

2.6 Remote I/O Connection

The DB-25 pin connections PA1-PA5 (on the back of the controller) are where the □ DB-25 Male-to-Male cables are attached from the individual PA2000's. Use PA1 for □ the top amplifier and PA2 for the bottom amplifier. □

The additional I/O connections on the back of the controller consist of 2 main ports; □ Port A (DB-25 Female) and Port C (DB-37 Female) . Port B (DB-37) is not used in □ the FM4000. □

Port A has the metering and control of the System and Port C has the individual □ amplifier metering channels available from each of the PA2000's. □

Other I/O ports are for the reflectometer (DB-9 Female) and an unused power control port (DB-9 Male). I/O port A is described in illustration 2-15 and I/O port B is □ described in illustration 2-16.

Port A	
Pin	Description
1	N/C
2	N/C
3	Ground
4	Remote RF Power RAISE - Momentary to Gnd to raise power 20 watts/second
5	Cabinet Temperature - 0.01 Volts/degrees Celsius reading of internal cabinet temp.
6	Ground
7	Remote High Voltage ON/OFF - Hold to ground to turn ON High Voltage
8	Fault Summary - TTL Logic HIGH (+5 VDC) when any fault light is ON
9	Ground
10	N/C
11	N/C
12	N/C
13	N/C
14	N/C
15	Remote RF Power LOWER - Momentary to Gnd to lower power 20 watts/second
16	N/C
17	N/C
18	Remote RF Power, Forward - 1 VDC = 1000 Watts of Forward power
19	N/C
20	N/C
21	Remote RF Power, Reverse - 1 VDC = 1000 Watts of Reverse power
22	N/C
23	N/C
24	N/C
25	N/C

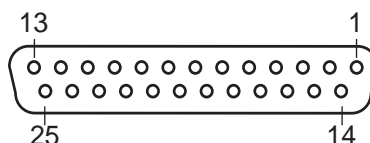


Illustration 2-15 Remote I/O Port A Female DB-25

Port B	
Pin	Description
1	(PA1) RF Power - 1V = 1000 Watts of power
2	(PA1) SWR - Calculated reading of SWR in VDC (1.00 VDC = 1.0 to 1.0 VSWR)
3	(PA1) PA Volts - 1V = 10 V on the PA
4	(PA1) PA Temperature - 1V = 20 degrees Celsius on the PA
5	Ground
6	(PA1) PA Total Current - 1V = 20 A on the PA
7	(PA1) PA#1 current - 1V = 2A of current
8	(PA1) PA#2 current - 1V = 2A of current
9	(PA1) PA#3 current - 1V = 2A of current
10	Ground
11	(PA1) PA#4 current - 1V = 2A of current
12	(PA1) PA#5 current - 1V = 2A of current
13	(PA1) PA#6 current - 1V = 2A of current
14	(PA1) PA#7 current - 1V = 2A of current
15	Ground
16	(PA1) PA#8 current - 1V = 2A of current
17	(PA1) ALC - A direct reading of the ALC voltage on the PA
18	(PA1) In Ref - A DC voltage reference representing RF input power to the PA
19	(PA2) RF Power - 1V = 1000 Watts of power
20	(PA2) SWR - Calculated reading of SWR in VDC (1.00 VDC = 1.0 to 1.0 VSWR)
21	Ground
22	(PA2) PA Volts - 1V = 10 V on the PA
23	(PA2) PA Temperature - 1V = 20 degrees Celsius on the PA
24	(PA2) PA Total Current - 1V = 20 A on the PA
25	(PA2) PA#1 current - 1V = 2A of current
26	Ground
27	(PA2) PA#2 current - 1V = 2A of current
28	(PA2) PA#3 current - 1V = 2A of current
29	(PA2) PA#4 current - 1V = 2A of current
30	(PA2) PA#5 current - 1V = 2A of current
31	Ground
32	(PA2) PA#6 current - 1V = 2A of current
33	(PA2) PA#7 current - 1V = 2A of current
34	(PA2) PA#8 current - 1V = 2A of current
35	(PA2) ALC - A direct reading of the ALC voltage on the PA
36	Ground
37	(PA2) In Ref - A DC voltage reference representing RF input power to the PA

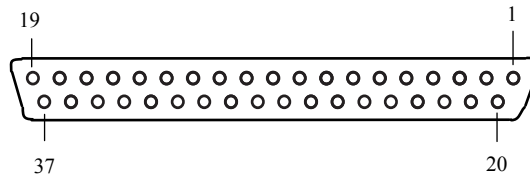


Illustration 2-16 Remote I/O Port B Female DB-37