

A2000-UIK-01 - A2000-UIS 4 Wire E & M Kit



Introduction:

This fitting instruction covers the fitting of the A2000-UIK-01 kit to the Tait A2000-UIS option board. The A2000-UIS is designed as a universal interface for the Tait T2000 mobile radios. It is made to suit most applications for general audio interfacing. This kit contains all the required components to make the A2000-UIS a 4 Wire 600 Ohm transformer balanced audio, opto coupled and relay isolated interface board.

The A2000-UIK-01 is applied to the A2000-UIS option board by the person that is fitting the board to the T2000 mobile radio, normally during programming and alignment. Because of the relatively low requirement (and increased cost), the A2000-UIS option board is not available with the 4 wire components already fitted.

Requirements:

An A2000-UIS option board and a A2000-UIK-01, or conversely, purchase the five components directly from Farnell Components. A breakdown of the individual parts required are as follows:

Ref. No.	Description	Part No.	Supplier	Qty.
D3	Diode BAW56, SOT-23	741-863	Farnell	1
IC6	SHF628A-3. Bi-directional Opto Coupler	464-582	Farnell	1
RL1	SPDT Relay 12 Volt PCB mount	466-890	Farnell	1
T1 & T2	ETAL 2781 Transformer 600:600 Ohms, SMD	523-100	Farnell	2

Procedure: (Refer to Figure 1. below)

1. Remove the seven 0 Ohm resistors R17, R18, R30, R31, R66, R67, & R80.
2. Clean up the solder pads where the components were removed in Step 1.
3. Fit the new components to the A2000-UIS board. These are Diode D3, IC6 Opto Coupler, RL1 Relay, and T1 & T2 Transformers.
4. Fit link LK19. The opto coupled PTT input will not work without this link.
5. Check that LK16 is set to 2-3.
6. All other links on the A2000-UIS can be left at their default positions.

The A2000-UIS Pin Outs on connector S21 remain the same as before. For example, the balanced receive line is on S21 pin 1 & 9, which are LINE OUT1 & LINE OUT2.

Specifications:

LINE OUT 1 & 2 Level	-30dBm to +4 dBm
LINE OUT 1 & 2 Impedance	600 ohms
LINE IN 1 & 2 Level	-30dBm to +10 dBm
LINE IN 1 & 2 Impedance	600 ohms
PTT IN 1 & 2	Opto Coupled, Non Polarised, 10 to 50 Volt Input range
GATE OUT 1 & 2	Voltage Free N.O. Relay Contacts. Relay Contacts rated 1A @ 24V dc, or 400mA @ 50V dc
Austel Approval	<i>The A2000-UIS is Not Austel Approved</i>

Associated Documents: AM2K-UIS A2000-UIS Service Manual

