

## UNAVCO Notes on Determining Proxicast Signal Strength

Until Proxicast integrates a signal strength indicator into the "Web Configurator" interface on port 7780 as planned, the following method can be used.

1. With the modem already powered up, move the switch on the front from the "RUN" to the "CFG" position. This will sever the connection between the CDMA and the LAN, but will not disable the LAN itself, so you will still have a DHCP-assigned IP number but will not be able to access the internet.
2. Connect to the "CFG PORT" using a 9-pin serial cable. If needed, use a adapter like the Keyspan High Speed USB/Serial adapter (OSX driver). Open a terminal program at 115200, 8N1, hardware flow control. The modem will respond as follows:  
AT S7=45 S0=0 L1 V1 X4 &c1 E1 Q0  
OK

3. Issue the command:  
AT+CSQ?  
The modem will return:  
AT+CSQ?  
+CSQ: 20, 99

The first number (in this case 20) is the 5-bit signal strength, 31 being maximum, and 99 being no signal. The second number returned is always 99. So if your first attempt gives a low number, move the antenna around and re-issue the AT+CSQ? command until you find your maximum signal. Note that we've gotten decent internet connectivity with pretty low numbers, so in the end downloading a web page is the ultimate test of functionality.

4. Finally: DON'T FORGET TO MOVE THE SWITCH BACK TO THE "RUN" POSITION before leaving, or you will have to return later to do so...