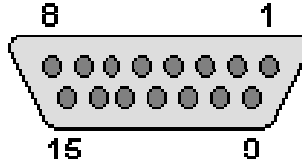


17. Use with External Radio

The model RV-M5-X is an OEM version of the FireLine modem which does not contain an internal radio. On the rear panel of the RV-M5-X is a 15 pin D-sub female connector, intended for connection to an external radio. The following table describes the functions of the various pins.



Front view of 15 D female connector

Pin Number	Function	Notes
1	<i>Ground</i>	Ground connection
2	<i>8V DC Out</i>	8V DC output. 2A max at 10% duty, 1A max at 25% duty, 250mA max continuous.
3	<i>TX ON</i>	Active high. 0V when off or in RX mode. 5V in TX mode.
4	<i>RX ON</i>	Active high. 0V when off or in TX mode. 5V in RX mode.
5	<i>Radio ON.</i>	Active high. 0V when external radio should be off. 5V when external radio should be on.
6	<i>TX Mod</i>	Wide-band modulation to the transmitter. Must be DC coupled, flat 0-4800Hz frequency response. 1V p-p nominal for full deviation.
7	<i>No Connect</i>	
8	<i>No Connect</i>	
9	<i>No Connect</i>	
10	<i>No Connect</i>	
11	<i>Keyline</i>	In RX mode, this is an open-drain circuit. In TX mode, it is pulled to ground with approximately a 10 ohm impedance.
12	<i>RSSI In</i>	Optional signal. Analog RSSI from external radio to the FireLine modem. Unused in most applications. May be used as a signal BUSY Channel to the modem. High-busy, low=not busy.
13	<i>RX Audio</i>	Wide-band receive audio input. Must be DC coupled to the radio FM discriminator. Flat response from 0 to 4800Hz.
14	<i>Mod Adjust</i>	DC voltage to adjust external modulation balance. Unused in most applications.
15	<i>DC In/Out</i>	9-16VDC. Directly connected to the DC input jack of the FireLine.