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:
	 inserting and removing components inside the module to disable cyclic keying;
	converting from rear RF input to front RF input.

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.

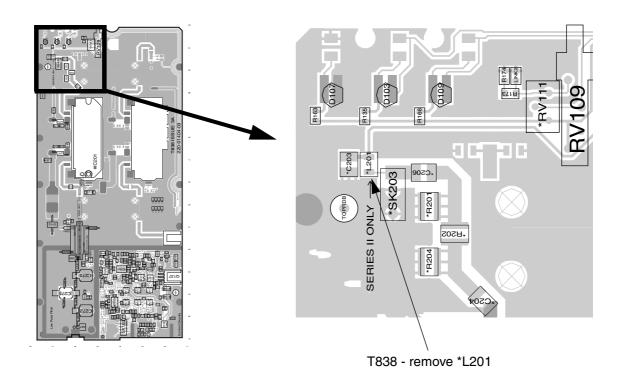
It should take approximately 15-20 minutes per module to perform these steps.

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3.2 Method

Step	Action
1	Remove the Series II front panel from the PA as follows:
	 remove the four screws using a Torx screwdriver;
	 push the LEDs from the front of the panel to remove them from their grommets.
2	Remove the side cover.
3	Follow the step for whichever module you are going to modify:
	• T838 - go to Step 4;
	• T839 - go to Step 5.
	These modifications will disable the cyclic keying.
4	T838
	Remove *L201 (330nH SMD inductor), as shown in Figure 3.1.
7	Caution: Do not use excessive heat to remove the inductor or it will melt.
5	T839
	Remove *L211 (330nH SMD inductor), as shown in Figure 3.1.
_	Caution: Do not use excessive heat to remove the inductor or it will melt.

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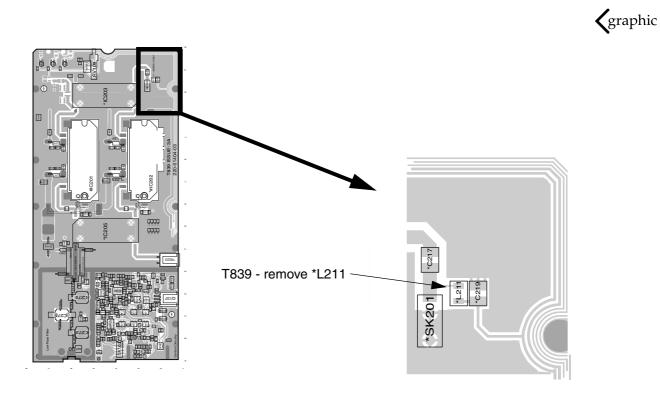
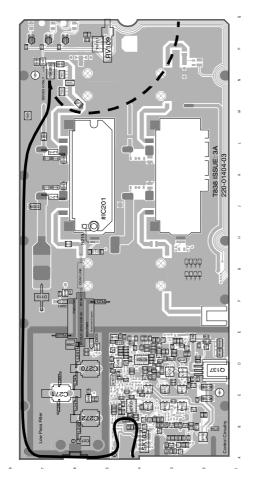


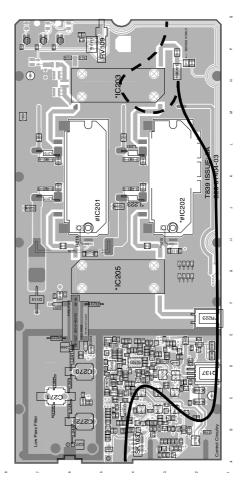
Figure 3.1 T838/839 Component Changes

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Step	Action
6	Converting from rear panel RF input to front panel RF input.
	Remove the rear panel BNC connector:
	 unplug the RF input coax from the socket on the PCB;
	 unscrew the BNC connector from the chassis;
	 carefully withdraw the coax from the module through the hole in the rear of the chassis;
	 fit the blanking plate over the hole in the chassis from which the BNC connector has been removed.
	Fit the front panel SMC connector:
	 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;
	• connect the coax from the SMC connector into *SK203 (T838) or *SK201 (T839) as shown in Figure 3.2.
7	Refit the side cover.
8	Fit all parts of the Series I front panel, following Step 1 in reverse order.
	Note: 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.

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T838 T839

Rear RF input coax

Front RF input coax

Figure 3.2 T838/839 RF Input Coax Routing

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