

Chapter 6

Accessory Connections

6.1 Accessory Connector Pin Functions

This section gives a description of the accessory connector pin functions.



CAUTION: The accessory connections shown are not compatible to some other models of Motorola radios. Check the appropriate accessory or technical manual for further information.

Table 6-1: Connector Pin Functions

Pin	Function	Description
1	External Speaker (-)	Connect external 8 or 4 Ohm speaker to pins 1 and 16. CAUTION: Bridge-type output. Neither pin 1 nor 16 is Ground.
2	External Mic Audio	Input impedance: 500 Ohms. 80 mV rms at 1 kHz for 60% deviation. This path is enabled when external mic PTT is keyed.
3	External Mic PTT	Put this pin low (less than 0.66 V dc) to key transmitter and enable external mic audio path. This pin is pulled low via a diode when front panel mic PTT is pulled low to allow sensing of mic PTT by accessory. This pin is pulled high to 3.3 V dc via 3.3 k Ohms.
4	Programmable Output	Defaults to External Alarm. Provides an active high to 13.8 V dc battery supply. Maximum current: 0.25 amps.
5	Flat_TX_Audio Input	Input impedance: Greater than 35 k Ohms. The nominal input level is 150 mV rms for 60% deviation.
6	SCI	Serial Communication Interface (for configuration of this pin as General Purpose Input, in addition to pins 8, 12, and 14, return the radio to an authorized service center).
7	Ground	Used as ground.
8	Programmable I/O	Input or output.
9	Emergency Input	When connecting the Emergency Footswitch between pin 9 and pin 7, the radio will sense the connection upon Power Up. Shorting this pin to Ground by pressing the switch when the radio is OFF, turns ON the radio in Emergency Mode. Shorting this pin to Ground by pressing the switch when the radio is ON, activates Emergency Mode. To turn OFF a radio that was turned ON by the Emergency Footswitch (ON/OFF knob in the OFF position) turn the knob to the ON position and then to the OFF position.
10	Ignition Sense	For optional 3-wire ignition control, connect this pin to the vehicle ignition-controlled voltage source for ignition-controlled radio ON/OFF. To resume NON ignition state, remove the battery connection for 10 seconds; remove the ignition connection from this pin and reconnect the battery connection.

Table 6-1: Connector Pin Functions

Pin	Function	Description
11	Receiver Audio Output	Programmable (using CPS in the Rx Audio Type): 660 mV rms (de-emphasized/ muted) or 330 mV rms (non-de-emphasized/unmuted) at 60% deviation at 1 kHz. Default is de-emphasized/ muted. Minimum load resistance: 5 k Ohms..
12	Programmable I/O	Input or output.
13	Switched B+	(Switched Battery Voltage) 13.8 Vdc (500 mA max.) when radio is ON.
14	Programmable I/O	Input or output.
15	Internal Speaker	Connected to internal speaker (+) and by internal jumper to pin 16.
16	External Speaker (+)	Connect external 8 or 4 Ohm speaker to pins 1 and 16. CAUTION: Bridge-type output. Neither pin 1 nor 16 is Ground.