Section 4
Expanded Accessory Connector

General

The following is a description of the pin functions on the Expanded Accessory Connector for the M1225 mobile radio. Refer to Figure 1 for pin locations in the connector housing.

Pin	Description	Application
1	External Speaker (–)	Connect external 8-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	Pull this pin low (less than 1.8 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 5 V dc via 9.6 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. Refer to "Programmable Pins" below.
5	Flat Tx Audio Input	Input impedance: 35k ohms. 150 mV rms for 60% deviation. May be programmed to bypass limiter using RSS.
6	Programmable Input	Refer to "Programmable Pin."
7	Ground	
8	Programmable Input/Output	Defaults to COR carrier detect. Refer to "Programmable Pins."
9	Programmable Input	Defaults to Emergency Switch. Refer to "Programmable Pins."
10	Ignition Sense	Remove fuse F401 and connect this pin to vehicle ignition-controlled voltage source for ignition-controlled radio on-off. CAUTION: Accidentally shorting this pin to ground will blow internal fuse F401.
11	Rx Audio Output	330 mV rms (at 1 kHz if de-emphasized) at 60% deviation. Minimum load resistance: 5k ohms. Default is de-emphasized, muted. May be programmed for non-de-emphasized, unmuted using RSS.
12	Programmable Input/Output	Refer to "Programmable Pins."
13	Switched A+ Sense	13.8 V dc source for accessories when radio is turned on. Maximum current: 0.5 amps. CAUTION: Accidentally shorting this pin to ground with radio turned on will blow internal fuse F401.
14	Programmable Input/Output	Refer to "Programmable Pins."
15	Internal Speaker (+)	If jumper JU501 is removed, connect to pin 16 to enable internal speaker. NOTE: If the HLN3145 Public Address and Speaker A/B Switch kit is used, jumper JU501 must be removed if it is desired to mute the internal speaker when the switch is in position B.
16	External Speaker (+)	Connect external 8-ohm speaker to pins 1 and 16. CAUTION: Bridge-type output. Neither pin 1 nor 16 is ground.

Programmable Pins

Pins 4, 6, 8, 9, 12, and 14 are programmable I/O's. The functions of the pins can be assigned using RSS. Information on the available functions and how to program them is contained in the RSS help files in the Appendices section.

Pin 4 is an output only. It provides an active high to the 13.8 V dc battery supply (0.25 amps maximum), otherwise it is pulled low via 10k ohms.

Pin 6 and 9 are inputs only. They are normally pulled high to 5 V dc via 4.7k ohms. To activate the input, it should be pulled low to within 0.7 V dc of ground.

Pin 8, 12, and 14 may each be programmed as either an input or output. If programmed as an input, the pin is pulled high to 5 V dc via 4.7k ohms. To activate the input, it should be pulled low to within 0.7 V dc of ground. If programmed as an output, the pin is normally pulled high to 5 V dc via 4.7k ohms. When enabled, the output goes active low. Maximum sinking current is 50 mA.

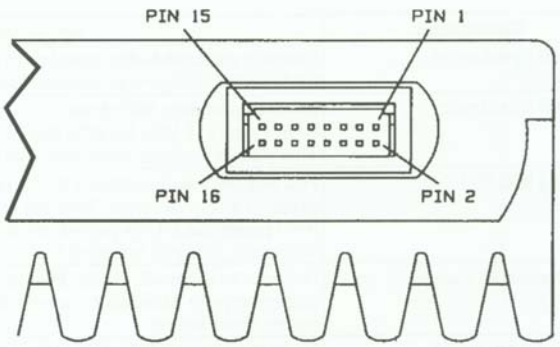

Figure 4-1. Expanded Accessory Connector Pin Locations (viewed from rear of radio)