

ICOM IC-A110 Mobile Radio to 223 Series Adapter Panels



Table of Contents

1.0 General	3
2.0 Interconnect Cable Assembly	3
3.0 223 Series Panels	3
3.1 TRA223 Setup	3
3.1.1 TRA223 Dip-Switch Settings	4
3.2 DSP-223 Setup	4
3.2.1 DSP-223 Jumper Settings	4
3.3 IP223 Setup	4
3.3.1 IP223 Jumper Settings	5
3.4 ICOM Radio Setup	5

ICOM IC-A110 Mobile Radio to 223 Series Adapter Panels

1.0 General

This application note is intended to assist technical staff with cable assembly and hardware setup of different 223 series adapter panels (TRA-223, DSP-223, and IP-223) to the ICOM IC-A110 series mobile radios.

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-A110's 8-pin RJ-45 microphone connector to the various 223 Series adaptor panels.

TABLE 1. Cable Assembly Pin Outs

TRA-223	DSP-223 DB-25 Pin	IP-223 DB-25 Pin	ICOM 8-pin Mic	Signal
25	25	25	6	MIC+
24	24	24	3	RX+
14	14	14	4	PTT
7	7	7	7	GND

3.0 223 Series Panels

3.1 TRA223 Dip-Switch Settings

To set the front panel dip switches, do the following:

1. Set to **on**:
 - position 4
 - position 6
 - position 7
2. Select **2- or 4-wire operation** using:
 - position 1
 - position 2
 - position 3

REFERENCE: For more information, see Section 2.2 of the TRA223 manual for proper configuration

3.2 DSP-223 Jumper Settings

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

1. Set to the **A position**:
 - J14, J15, J22, J23, J25, J25, J27.
2. Set to the **B position**:
 - J12 and J13.
3. Solder close **JP2**.
4. For selecting **2- or 4-wire operations**:
 - J19, J20, and J21.

REFERENCE: For more information, see the DSP-223 technical Manual (P/N 803274), DSP to Console Line Connection section. This document is available for download at www.telex.com/Downloads/.

3.3 IP-223 Settings

3.3.1 IP-223 Software Settings

Set up the desired IP-223 lines for Local radio control.

To **configure the IP-223 for Local control**, do the following:

1. In the Processed Devices pane, select the **IP-223 to configure**.
2. Click the **Multicast** tab.
The Multicast page appears.
3. Select the **Enable** check box for the line to configure.
4. From the Type drop down menu, select **Local**.
5. In the Line Name field enter **a name** for the line.
6. In the Rx Multicast Address field, enter the **Rx Multicast Address**.
7. In the Port field, enter the **port number** for receive audio.
8. In the Tx Multicast Address field, enter the **Tx Multicast Address**.
9. In the Port field, enter the **port number** to transmit audio.

3.3.2 IP223 Jumper Settings

TABLE 2. IP-223 Jumper Settings

Line 1	Jumper Settings	Line 2
J33, J34	B = 4-wire	J5, J6
J16, J21	A = Single Ended	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	A = 600 Ohms	J10, J15
R377	Solder bridge pads together	R381

3.4 ICOM Radio Setup

To **configure the radio**, do the following:

1. Open the **radio's case**.
2. Disassemble the radio enough to gain access to the **control head**.
3. Solder closed **CP1** (located next to C3).
4. Reassemble the **radio** and the **case**.

Notes:

Revision History		
Document Title: ICOM IC-A110 Mobile Radio to 223 Series Adapter Panels		
Document Number: AN-DISPATCH-045		
Revision	Change Description	Date
A	Update brand, format and new document number.	15-NOV-2009

Suggestions or comments:

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

Technical Support:

Email: TelexDispatchtechsupport@us.bosch.com

Fax: 1-402-467-3279

Phone: 1-800-898-6723

Bosch Security Systems, Inc.
8601 East Cornhusker Highway
Lincoln Nebraska 68507

Phone: (800) 752-7560 Fax: (402) 467-3279

Email: Telexdispatch@us.bosch.com

Web: www.telex.com

Downloads: www.telex.com/Downloads/