

## Eclipse setup for Fylde Controllers

### Alarm Trunking Interface

Module DB25	Setup	ATI DB25
RX DISC pin 18	Link PS4 RSSI to PS4C	Pin 20
RX AUDIO 600 ohm pin 6, 20	Open Line+ to Line- JP4, JP5	Pins 3, 15
RX COS- pin 16	Link JP7 COS- to GND	N/A
TX TONE+ pin 5	Link JP8 Tone+ to Tone-	Pin 7
TX AUDIO 600 ohm pin 6, 20	Open Line+ to Line- JP4, JP5	Pins 18, 5
Alarm output – active low	Open PS1C-PS1AH, Link PS1C-PS1AL	Pin 4. Q1 open collector

### Receiver Modifications

To improve low frequency response

- 1 Change C35 from 0.47uF to 10uF electrolytic capacitor (+ve towards op amp U2, -ve towards U3)
- 2 Change C97 from 47uF to 100uF

For ATI alarm output

- 3 On the bottom of the receiver circuit board, cut the tracks to Pins 7 and 19 at DB25 (P1) connector immediately adjacent to the connector pins
- 4 Using insulated hookup wire, connect Pin 7 of P1 to the pad of R151 (which is adjacent to pin 11 of U15). Route the wire along the lower edge of the pcb and secure with tape or RTV.
- 5 Similarly, connect Pin 19 of P1 to the pad of R113 farthest from the front edge of the pcb. Route the wire along the lower edge of the pcb and secure with tape or silicone adhesive.

Jumper link settings: JP7, JP8, JP9 all OFF (No DC loop keying)

### Exciter Modifications

To improve low frequency response

- 1 Change C113 and C114 from 1uF to 10uF electrolytic capacitor (+ve towards op amp, -ve towards JP8)

Bypass low pass filter

- 2 Remove R19, R66, R65, C49, C50, C51
- 3 Link U9C (pin 8) to U7C (pin 10)
- 4 Change R127 from 470k to 82k

For ATI alarm output

- 5 On the bottom of the transmitter circuit board, cut the track to Pin 7 at DB25 (P3) connector immediately adjacent to the connector pin
- 6 Using insulated hookup wire, connect Pin 7 of P3 to the pad of R86 (which is adjacent to pin 4 of U13). Route the wire along the lower edge of the pcb and secure with tape or silicone adhesive.

Jumper link settings: JP8 2-3, 4-5. (pin 1 close to xtal) allows Tone+ input  
JP9 OFF (No DC loop keying)