

# **TUTORIAL N° 1**

## **USING TERMITE PROGRAM**

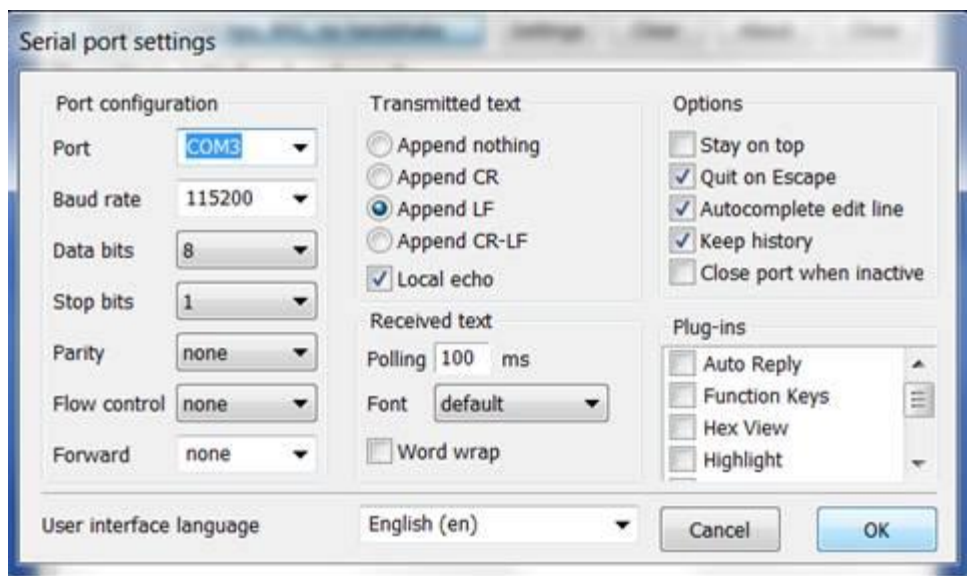


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For controlling PIEZOCONCEPT nanopositioner, a good start can be to use Terminate (or Hyperterminal ) : The Terminate program can be downloaded at this webpage : [http://www.compuphase.com/software\\_terminate.htm](http://www.compuphase.com/software_terminate.htm) . It provides a suitable commonly-available interface for talking to the controller, by sending the appropriate Serial Command. It uses an interface similar to that of "messenger" or "chat" programs, with a large window that contains all received data and an edit line for typing in strings to transmit. Highlights of the utility are the ease of installation (possibly with pre-configured settings) using a heuristic search for the appropriate COM port and, as was mentioned, its user-friendliness.

Once you will become familiar with all the serial command, you will be able to switch to more sophisticated program (Labview) more easily.

After installation of Terminate, you should click on the Setting tab and enter the parameter below. Only the COM port may be different, ie you may have COM8 or COM42 (instead of COM3 for your nanopositioner).



Once this is done, you should click on the button "Disconnected - click to connect "

Then you can start to enter at the bottom of the Terminate software the commands you would like to use.

If you start with "INFOS", you should get all the information needed for your system.

### INFOS

Piezconcept product :  
Nanopositioners : LT3.300  
3 Axis available  
Travel X : 300  $\mu$ m  
Travel Y : 300  $\mu$ m  
Travel Z : 300  $\mu$ m

Then you can use the basic command like MOVEX or GET\_X.

```
MOVEX 10u
Ok
GET_X
10.012 um
```

Then you can do more advanced functions. For example, if you would like to do a XY “step by step” scan between 0 $\mu$ m and 30 $\mu$ m for X and Y, with 100 step in X and 100 steps in Y, with 10ms period between point, with the emission of a TTL pulse from port 1 for axis 1 (X) at start of motion, here are the commands to be sent.

```
SWF_X 100 0u 30u
NumPoints: 100, Start: 0.0, End: 6553.0
Ok
SWF_Y 100 0u 30u
NumPoints: 100, Start: 0.0, End: 6553.0
Ok
STIME 10m
Ok
CHAI0 1o1s
TTL1 output
set up TTL pulse from port 1 for axis 1 at start of motion
Ok
RUNWF
Ok
100.00
100.00
0.00
Scan completed
```