MICROTOPS MEASUREMENTS WITH LINUX

Requirements

- Superuser rights on the machine to install and run the specific software. Without running the software as superuser it is not possible to connect to the device!
- USB or COM-port to be able to connect to the MICROTOPS. In case of an USB-port, a converter to COM is needed.

Installation

There are two or even more software packages available which are similar to the Hyperterminal under Windows:

- cutecom
- minicom

The first one comes with a graphical user interface, while the second doesn't.

Since the packages are small both programs can be easily installed side by side. Both programs are included in the Universe Repository and can be installed by typing

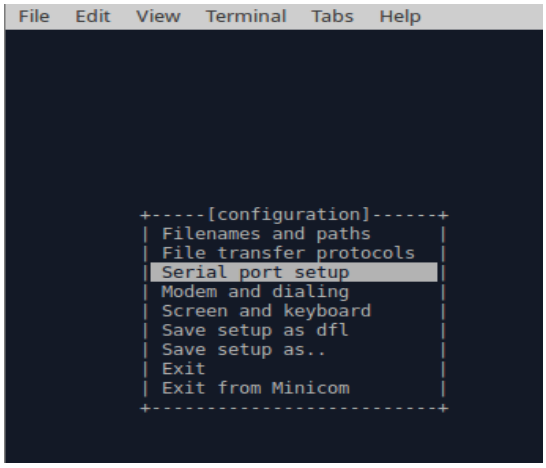
sudo apt-get install cutecom or *sudo apt-get install minicom*

in a terminal.

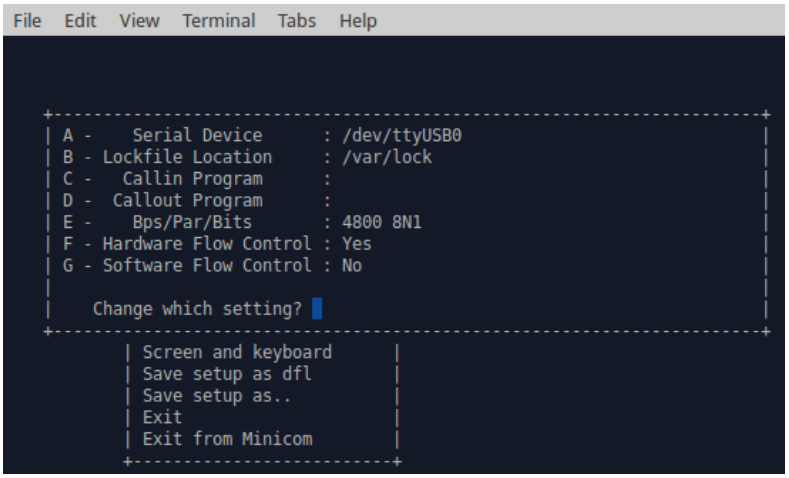
Configuration

Minicom

Start minicom with superuser permissions: *sudo minicom -s*:

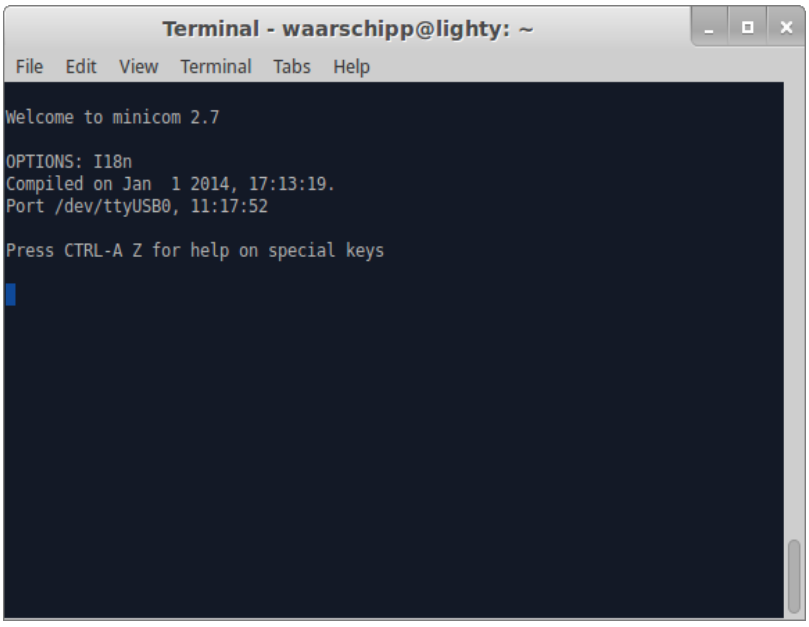


Select “Serial port setup” with the down-arrow on your keyboard and continue with enter to get the following dialog:

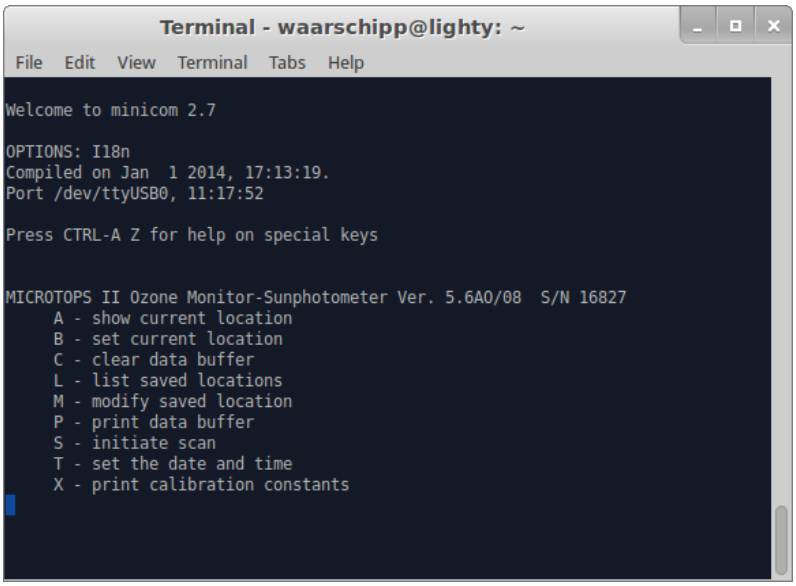


By typing the letter on the left hand side you can change the different settings. Make sure, that you have selected the right serial device (if you have only one USB-port in use, it is probably */ dev/ttyUSB0*. To get a list of all possible ports you can run *dmesg | grep tty* in an other terminal) and the bits per second (4800).

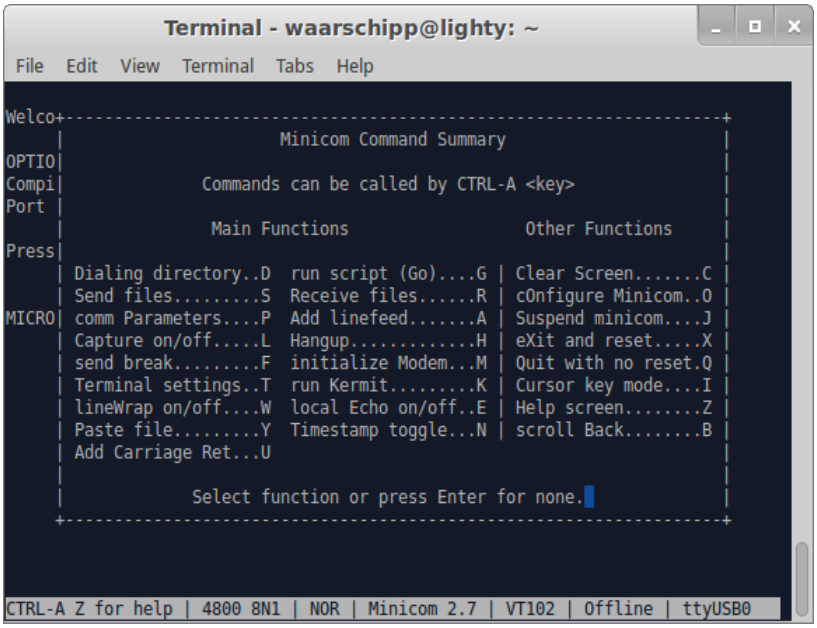
Optional you can save these settings by selecting “Save setup as dfl” for future sessions as default.
By choosing “Exit” you will leave the setup and automatically be connected to the MICROTOPS if all settings are correct:



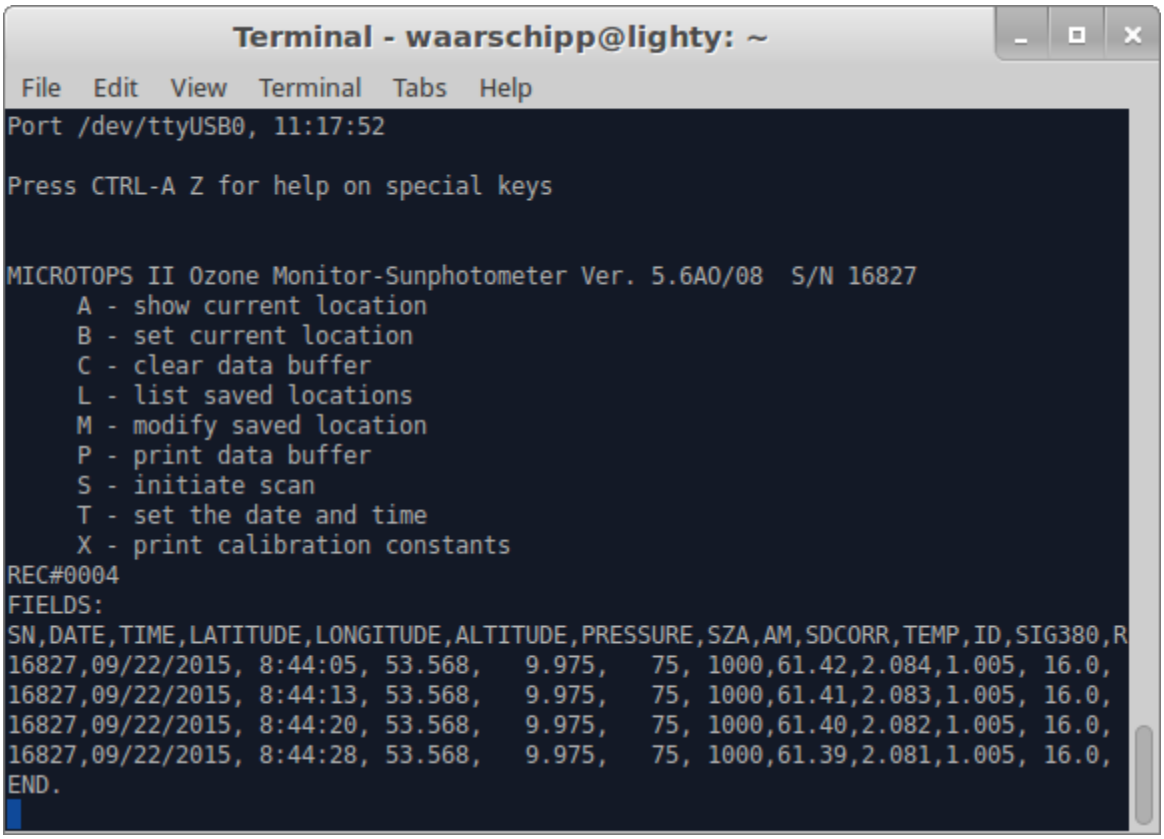
By pressing *return* you will get a number of options, the MICROTOPS supports:



By typing “p” you get all your measurements listed.
To save them you have to enable the capture mode. Press “Ctrl-A Z” to show the options:



Capture mode can be enabled by typing “L” and inserting a filename. This file is created in your current working directory (where you started minicom). Entering “p” in the command window will now show all your measurements and also save them in the provided file.

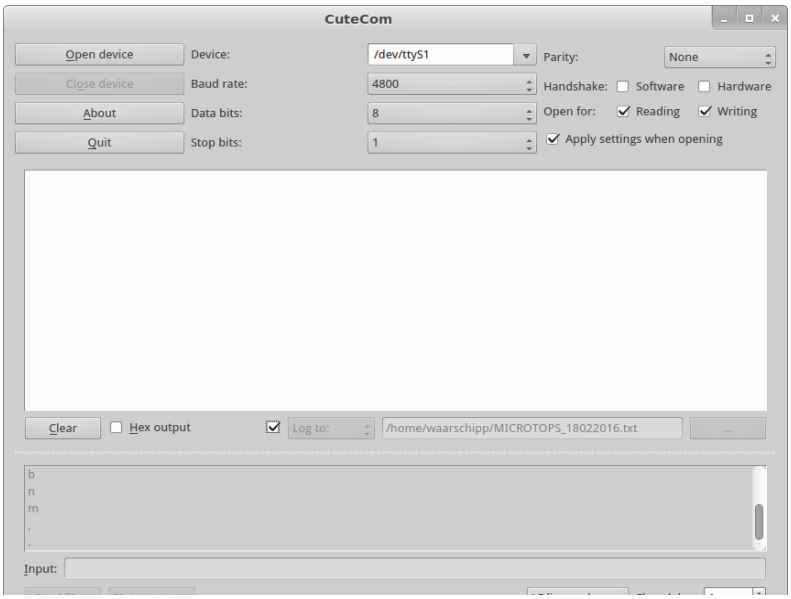


After you have checked that the data has been successfully recorded to the file you should disable the capture mode so that no further activities are recorded to the file. This is done in the same way as turning on the capture mode: press “Ctrl-A Z” and “L”.
Now the logging is stopped and you can delete the measurements on the MICROTOPS by entering “c” in the command line.

Exit minicom by “Ctrl-A Z” followed by “Q”.

Cutecom

Start cutecom with superuser permission (sudo cutecom) and select the right port (see also the minicom section) as well as baud rate of 4800, data bits 8 and stop bits 1 as shown below:



- Enable also the logging by setting a tick before “log to:”.
- Start the MICROTOPS.
- By clicking on “Open device” you connect to the MICROTOPS and can transfer data by typing a “p” in the Input line at the bottom of your window.

  Other options you may use are:

  A - show current location
  B - set current location
  C - clear data buffer
  L - list saved locations
  M - modify saved location
  P - print data buffer
  S - initiate scan
  T - set the date and time
  X - print calibration constants

!!! BE AWARE that minicom and cutecom do overwrite a file. So always change the filename and copy the file to a different location to minimize potential data loss.