## Configuring an NPM address through the terminal interface

Occasionally an NPM address can get garbled or is set to the wrong value, causing a conflict. In either case, this result can be an NPM that is reporting data. To reconfigure the address:

- 1. Make sure only one NPM (the one that is being reconfigured) is connected to the logger.
- 2. Power off the data logger.
- 3. Set up a Windows *Hyperterminal* or *Teraterm Pro* interface to the datalogger per instructions in the CRS1000 manual, Appendices A and B (http://hydroinnova.com/reso\_manuals.html).
- 4. Make certain that the Terminal interface program is set up to send Carriage Returns and Line Feeds at the same time. On the Hyperterminal interface this is configured by going to File-> Properties. Then go to the Settings Tab and select the Ascii Set Up button. Select the "Send Line Ends with Line Feeds" checkbox. I do not believe the recent CRS-1000 manual indicates this specific direction.
- 5. Turn on the logger and info will be displayed on the terminal window as the logger boots up. Something like the following should be displayed.

/-- Hydroinnova Cosmic Ray Probe --/
/-- Q-DL-2100 Datalogger, FW Version 1.450 --/
/-- Datalogger Serial Number: 1006036 --/
Logger last powered down at 2010/08/27 20:19:08
Initializing Peripherals... Please wait.
.. (Several more lines of Informational messages)
...
...
Current Time is: 2010/08/27 20:19:30
READY

6. After the READY indicator is displayed, confirm logger two-way interface operation by typing "test" and hitting Enter. The logger should respond with "OK it works!" (If it does not then there is likely a problem with the *Hyperterminal* or *Teraterm setup*).

The next step involves sending a command to the NPM to change the address. All commands to an NPM must start with its address character, followed by an "X". "Q" is the generic address character and all NPMs connected will respond to a command that begins with Q. The Q character should therefore be used when only one NPM is attached.

- 7. To set the NPM address to address to 'A', type 'QXA=A'.
  - The module should respond with a newline, echoing the address set.
  - If the NPM does not respond, then the logger will simply respond with a blank line and carriage return.
  - If the NPM does not respond (i.e., the blank line and carriage return are returned), replace the NPM's RJ45 cable and repeat steps 1-6. If it still does not respond, then contact Hydroinnova for further directions. The module may need to be replaced.
- 8. Turn off the power, leaving only one NPM attached. To verify operation, complete Test 2 or 3 as relevant in the support document entitled *TroubleshootingNPMCommunication*.