

E. F. Johnson Series 5300 Radios to 223 Series Adapter Panels



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E. F. Johnson Series 5300 Radio to 223 Series Adapter Panels

1.0 General

This application note is intended to show how to assemble a cable and setup the hardware of different 223 series adapter panels (TRA-223, DSP-223 and IP-223) to the EF Johnson 5300 mobile radio. Only control of a dedicated channel is supported.

EF Johnson Remote Cable Assembly P/N-5972002245 (connected to J6 and J8 on the Logic PCB) is required for X series radios.

EF Johnson Pigtail Connector Accessory P/N-5975357746 is required for EFJ 53ES series radios, including all EFJ 5300SL and EFJ 5300SL ES radios

Contact your local EF Johnson dealer to purchase these accessories.

2.0 Interconnect Cable Assembly

A cable assembly will be required interconnect the DB25 output of the various 223 Series adapter panels to the DB25 pin-out of the EF Johnson Remote Cable Assembly. Use the following chart to manufacture this interconnect cable assy.

Table 1: Cable Assy

223 Series DB-25 Pin	EFJ Remote Cable Assy DB-25 Pin	Signal
25	7	MIC +
13	8	MIC -
14	9	PTT
24	11	RX +
12	12	RX -
7	25	DGND

3.0 223 Series Panels

3.1 TRA-223 Setup

The TRA-223 will require the optional TO-23 Balanced Transformer option P/N 0118024 be installed.

3.1.1 TRA-223 Dip Switch Settings

Set the front panel dip switch for the following settings:

Position 7 “ON”, 1, 2 and 3 depend on if you are using 2 or 4 wire connection, refer to the TRA-223 manual for instructions.

3.2 DSP-223 Setup

No software programming is required.

3.2.1 DSP-223 Jumper Settings

Set the following jumpers to the A position:

J12

Set the following jumpers to the B position:

J13, J14, J15, J22, J23, J24, J25, J27

Solder close JP2.

3.3 IP-223 Setup

Setup the desired IP-223 lines jumpers for 5300 radio control.

3.3.1 IP-223 Jumper Settings

Table 2: IP-223 Jumper Settings

Line 1	Jumper Setting	Line 2
J33, J34	B = 4-wire	J5, J6
J16, J21	B = Balanced	J19, J20
J14	Hanging on center pin = 10K Ohm	J24
J3, J9, J11	B = Balanced	J25, J28, J29
J13	B = High	J27
J17, J22	B = 600 Ohms	J10, J15
R377	Solder bridge the pads together	R381

Revision History		
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Revision	Change Description	Date
A	Update brand, format and new document number. (Reference rev B)	5-AUG-2009

Suggestions or comments:

Contact technical support with suggestions or comments concerning this application note.

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