FMS PIC Serial Interface Kit

Use with FMS 2.0 Beta 7

From the 'Controls' menu select 'Analogue control'. From the Interfaces option select 'Serial PIC interface' and then click 'Resources' select the Com port you are using and then for the Protocol make sure you have '9600 Baud / 0xF0+ Sync' selected.

Parts List

R1	33k	C1	10nF
R2,7	10k	C2	10uF
R3	220k	Z1	5.1v zener
R4	22k	Q1	2N3904
R5	1k	U1	PIC12C508A
R6	470R		

Assembley

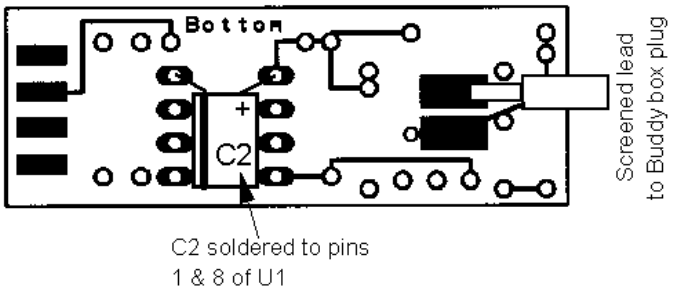
This is very easy, all of the above listed parts, except C2 are all mounted on the PCB which has all of the locations printed on it. Make sure that Q1, Z1 and U1 are fitted the correct way around. Q1 is fitted with it's flat side away from the edge of the board and facing R3. Z1 has a black band on one end which is indicated on the board printing. U1 is fitted with the notch or dot nearest to R5.

The only part not fitted to the printed side of the board is C2, this fitted to the reverse side of the board and lays between the pins of U1 and is soldered to pins 1 and 8 of U1. It must fit flush against the board. The negative lead of C2 is indicated by a black stripe, this lead goes to U1 pin 8, the other lead (+) goes to U1 pin 1.

Once the board is assembled it should be soldered to the 9 pin D socket, insert the board in between the two rows of pins making sure the pins align with the pads on the board and solder them all.

The only part of the assembly that need extra care is the fitting of the screened lead, this is soldered to the rectangular pads on the reverse side of the board and take must be taken that the screen of the lead does not touch any solder joints on the reverse side of the board. No damage will be done but it may give you problems getting the interface working correctly.

The location of C2 and the screened lead can be seen in the drawing below.



Fitting Case

Supplied in the kit for use with the plastic case is a white plastic end piece and a grommet, insert the grommet into the end piece and make sure you fed the screened cable through the grommet before soldering it to the board. Lay the board into one half of the case and make sure the end piece is in place and then snap on the other half of the case.

Buddy Box Connections

Supplied with your kit will have been the right type of plug to fit you RC transmitters buddy box socket. For the correct connection details please check the web site for the latest information. http://www.welwyn.demon.co.uk/buddy.htm.