

# ICOM IC-A200 Aircraft Radio to 223 Series Adapter Panels



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# ICOM IC-A200 Aircraft 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 an ICOM\*<sup>1</sup> IC-A200 series aircraft radio.

**NOTE:** This application note only supports control on a dedicated radio channel.

## 2.0 Interconnect Cable assembly

A cable assembly is required to connect the ICOM IC-A200 30-pin accessory connector to the various 223 Series adapter panels.

Use the following chart to manufacture this cable assy.

TABLE 1. Interconnect Cable Assembly

TRA-223 DB-25 Pin	DSP-223 DB-25 Pin	IP-223 DB-25 Pin	IC-A200 30-Pin	Signal
25	25	25	J	MIC+
24	24	24	H	RX+
12	12	12	7	RX-
14	14	14	9	PTT
7	7	7	6 & 8	GND

## 3.0 223 Series Panels

### 3.1 TRA-223 Setup

The TRA-223 requires the TO-23 option is installed to support a connection to the ICOM IC-A200.

**REFERENCE:** For more information, see the TRA-223 Technical Manual (P/N 803570). This document is available for download at [www.telexradiodispatch.com/](http://www.telexradiodispatch.com/).

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<sup>1</sup>.See "Copyright Notice" on page 7.

### 3.2 TRA-223 Dip-Switch Settings

Use Table 2 to set the dip switches for the TRA-223.

TABLE 2. TRA-223 Dip Switch Settings

Switch	Setting	Signal
1	As appropriate	2-Wire = On 4-Wire = Off
2	As appropriate	4-Wire = On 2-Wire = Off
3	As appropriate	Full Duplex = On Half Duplex = Off
4	Off	Squelch
5	Off	Radio Rx Level Speaker = On High Impedance = Off
6	On	Radio Tx Level Low Level = On High Level = Off
7	On	Ground on PTT Relay Common
8	Off	Ground on Monitor Relay Common

### 3.3 DSP-223 Jumper Settings

To set the **DSP-223 jumpers**, do the following:

1. Set to the **A position**:
  - J14, J15, J22, J23.
2. Set to the **B position**:
  - J24, J25, J27, J12 and J13.
3. Solder closer **JP2**.

**NOTE:** J19, J20 and J21 are for selecting **2- or 4-wire operation**.

**REFERENCE:** For more information, see the DSP-223 Technical Manual (P/N 803274).  
This document is available for download at [www.telexradiodispatch.com/](http://www.telexradiodispatch.com/).

### 3.4 IP-223 Setup

Set up the appropriate IP-223 lines for Local mode.

Using control and set the jumpers as follows.

TABLE 3.

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	A = Single Ended	J25, J28, J29
J13	A = Low	J27
J17, J22	B = 600 Ohms	J10, J15
R377	Solder Bridge pads together	R381

### 3.5 ICOM IC-A200 Radio Setup

Set front panel volume control to mid-range.

No further configuration or radio programming is required.



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A	Update brand, format and new document number.	15-NOV-2009
B	Update Telex website url. Correct table 2: row 6 column 1.	11-FEB-2011