Kenwood TK-6110 Series Radio to 223 Series Adapter Panels

VOIProven

TELEX
Radio Dispatch

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1.0   General

This application note is intended to show how to assemble a cable and setup the hardware of different 223 series adaptor panels (TRA-223, DSP-223 and IP-223) to a Kenwood TK-6110 series mobile radio.

2.0   Interconnect Cable assembly

A cable assembly is required to connect to the 15-pin accessory connector of the TK-6110 to the various 223 Series adaptor panels.

Use Table 1 to manufacture this cable assy.

TABLE 1.

TRA-223 DB-25 Pin	DSP-223 DB-25 Pin	IP-223 DB-25 Pin	TK-6110 15 Pin Acc	Signal
25	25	25	5	MIC+
24	24	24	12	RX+
14	14	14	8	PTT
7	7	7	15	GND
10	10	20	14	COR

3.0 223 Series Panels

3.1 TRA-223 Setup

3.1.1 TRA-223 Dip Switch Settings

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

TABLE 2.

Switch	Setting	Signal
1	As appropriate.	2-Wire = On 4-Wire = Off
2	As appropriate.	2-Wire = On 4-Wire = Off
3	As appropriate.	Full-Duplex = On Half-Duplex = Off
4	On	Squelch
5	Off	Radio RX Level On = Speaker Off = High impedance.
6	On	Radio TX Level On = Low Level Off = High Level
7	On	Ground on PTT relay common
8	Off	Ground on Monitor relay common

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

3.2 DSP-223 Setup

No software programming is required.

3.2.1 DSP-223 Jumper Settings

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

1. Set the following jumpers tot he **A position**:

    • J14, J15, J22, J23, J24, J25, J27.

2. Set the following jumpers to the **B position**.

    • J12 and J13.

3. Solder close **JP2**.

4. For selecting 2- or 4-wire operation:

    • J19, J20, J21.

REFERENCE: For more information, see the DSP-223 Technical Manual (P/N 803274)

3.3 IP-223 Setup

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

3.3.1 IP-223 Jumper Settings

Use Table 2 to configure the IP-223 jumpers settings.

TABLE 3.

Line 1	Jumper Setting	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	B = High	J27
J17, J22	B = 600 Ohms	J10, J15
R377	Solder bridge the pads together	R381

4.0 Radio Programming

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

> From the Optional Features field, configure for **Ext. PTT w/Mic Mut**

Revision History		
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A	Update brand, format and new document number.	30-NOV-2009

Suggestions or comments:

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