R9120 ModHopper – Dipswitch Mode Option

Starting in version 2.xx, the ModHopper R9120 firmware has several protocol options for the RS232/RS485 port. These include Modbus (master/slave/auto), Orion, and Point Six. Usually, this option is configured by writing to a modbus register 40143. If the serial port protocol is configured for something other than Modbus, it may make it difficult to reconfigure the register. In fact, the only way to reprogram the modbus registers is through the wireless link of another ModHopper. A special boot configuration option will allow you to set the serial port protocol back to Modbus. If the ModHopper is connected to an AcquiSuite or other modbus master, choose the "modbus slave" option listed below.

The following instructions require that firmware version 2.02 or later be installed on the ModHopper. Consult the firmware update instructions if you have an older firmware version resident in the ModHopper.

Step 1: Make note of the current dipswitch settings. You will need these to set the original configuration when you are done with this procedure.

Step 2: Remove power from the ModHopper.

Step 3: Turn off all the dipswitches. Turn on the "reserved" switch

Step 4: Select one of the following options and set the corresponding switches:

Modbus Autodetect mode: RFchannel1=off, RFchannel2 = off, RFchannel4 = off, Modbus 128 = on.

or

Modbus Master mode: RFchannel1=on, RFchannel2 = off, RFchannel4 = off, Modbus 128 = on.

or

Modbus Slave mode: RFchannel1=off, RFchannel2 = on, RFchannel4 = off, Modbus 128 = on.

Radio HighSpeed mode[1]: Rfchannel1=on, Modbus 128 = on, Modbus 1 = on

Radio Distance mode[1]: Rfchannel1=off, Modbus 128 = on, Modbus 1 = on

Clear key mode[1]: Modbus 128 = on, Modbus 2 = on

Clear 485 lock mode: Modbus 128 = on, Modbus 2 = on, Modbus 1 = on

Step 5: Apply power to the modhopper.

Step 6: The TX485, Alive, Pulse1, and Pulse2 LEDs should start blinking together.

Step 7: Remove power from the ModHopper.

Step 8: Turn off the Reserved dipswitch. Set the Modbus address and RF channel dipswitches back to the original positions noted in step 1 above.

Step 9: Apply power to the modhopper. The ModHopper will now be in a normal operating mode.

Notes:

1) Feature available on R9120-5 only.