

# SRM6000/6100 Manual Addendum

## Instructions for ADT Modem

The SRM6000/6100/ADT has the ability to allow multi-point remotes to remotely connect to a multi-point master via the DTR line in combination with an ASCII string given to the modem. In order to implement this function, a few configuration settings must be performed. Once the modems are configured, raising the DTR line and sending the proper ASCII string will cause the multi-point remote to connect to a multi-point master modem. Dropping the DTR line will cause the multi-point remote to disconnect from the multi-point master, therefore, available to connect to another multi-point master. The ASCII string determines which multi-point master the unit will attach to.

### SRM6000/6100/ADT Modem Requirements:

- The SRM6000/6100/ADT modems have special firmware installed that allow operation in this mode. For additional information regarding this firmware, contact Data-Linc Group at 425.882.2206.

### Hardware Requirements:

- Equipment attached to the SRM6000/6100/ADT needs to be able to control (raise and lower) a logic line on the serial port. This line needs to be connected to the DTR line (pin 4 of the DB-9 connector) of the SRM6000/6100/ADT.
- Equipment attached to the SRM6000/6100/ADT needs to be able to send an ASCII string.

### Configuration Requirements.

- Master modem:
  - Multi-point master (Operating mode menu)
  - Number of repeaters = 1 (Edit Multi-point parameters menu)
  - Network ID < 255 (Edit Multi-point parameters menu)
  - Special hop table\*
- Remote modem:
  - Multi-point remote (Operating mode menu)
  - Number of repeaters = 1 (Edit Multi-point parameters menu)
  - DTR Connect = 0 (Edit Multi-point parameters menu)
  - Diagnostics > 0 =< 63 (This will be used as the delimiter character in the ASCII string / Edit Multi-point parameters menu)
  - Network ID < 255 (does not need to be set to the masters Network ID / Edit Multi-point parameters menu)
  - Radio ID = 4095 (Enables remote connect mode/Edit Multi-point parameters menu)
  - Special hop table\*

**Note:** The special hop table is for the Sea-Tac Airport project. This hop table is enabled by setting the modem to the Brazilian hop table (the modems are pre-configured for this). The Brazilian hop

table is not for use in Brazil; however, it has been altered for this application.

### **ASCII String.**

The ASCII string used to connect the SRM6000/6100/ADT to a given Multi-point master is a three-byte string. The first byte of this string is a delimiter character. It's ASCII value is one less than the Diagnostics (B) entry in the Edit Multi-point parameters menu. For example, if you want this character to be 30 hex or 48 decimal then you would set the Diagnostics to 49. The next byte is the Network ID of the master radio you want to connect with. For example, if you want the modem to connect to a Multi-point master that has it's Network ID set to 113 (decimal) then the second byte would be 71(Hex). The Third byte is the XOR checksum of the first and second bytes.

#### **Example:**

- o A Multi-point remote modem with the Diagnostics set to 49
- o A Multi-point masters Network ID set to 113

The ASCII string would be:

- o First byte 30 hex (48 dec/character 0)
- o Second byte (71 hex (113 dec/character q)
- o Third byte 41 hex (65 dec/character A)

**Note:** The string sent to the modem must represent a possible connection. If the connection is not possible (bad Network ID, inaccurate delimiting character or bad checksum) or the master modem it is trying to connect to is off line, the modem will get locked into an acquisition loop. To clear this condition, the power will need to be cycled to the modem.

### **Technical Support**

If further information is needed, please call Technical Support at (425) 882-2206 or email [support@data-linc.com](mailto:support@data-linc.com).