
TECHNICAL NOTE TN-1082

Modification of TBA0ST1 to Fit DC Blocking Capacitor on the Unbalanced Input.

22 June 2006

Applicability

TB8100 TBA0ST1 Calibration Test Unit using PCB issue less than 220-02031-07.

1. Introduction

The unbalanced input on the following TB8100 System Interface boards was changed to allow DC coupling for the paging interface.

- TBA-SP-S0T1 TaitNet SIF
- TBA-SP-S0L0 TaitNet RS232 SIF
- TBA-SP-S0K0 TaitNet Ethernet SIF

There is now DC on the input via a high impedance source from the base station. Any equipment connected to the unbalanced input that has a path to ground will cause negative deviation.

Adding a 22uF ceramic capacitor to the Calibration Test Unit resolves this problem for any test equipment attached to this input.

2. Modification

This modification was carried out on a TBA0ST1 with PCB 220-02031-04. Later issues may differ.

Remove the 4 front panel screws and the nuts on the 4 BNC connectors. Carefully lift the CTU assembly out of the case and remove the cable from the noise source output on the PCB.

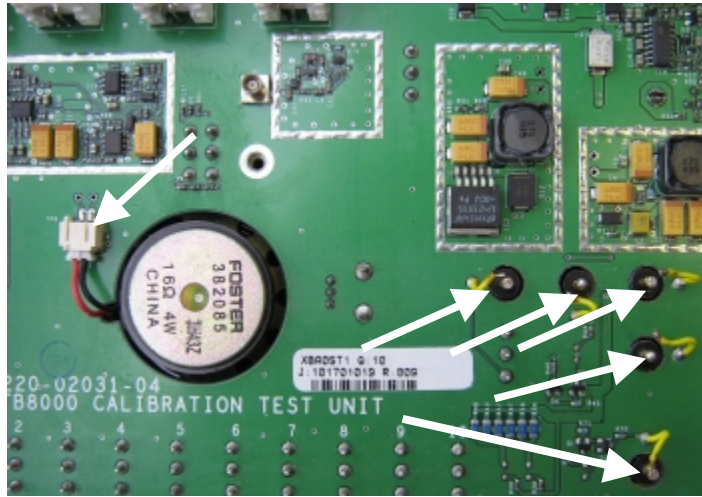


Fig 1.
Unsolder the wires connecting the banana sockets to the PCB and unplug the speaker socket. Remove the 5 screws holding the PCB to the front panel. Lift the PCB off the front panel.

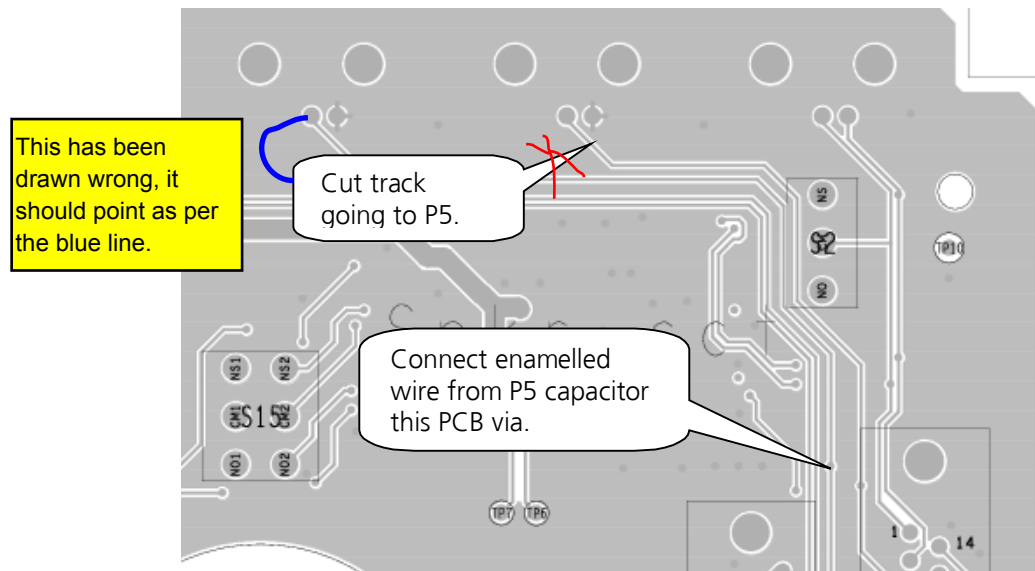


Fig 2.
On the top side (switch side) of the PCB, cut the track going to P5, the unbalanced input.

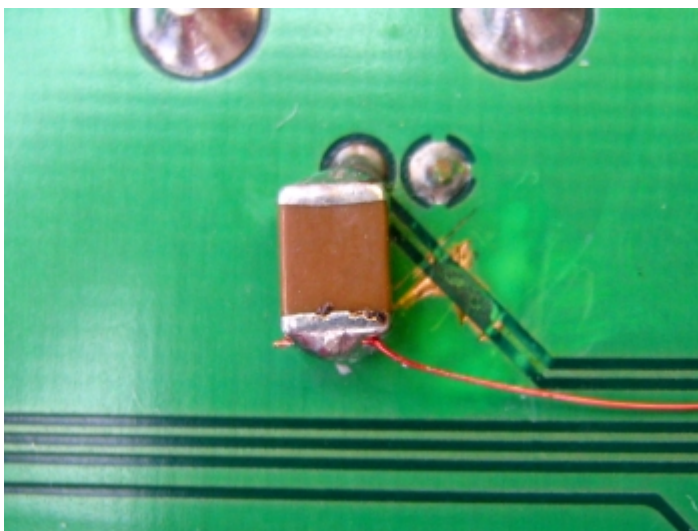


Fig 3.

Solder a 22uF ceramic capacitor (Tait part number 015-08220-10 CAP cer 22u 16V 10% 1210 X5R) to the centre pin connection of P5.

Connect enamelled hook-up wire to the free end of the capacitor and run to the PCB via shown above in Fig 2. Reassemble the CTU.

3. Issuing Authority

Name and Position of Issuing Officer

Jeff Northcott
Senior Technical Support Engineer

Confidentiality

Confidential – This message or document contains proprietary information intended only for the person(s) or organisation(s) to whom it is addressed. All Recipients are legally obliged to not disclose Tait technological or business information to any persons or organisations without the written permission of Tait.

Distribution Level

Associate

Document History

Original Release	22 June 2006	JN
------------------	--------------	----