

## 3 T838/839 SII - SI Conversion

### 3.1 Introduction

You must make a number of modifications to enable a T830 Series II PA to operate in a Series I rack frame. These changes can be split into two groups, mechanical and electrical, as described below.

Mechanical	These changes involve putting on a new front panel because of the differences in height and width between a Series II and Series I panel.
Electrical	These changes involve: <ul style="list-style-type: none"> <li>• inserting and removing components inside the module to disable cyclic keying;</li> <li>• converting from rear RF input to front RF input.</li> </ul>

This procedure assumes you have already purchased the appropriate Series I conversion kit:

- T838 - T800-70-0038
- T839 - T800-70-0039.

If not, you should purchase one from your nearest Tait Dealer or Customer Service Organisation before beginning the procedure.

**Note:** This procedure applies to the latest design T838/839 PAs which use RF power modules and are identified by the Series II style product code T83X-X0-0000.

It should take approximately 15-20 minutes per module to perform these steps.

## 3.2 Method

Step	Action
1	Remove the Series II front panel from the PA as follows: <ul style="list-style-type: none"> <li>• remove the four screws using a Torx screwdriver;</li> <li>• push the LEDs from the front of the panel to remove them from their grommets.</li> </ul>
2	Remove the side cover.
3	Follow the step for whichever module you are going to modify: <ul style="list-style-type: none"> <li>• T838 - go to <a href="#">Step 4</a>;</li> <li>• T839 - go to <a href="#">Step 5</a>.</li> </ul> <p>These modifications will disable the cyclic keying.</p>
4	<p><b>T838</b></p> <p>Remove *L201 (330nH SMD inductor), as shown in <a href="#">Figure 3.1</a>.</p> <p><b>Caution:</b> Do not use excessive heat to remove the inductor or it will melt.</p>
5	<p><b>T839</b></p> <p>Remove *L211 (330nH SMD inductor), as shown in <a href="#">Figure 3.1</a>.</p> <p><b>Caution:</b> Do not use excessive heat to remove the inductor or it will melt.</p>





Step	Action
6	<p><b>Converting from rear panel RF input to front panel RF input.</b></p> <p>Remove the rear panel BNC connector:</p> <ul style="list-style-type: none"> <li>• unplug the RF input coax from the socket on the PCB;</li> <li>• unscrew the BNC connector from the chassis;</li> <li>• carefully withdraw the coax from the module through the hole in the rear of the chassis;</li> <li>• fit the blanking plate over the hole in the chassis from which the BNC connector has been removed.</li> </ul> <p>Fit the front panel SMC connector:</p> <ul style="list-style-type: none"> <li>• insert the coax fitted with the brass SMC connector through the hole in the front of the chassis and secure with the brass nut and washer;</li> <li>• connect the coax from the SMC connector into *SK203 (T838) or *SK201 (T839) as shown in <a href="#">Figure 3.2</a>.</li> </ul>
7	Refit the side cover.
8	<p>Fit all parts of the Series I front panel, following <a href="#">Step 1</a> in reverse order.</p> <p><b>Note:</b> If you have difficulty refitting the LEDs, try pushing the body of the LED back into the grommet with a thin screwdriver or spike. Be very careful while doing this as the legs of the LED are very easy to break.</p>



