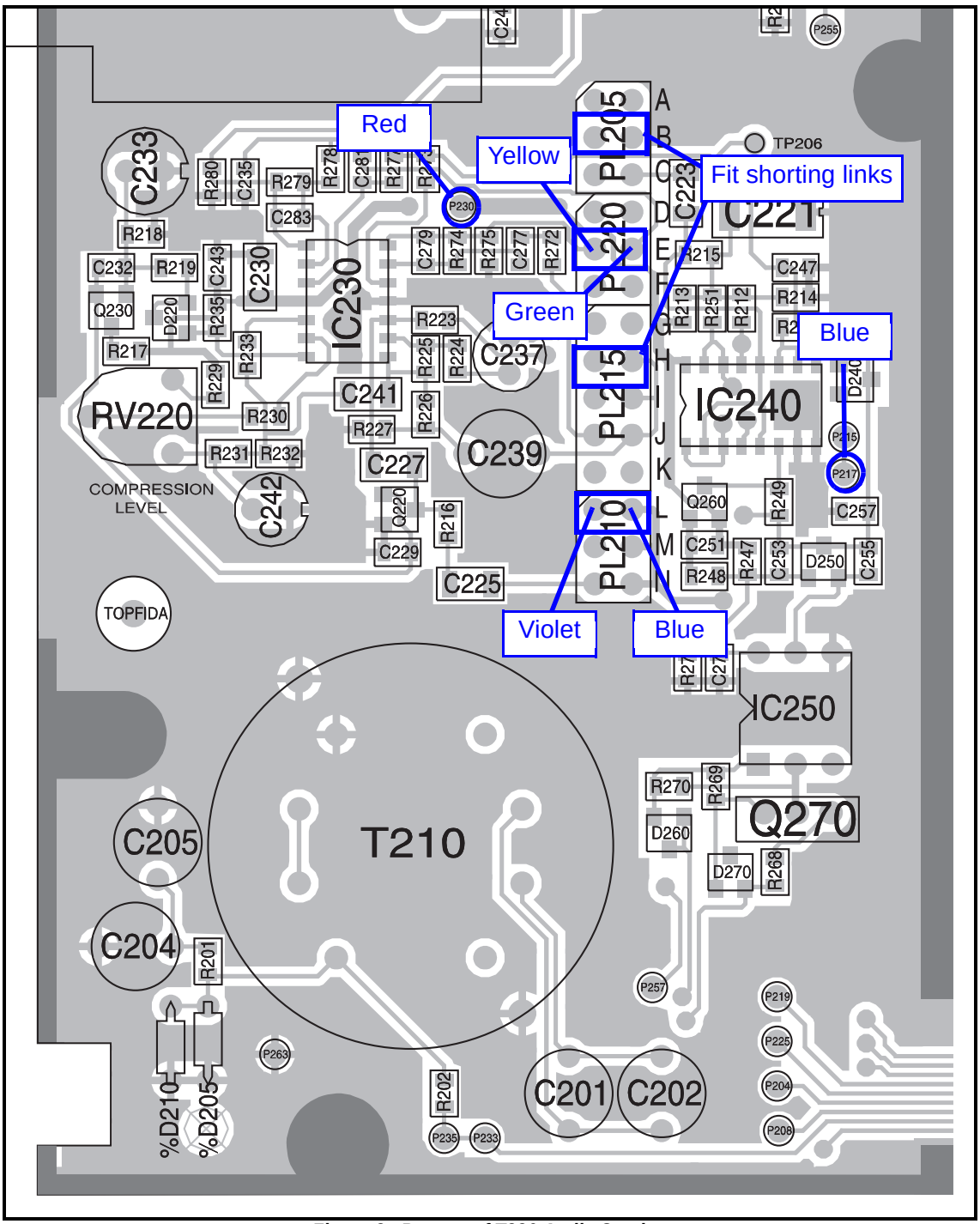

Figure 3 Bottom of T836 Audio Section

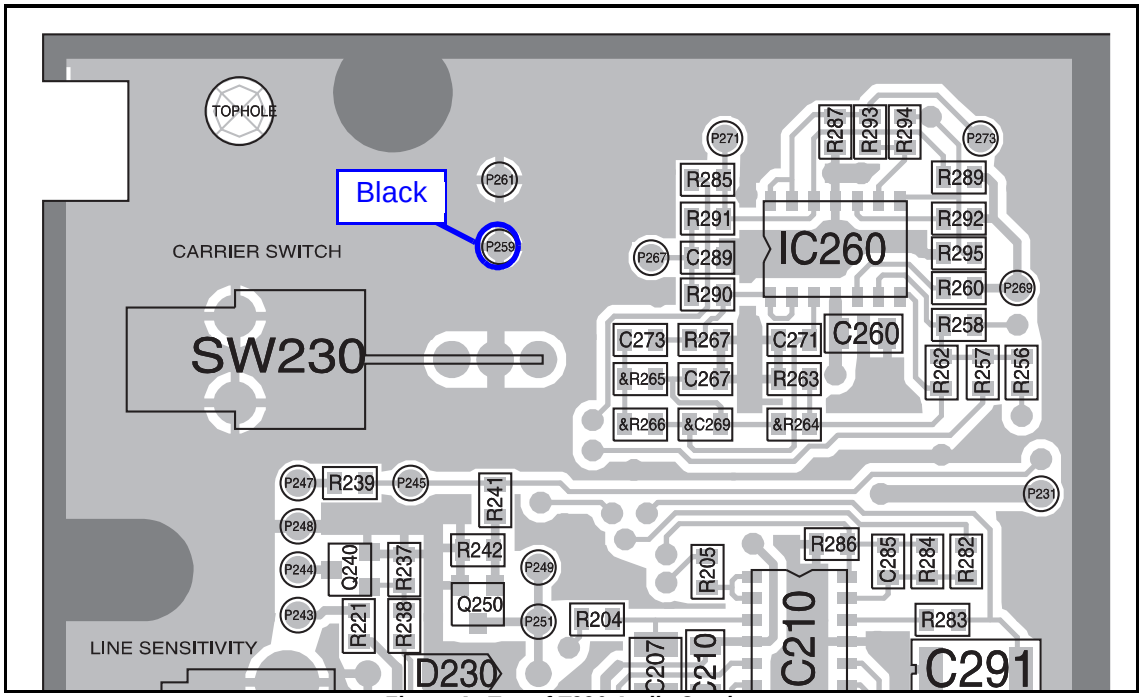

Figure 4 Top of T836 Audio Section

Issuing Authority

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