

## Special Notes for Ethernet Users

If you are connecting your instrument or computer to one of the nodes using Ethernet protocol you should understand that inside the node you are actually connecting to a network hub. Therefore to accurately simulate connecting to the node you should be sure that the guest port simulator's Ethernet connector (the RJ-45) is connected to a hub using a standard (straight-wired) Ethernet cable. Always use a straight cable to connect to the hub or the simulator's Ethernet connection. The hub uplink port can be connected to the Internet to test external access.

After connecting in this manner, if your computer or instrument indicates a lack of network connection try the following steps.

- Check the configuration of your guest port by requesting a status return.  
#Pnn,S where nn= port number (in hex)  
Saa,,vv<sub>a</sub>,ii<sub>a</sub>,gg<sub>a</sub>,vv<sub>b</sub>,ii<sub>b</sub>,gg<sub>b</sub>,ll,tt,gg<sub>ahi</sub>,gg<sub>alo</sub>,gg<sub>bhi</sub>,ff<sub>1</sub>,ff<sub>2</sub>  
Where the last digit of ff<sub>1</sub> should indicate data type 4 for Ethernet.  
If it is not type 4, set it by sending the command #Pnn, D,4 then retry.
- The wiring could be reversed inside your instrument or cable. Try using a cross-over cable inside your instrument and test again.
- If you are using a hub *inside* your instrument, bypass the hub and test again. Then you have three options:
  - If the hub in your instrument has a cross-over button then reconnect to the hub, push the button and try again.
  - Change the wiring on your connector, reattach your internal hub and try again.
  - Use a cross-over cable instead of a straight Ethernet cable between the node and your hub.

If you get a network connection but cannot address your instrument then double check that your system network configuration is correct including the IP address and gateway.

If all else fails contact the MVCO manager at x2573.