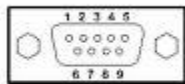


## Features

- Control each of the Rain8UPB module's eight zones individually.
- Supports status request.
- Works with PRO or regular Rain8UPB modules

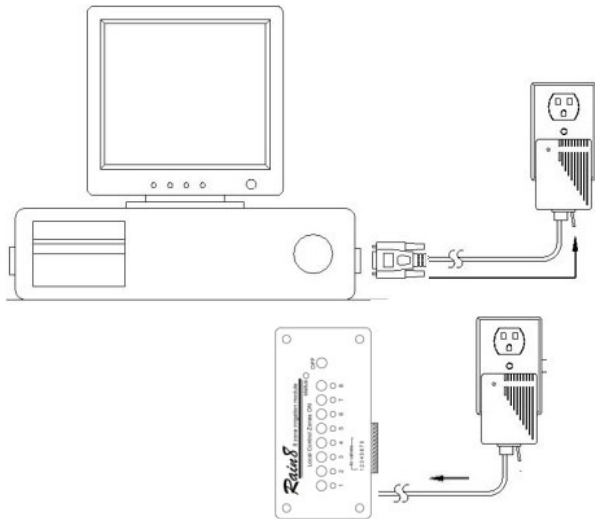
**You will need a PC with Windows 98 or later as your operating system, a serial port and a second PIM to utilize the demo software.**

Connect your second PIM to an unused COM port on your PC. If you are using a PCS or Simply Automated PIM with a DB9 jack as shown below, all you need is a regular DB9F – DB9M RS232 cable.



If you are using a HAI PIM with an RJ11 jack (looks like a phone jack) then you will need the special cable assembly for connection to a PC's serial port from HAI.

**Caution: do not try to substitute the WGL cable assembly that came with your Rain8UPB that looks the same but is wired differently.**



It is assumed at this point that:

1. You have configured your Rain8UPB module and have recorded the NID and Rain8 module number that has been assigned.
2. Your Rain8UPB module is powered and connected to a PIM as described in your installation instructions.
3. The status led on your Rain8UPB module is a steady solid green indicating that it sees the PIM connected to it.

Run the Rain8UPB demo software:

1. Enter your Com port number in the "port" text box.
2. Uncheck "auto query"
3. Click "connect"

**If you see this message,**



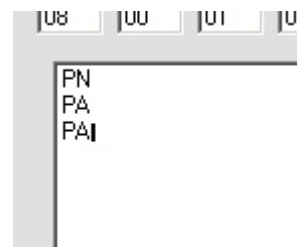
it will be necessary to correct COM settings or defective cables or PIM before proceeding. You are not connected.

If you see the letters "PA" in the large window at the bottom, you are connected to the PIM and may continue.

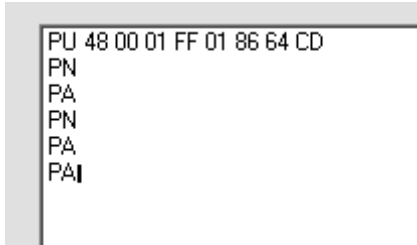
However, **if you see "PE" at any time, there is a problem** with the PIM connection. It could be a COM port issue or a PIM problem. This will have to be resolved before proceeding.

## Running the Demo Software

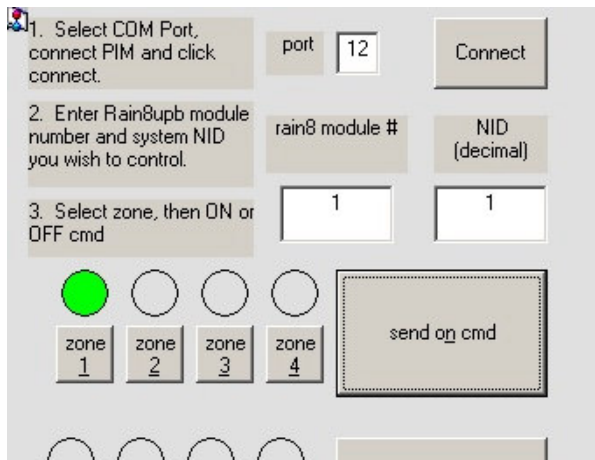
1. Verify, "auto query" is unchecked.
2. Enter the module number and NID that was assigned to your module during the initial configuration.
3. Click on one of the zone buttons and the two send buttons should be no longer grayed out.
4. Click on the "send on cmd" button. You should now see:



- Click on the “send query” button. This should now be displayed:



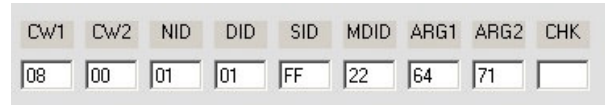
- This added data is the response for the status request and will always begin with a PA PN PU if it passes all quality checks. The actual data that will vary with your settings. If you see a PE then you have a marginal link as this indicates an error was detected.
- The circle just above the zone button you clicked on earlier should now be green indicating this zone is now active. The led on the PRO version that corresponds to this zone should also be on. If a valve is connected to this zone terminal and the common terminal, the water should be running.



- Click on the OFF and then the “send query” buttons and you will see a similar response but with the next to last byte indicating the off status (00)
- Note that the top line of the large display will always contain the last UPB transmission on the power line. This may be useful in troubleshooting general UPB issues

**At this point you have confirmed the proper operation on your Rain8UPB module**

For those of you interested in writing UPB control software for a PIM the section shown below represents the exact PIM commands necessary to provide control



This represents the ON command for NID = 1 DID = 1

Changing the settings and clicking on different buttons will alter the values as required.

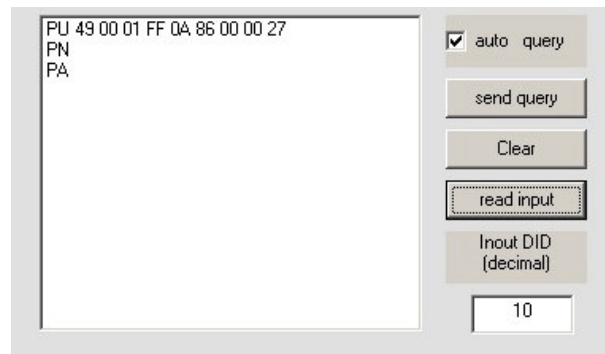
**Input Feature (flow meter)**

The input feature must be enabled and a DID selected with the config software, as shown below, before it can be used. Be sure you use a DID not in use by any other UPB device.



Now that you have enabled and configured the flow meter input feature you can return to the UPB demo software.

Clicking on “read input” should give the following results.



Looking at the last three bytes of the Rain8UPB’s response, discard the last byte as it is the check sum and not needed.

The remaining two bytes are the 16-bit counter value that represents the flow meter’s reading. In this case the reading is 0000.