Technical Support
TECHNICAL NOTE

TECHNICAL NOTE TN-1091

TB8100 Calibration Test Unit – Disable DC-Coupling

26 Sept 2005

Applicability TBA0ST1 - TB8100 Calibration Test Unit

1. Introduction

This Technical Note describes a modification to TB8100 Calibration Test Unit TBA0ST1 necessary to use it with TB8100 Reciters with the paging SIF fitted.

The modification to the Calibration Test Unit is to add a 22uF Capacitor in series to the Unbalanced Input Line.

2. Background

This modification to the Calibration test Unit will only be necessary if it is to be used with TB8100 Reciters with the paging SIF fitted.
To determine if a TB8100 has had the paging modification follow the procedure below:

TB8100 Changes to SIF for paging:

The unbalanced input on Taitnet and Taitnet RS232 SIFs has been changed to be DC coupled. This change has been made for paging. You can identify if a SIF is modified for paging as the version has been changed from 0 to 1 as shown in Monitor > Module Details > Reciter in the Service Kit.

If you are not using a Taitnet SIF for paging, ensure that the High Pass Filter is enabled in Bypass mode in the Configure > Base Station > Channel Profiles > Signal Path tab on TX Path B.

3. Procedure

Parts Necessary

1 x 22uF, 10%, X5R, 1210 Capacitor.
100mm insulated Enamel Wire.

Steps of modification

1. Remove nuts and washers from BNC connectors on side of unit.
2. Remove 4 screws from top of unit.
3. Face of unit will now pull out unrestricted, do this now.
4. Unplug Co-axial connection from case of unit to PCB.
5. Pull Volume knob off.
6. Unplug speaker from PCB.
7. Looking at the underside of PCB there are 5 plugs with yellow wires connecting them to the board, de-solder one end of each wire (plug end of wire is easier).
8. Remove the 5 screws holding the PCB.
9. Refer to Figure 1 for the following instructions. Using a scalpel cut the track as shown. Solder one end of the capacitor to pin as shown. Using enamel wire, solder one end to the via shown, and the other end to the capacitor (see Figure 1). Take care not to overheat the capacitor when soldering to it.
10. Use a multimeter to confirm connections are correct.
11. Reassemble the unit following steps 1 to 8 in reverse.

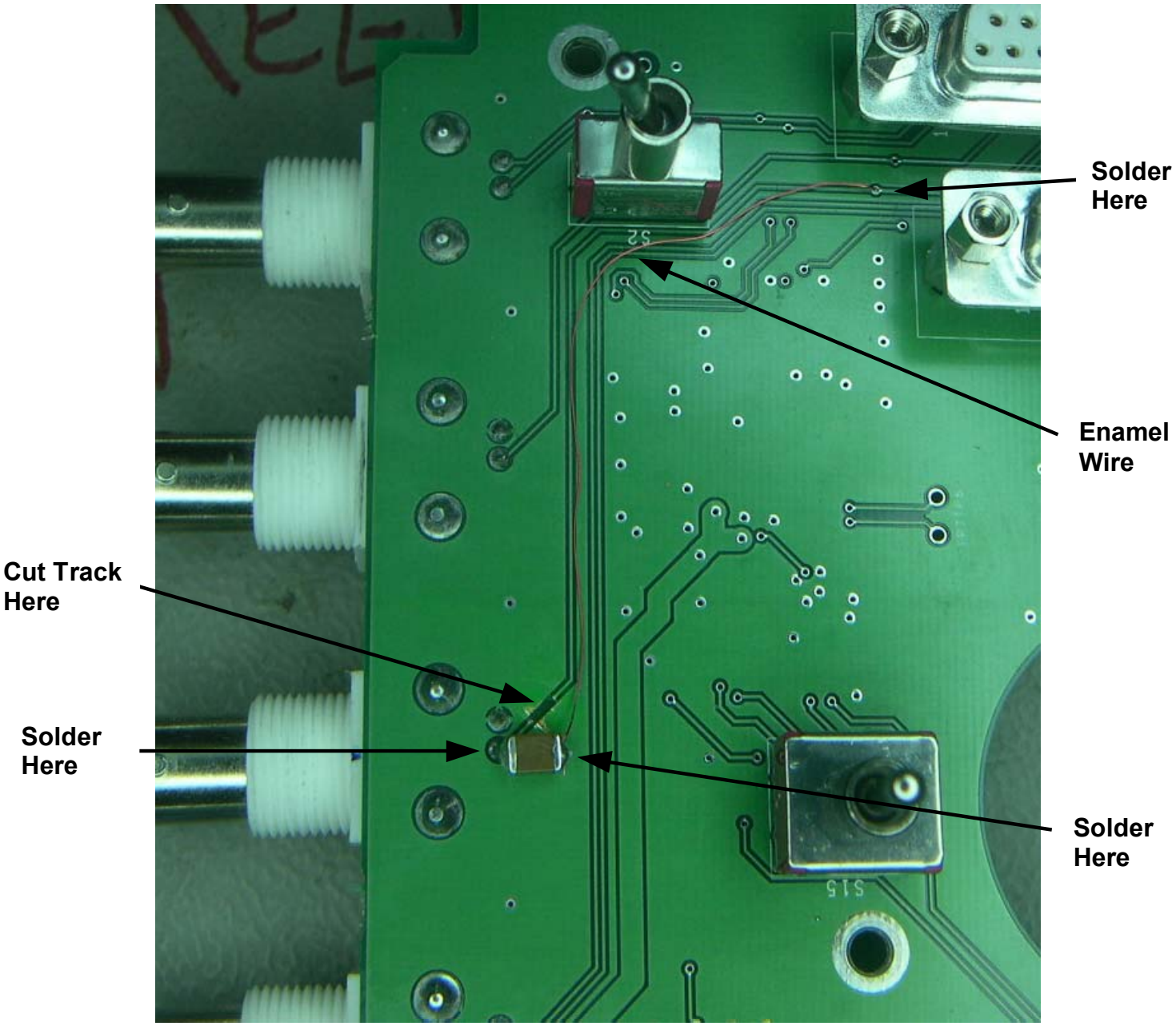

Figure 1. Finished modification showing 22uF Capacitor installed I series on the Unbalanced Input Line.

Compliance Issues None

CSO Instruction None

5. Issuing Authority

Name and Position of Issuing Officer Simon Nieper
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, Associate System Integrator, Accredited Service Centre, Accredited Service Centre System Integrator or Tait Only

Document History

Original Release	26 September 2005	SJN