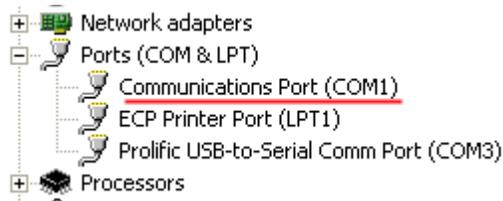


Solving Problems with RS232

If you are experiencing problems with your scale/balance communicating to your computer then you can follow these basic checks and test to help diagnose where the problem may lie. First check that the COM port is enabled and working by looking at the Windows Device Manager (found under Control Panel, System, Device Manager in MS Windows XP & similar in other variations of MS operating systems).

You should see all the COM Ports under the section “Ports”, see example below:



This should also list the COM port number ie COM1 in this example. If it does not show up under ports or there is a yellow exclamation symbol next to it then there is a problem with the physical device or driver. Check the port is enabled in your computer BIOS, failing that contact your computer manufacturer for more help..

If there is a red cross next to it – this could mean the device is disabled, try right clicking on the COM port and enabling it.

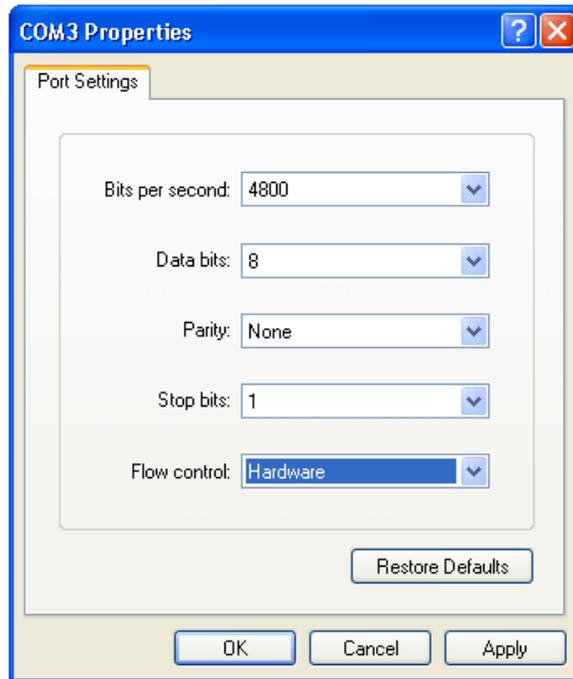
Assuming all is ok so far then you can try connecting the scale to the computer with a RS232 cable. Make sure you read the scale/balance’s manual to check you have a correctly wired RS232 cable – as not all RS232 cables are wired the same way! A basic communication test should be executed to make sure data is flowing correctly from the scale to the computer. A program like HyperTerminal on MS Windows XP can be used, though this program is not included on later operating systems like MS Vista & Windows 7. Alternatively you can use a free program like Putty.

Typical HyperTerminal Setup for a basic test:

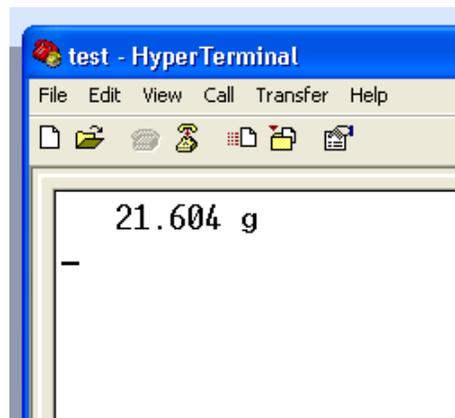
Launch HyperTerminal:



Set the COM port number – COM3 in this example. Next set the Baud settings, typically 4800 Bps, 8 data bits, no parity and 1 stop bit for most ADAM scales (though not all, so you need to check the user manual’s RS232 Section to find out how to check the settings inside your scale/balance.



Once the HyperTerminal settings have been entered you should try pressing print on the scale/balance/indicator etc and hopefully you will see a reading appear in HyperTerminal like below (Note the scale output varies considerably per model but as long as you can see something that resembles the reading from the scale it should be working, you may also see lots of extra information depending upon the model, that is not displayed on the scale’s screen – that is ok).

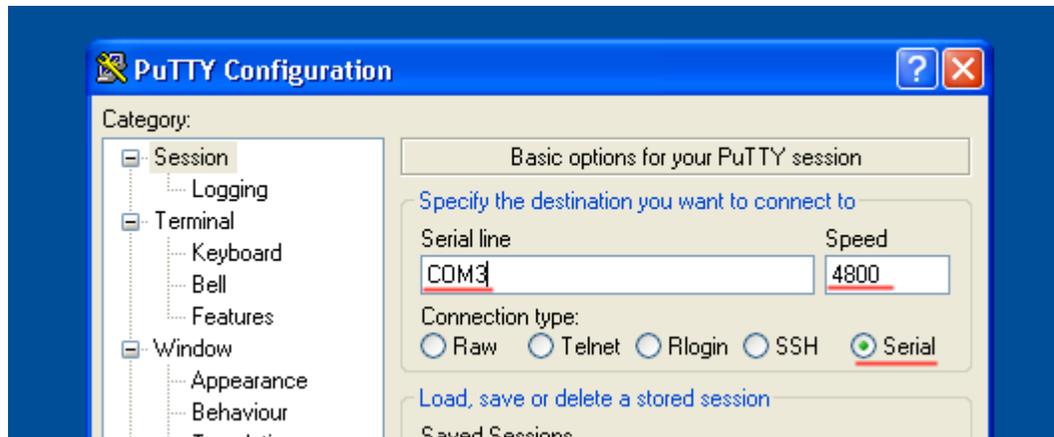


Typical Putty setup for a basic test:

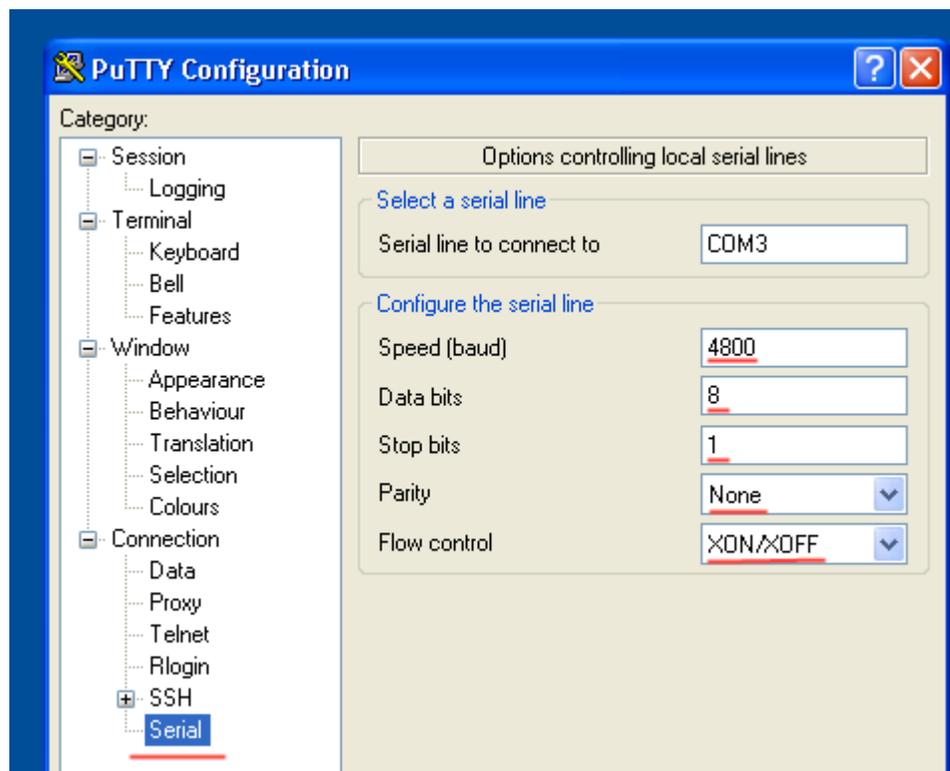
Download and install the free program Putty from:

<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

There are multiple versions to download, the simplest one to download/install is the “Windows installer” version. Download and install using the default options. Launch the Putty program. Change the Putty configuration screen so “connection type” is set to “serial”. Then enter the COM port in the “Serial Line” box, COM3 in this example

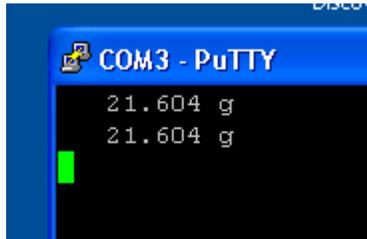


Next set the Baud/speed setting, typically 4800, 8 data bits, no parity and 1 stop bit for most ADAM scales (though not all, so you need to check the user manual’s RS232 Section to find out how to check the settings inside your scale/balance. The flow control can be left at its default.



Click open and you should get a black window open.

You should try pressing print on the scale/balance/indicator etc and hopefully you will see a reading appear in Putty window like below (Note the scale output varies considerably per model but as long as you can see something that resembles the reading from the scale it should be working, you may also see lots of extra information depending upon the model, that is not displayed on the scales' screen – that is ok).



Interpreting the Results:

If you see lots of characters that look nothing like the reading on the scale for example:

```
\x%31\v\n&€o\x%32\x%31\x%31|\x%31\x%33\x%31\x%31
```

This usually means you do not have the com port/baud settings correctly matched between the scale and Putty/HyperTerminal, you need to recheck the settings in the scale & Putty/HyperTerminal – they must match.

If you see nothing appear in the Putty/HyperTerminal screen then again this usually means you do not have the com port/baud settings correctly matched between the scale and Putty/HyperTerminal, you need to recheck the settings in the scale & Putty/HyperTerminal – they must match.

The data is readable in the Putty/HyperTerminal window - this means the basic communications test is now complete, your computer/scale appears to be working OK. You should now be able to use the scale with other software like the [ADAM DU Data Utility](#) for collecting and analyzing readings from ADAM Balances & scales. See www.adamdu.com for more information about this program.