T2000-A68 Single-Port UART User Interface Module Installation Instructions

Introduction

The T2000-A68 single-port UART Interface Module (UIM) kit enables a T203x or T2040 Series II radio to be controlled via a computer, allowing either semi or fully automatic communication systems to be developed.

The T2000-A68 kit includes an adapter cable to provide compatibility with applications that previously used the T2000-A66 single-port UART. The T2000-A68 can also be combined with a T2003-A00 or T2005-A00 GPS receiver for AVL applications.

Contents of Kit

The T2000-A68 kit contains the following items:

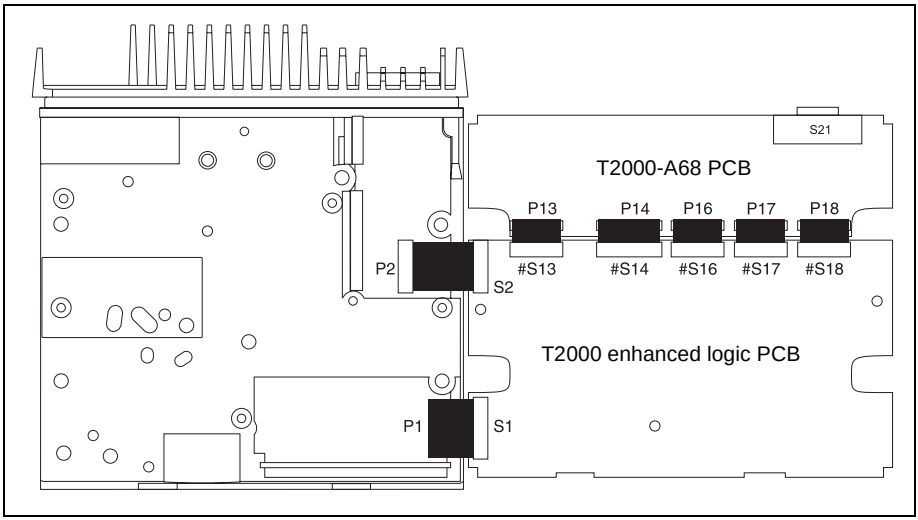
Pos.	Qty.	Part Number	Description
①	1	X2U001	T2000-A68 single-port UART UIM PCB
②	1	219-03085-00	15-way to 9-way adapter cable
③	3	349-02062-00	Pozidriv #2 Taptite screw M3×8
④	4	240-10000-06	12-way MicroMaTch connector (#S13, #S16, #S17, #S18 on T2000 enhanced logic PCB)
⑤	1	240-10000-07	16-way MicroMaTch connector (#S14 on T2000 enhanced logic PCB)
⑥	1	354-01041-00	Female screw lock kit (in plastic bag)

Installation

1. Remove the top cover of the radio by unscrewing the four bottom cover screws, unscrew the T2000 enhanced logic PCB and fold out.
2. Unclip the D-range blanking plate in the rear of the T2000 chassis.
3. If not already fitted, fit the MicroMaTch connectors provided in positions #S13, #S14, #S16, #S17 and #S18 (④ and ⑤) on the top side of the enhanced logic PCB.
4. Position the UIM PCB ① as shown in Figure 1, and connect the MicroMaTch connectors P13, P14, P16, P17 and P18 on the UIM PCB to #S13, #S14, #S16, #S17 and #S18 on the enhanced logic PCB.

5. Carefully fold the enhanced logic PCB and the T2000-A68 PCB back into position, guiding the T2000-A68 D-range socket (S21) through the hole provided in the T2000 chassis.
6. Secure the PCBs using the three retaining screws of the enhanced logic PCB and the three M3×8 screws ③ provided.
7. Fit the female screw lock kit ⑥ to S21.

Figure 1 Installing the T2000-A68 single-port UART UIM PCB



Radio Programming

1. On the Specifications page, select Map27 Interface.
2. On the CCI Setup page, set UIM to Dual Port.

Note: Although the T2000-A68 is a single-port UART, it is based on the T2000-A60 dual-port interface and therefore requires this setting.

3. On the CCI Setup page, set Port A – Map27 Data Rate as required.
   The Port B settings will have no effect.

Pinout of the 15-way to 9-way Adapter Cable

Signal	Description	15-way high-density D-Range plug	9-way D-range socket
DGND	digital ground	2	5
13.8V-SW[a]	switched 13.8V supply for T2005-A00 GPS	4	6
5V[a]	switched 5V supply for T2003-A00 GPS	5	4
RXD	receive data, serial data input to UART PCB	7	3
TXD	transmit data, serial data output from UART PCB	8	2
OPTIONS-GND	options ground	10	not connected

a. Requires modification (see below).

The other pins are not connected.

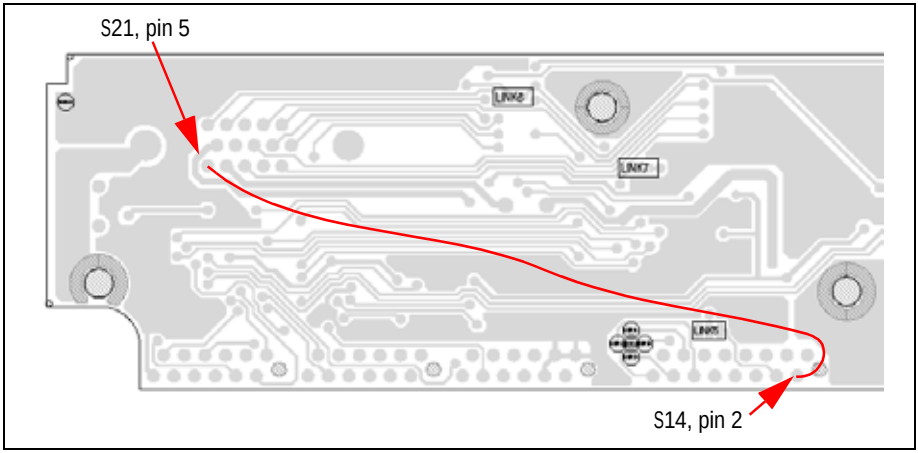
Connecting to the T2003-A00 GPS Receiver

1. On the T2000-A68 UIM PCB, connect a wire from S21 pin 5 to S14 pin 2 as shown in Figure 2.

Note: This wire provides the 5V supply required by the T2003-A00. The adapter cable supplied in the T2000-A68 kit is already wired as required.

Note: For operation with the T2003-A00 GPS receiver, the T2000 radio requires the Direct Connect GPS firmware.

Figure 2 Connecting a wire from S21 pin 5 to S14 pin 2



For further information on using the T2000-A68 in AVL applications, refer to the latest issue of Tait Technical Note TN1063-AN.

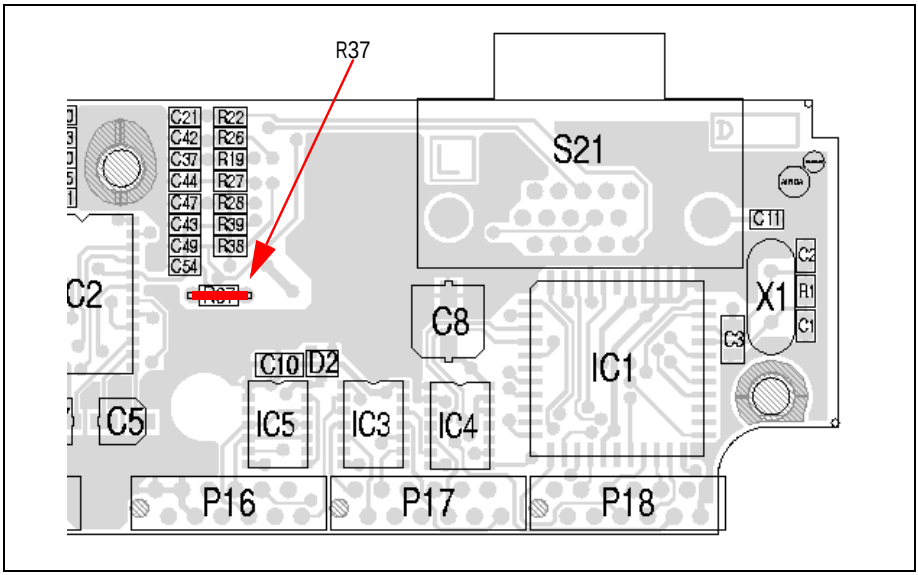
Connecting to the T2005-A00 GPS-Receiver

1. On the T2000-A68 UIM PCB, connect a wire link at R37 as shown in Figure 3.

Note: For operation with the T2005-A00 GPS receiver, the T2000 radio requires the Direct Connect GPS firmware.

Note: This wire provides the 13.8 V supply required by the T2005-A00. The adapter cable supplied in the T2000-A68 kit is already wired as required.

Figure 3 Inserting a wire link at R37



For further information on using the T2000-A68 in AVL applications, refer to the latest issue of Tait Technical Note TN1063-AN.

More Information

Refer to your radio provider for more information about this product.