MOTOROLA CDM RADIO INTERFACE CABLE TO IP-223

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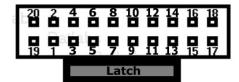
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The color code for the DB25-DB25 cable that is included with the IP-223 has changed. This interface spec is to call out the differences and provide an updated wiring diagram. This appnote should be used in conjunction with Telex CDM radio guide AN-DISPATCH-009-CDM-GM-PRO.pdf. Please disregard the Solder Bridge connection, that connection is provided by pin 2 on the DB25.

The accessory jack below is shown viewed from the rear of the radio. Note that there are unused pins on both ends of the connector. Pins 17, 18, 19 and 20.

MOTOROLA CDM SERIES MOBILE REAR ACCESSORY JACK





RADIO BOTTOM

Mobile Radio Accessory Connector Predetermined Functionality

Pin	Description	Direction	Comments		
1	Speaker (-)		Not Programmable		
2	External Mic Audio		Partially Programmable		
3	Digital In #1	Input Only	Fully Programmable, 12 Active Low Only		
4	Digital In #2	Output Only	Fully Programmable		
5	Flat TX Audio Input		Partially Programmable		
6	Digital In/Out #3	Input Only	Fully Programmable		
7	Ground		Not Programmable		
8	Digital In/Out #4	Selectable Input/Output	Fullt Programmable		
9	Analog In #5	Special Input	Fully Programmable, Tri-state Emergency Switch		
10	Ignition Sense	Special Input	Not Programmable, Active High		
11	Flat RX Audio		Partially Programmable		
12	Digital In/Out #7	Selectable Input/Output	Fully Programmable		
13	Switched Battery (+)		Not Programmable		
14	Digital In/Out #8	Selectable Input/Outpur	Fully Programmable		
15	RSSI (Radio Signal Strength Input)		Not Programmable		
16	Speaker (+)		Not Programmable		
17	BUS (+)*		Not Programmable		
18	Boot Control*		Not Programmable		
19	Unknown		Not Programmable		
20	Unknown		Not Programmable		

MOTOROLA CDM RADIO INTERFACE CABLE TO AN IP-223 THAT REFLECTS THE NEW DB25 CABLE COLORS.

DB25 Pin		TRA-223 Signal	DSP-223 Signal	IP-223 Signal	Wire Color in manuals	Wire Color in supplied cable	Wire Color if not matching	Pin on radio connector
1	=	PTT N.C.	PTT N.C.	PTT N.C.	Brown	White		
2	=	PTT COM	PTT COM	PTT COM	Red	Grey		PIN 7 GROUND
3	=	MON N.O.	MON N.O.	MON N.O.	Orange	Yellow		
4	=	NC	F1 N.C.	F1 N.C.	Pink	Pink		
5	=	NC	F1 COM	F1 COM	Yellow	Orange		
6	=	NC	F2 N.O.	F2 N.O.	Green	Red		
7	=	GROUND	GROUND	GROUND	Lt. Green	Brown		PIN 7 GROUND
8	=	NC	DIG 0	DIG 0	Blue	Green		
9	=	NC	DIG 2	DIG 2	Violet	Blue		
10	=	NC	DIG 4	DIG 4	Gray	Purple		
11	=	NC	CTCSS	CTCSS/tape	White	Light Green		
12	=	RX-	RX-	RX-	Black	Blue/White		
13	=	TX-	TX-	TX-	Brown/WHT	Black		
14	=	PTT N.O.	PTT N.O.	PTT N.O.	RedWHT	Black/White		PIN 3 PTT
15	=	MON N.C.	MON N.C.	MON N.C.	Red/BLK	Gray/Black		
16	=	MON.COM	MON.COM	MON.COM	Orange/WHT	Yellow/Black		
17		NC	F1 N.O.	F1 N.O.	Orange/BLK	Pink/Black		
18	=	NC	F2 N.C.	F2 N.C.	Pink/BLK	Orange/Black		
19	=	NC	F2 COM	F2 COM	Yellow/BLK	Red/Black		
20	=	+V	+V	DIG6	Green/WHT-	Brown/White		PIN 4 COR
21	=	NC	DIG 1	DIG 1	Green/BLK	Green/Black		
22	=	NC	DIG 3	DIG 3	Blue/WHT	Orange/White		
23	=	NC	DIG 5	DIG 5	Violet/WHT	Purple/White		
24	=	RX+	RX+	RX+	Gray/BLK	Green/White		PIN 11 RX AUDIO
25	=	TX+	TX+	TX+	Black/WHT	Red/White		PIN 2 TX AUDIO
Shell	=				Shield	Shield		

This is a single ended audio interface for both Tx and Rx audio, they are referenced to pin 7. Note that pin 2, the PTT relay common is also tied to pin 7 on the radio plug. With this cable there is no need to connect the Solder Bridge in the IP-223.

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