

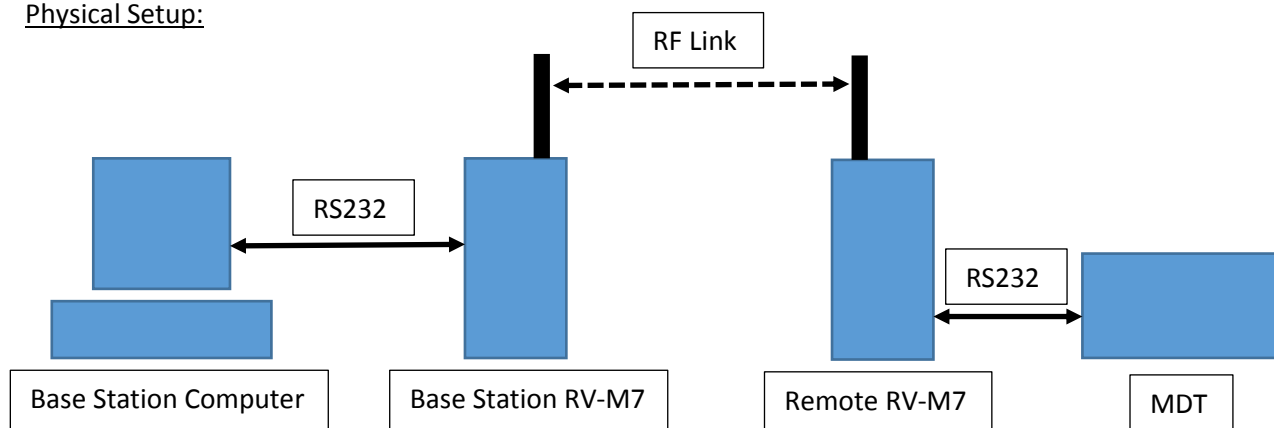
AN128 MDT – M7

Example Configuration

E. Musil 01/26/2017

Scope: This document will describe the MDT and M7 physical configuration and internal settings to allow text messaging from the base to the MDT, Status Messages from MDT to base, Event Codes from MDT to base, and GPS position reports from MDT to base.

Physical Setup:



Settings:

Base Station Computer: Radio Manager, RavTrack, or equivalent software needs to be configured for serial port settings matching the Base Station M7. Usually this will be 38400 Baud, 8 Data bits, no Parity bits, 1 Stop bit, no flow control. In addition, the outbound serial data needs to utilize the WMX protocol for on the fly addressing of several remote M7 / MDT pairs.

Base Station RV-M7 Radio: Serial port settings need to match those of the Base Station Computer. As a general rule, for two RV-M7 radios to communicate, both need to be set to the same frequency and over-the-air baud rate. The M7 needs to be firmware version E20 or later. Additionally, the addressing needs to be configured in a way that allows communication between the two radios, see the RV-M7-GX Technical manual. For general TDMA / GPS setup see AN139 and the RV-M7-GX Technical manual. GPS 2, NMEAOUT 0, OUTPUT 1, WMX 1, TDMADATA 0.

Remote RV-M7 Radio: See Base Station RV-M7 above for general setup. Serial port settings need to match that of the MDT attached to the remote radio. Usually this will be 38400 Baud, 8 Data bits, no Parity bits, 1 Stop bit, no flow control. The M7 needs to be firmware version E20 or later. GPS 6, NMEAOUT 0, OUTPUT 1, WMX 1, TDMADATA 0, ATMD 1.

MDT: Serial port settings need to match that of the remote radio. WMX 1.