# Troubleshooter

- If the communication does not work, cable and COM port settings should be checked at first.
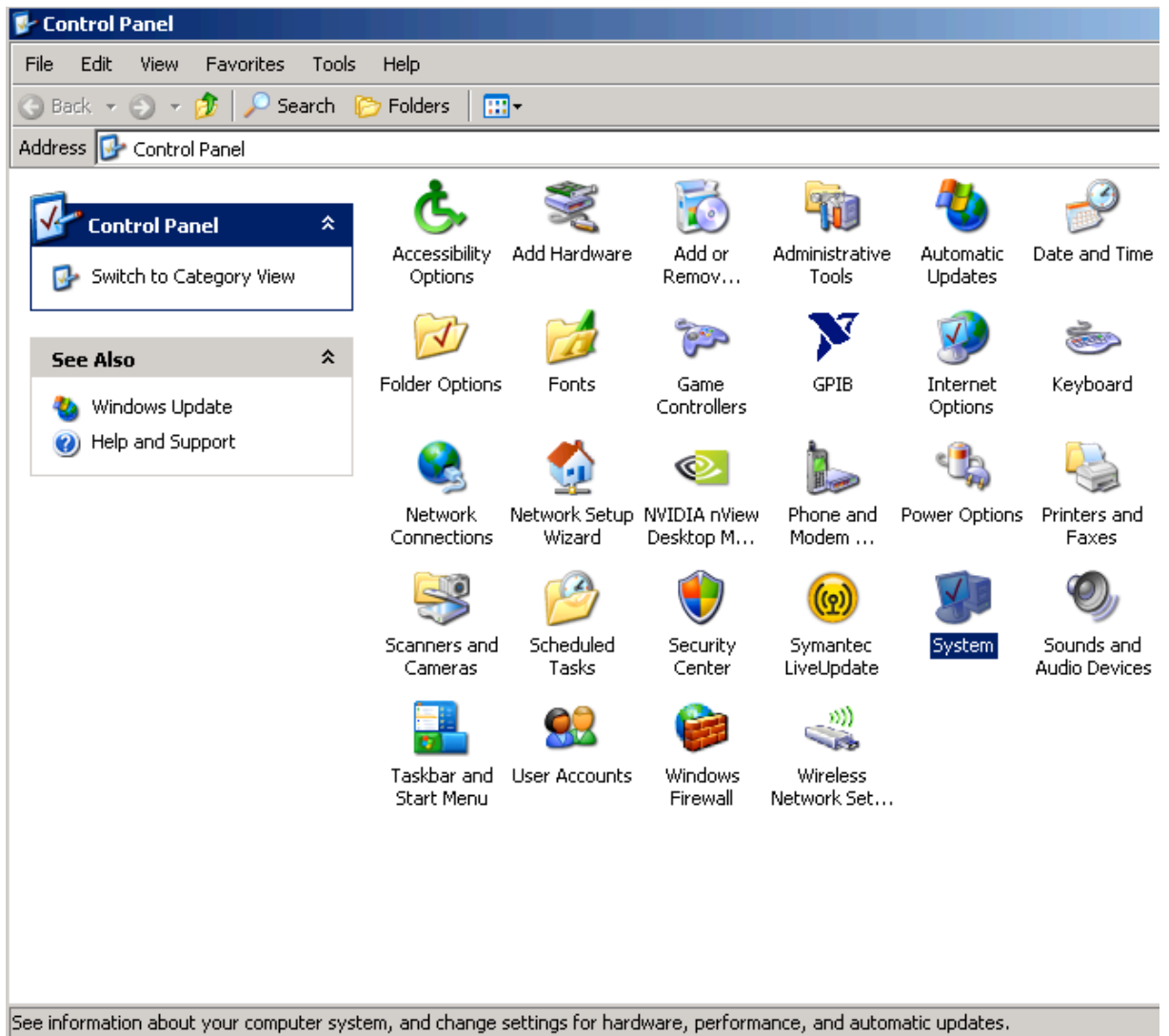
## Cable check

- It's very important to use known type of RS232 cable. Use cable Ekspla supplied or **straight** standard RS232 cable.
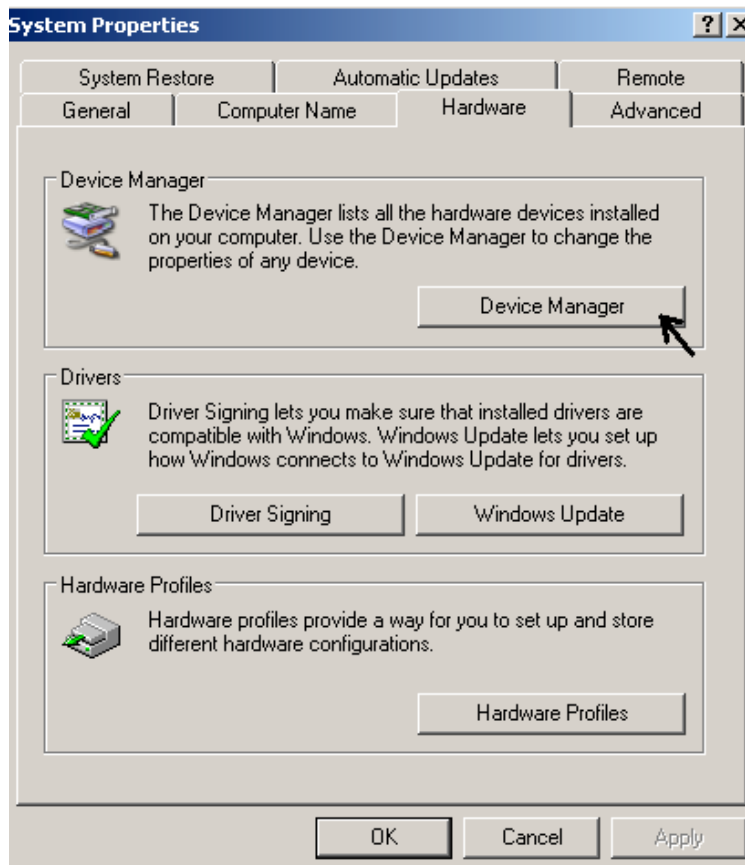
## COM Port verification

- Look in the 'Device Manager', which you can find following these steps:
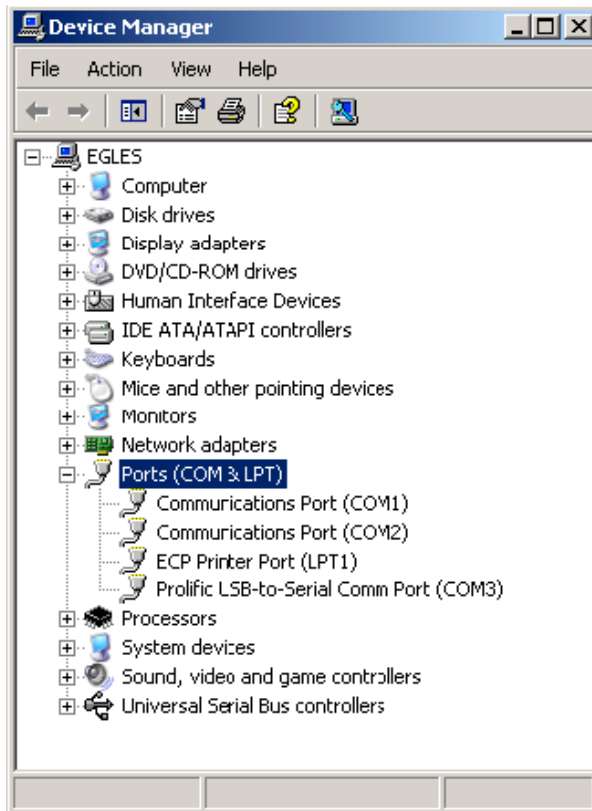- Go to START menu and there find 'Control Panel':
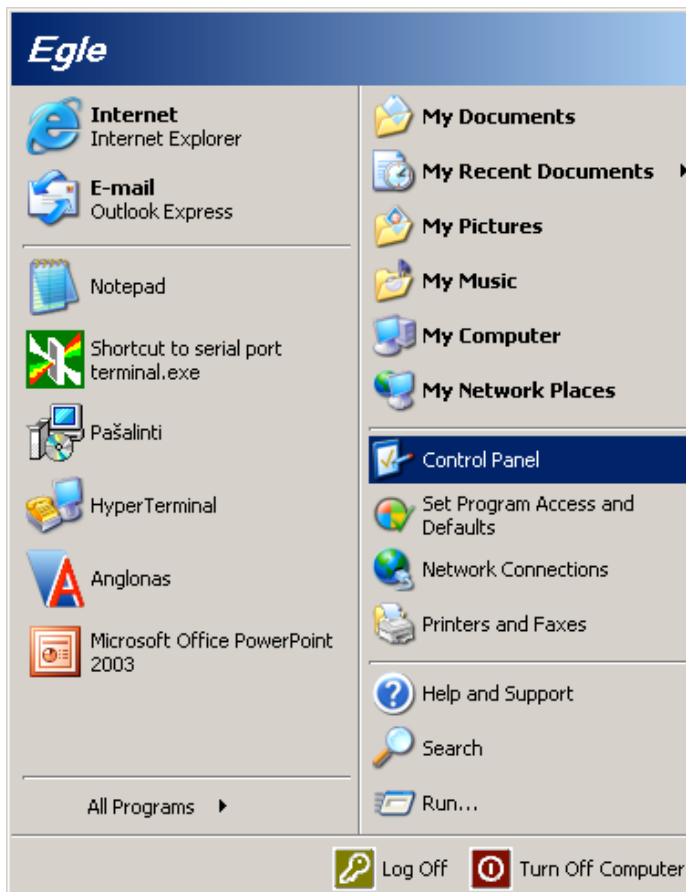


- In the 'Control Panel' go to the 'System':

- There you have to find 'Hardware' and then go into 'Device Manager':

- Press twice 'Ports' icon and there will appear the list of COM Ports. Look at the 'USB-to-Serial' COM Port, the number of this COM Port you have to use in the LabVIEW program.
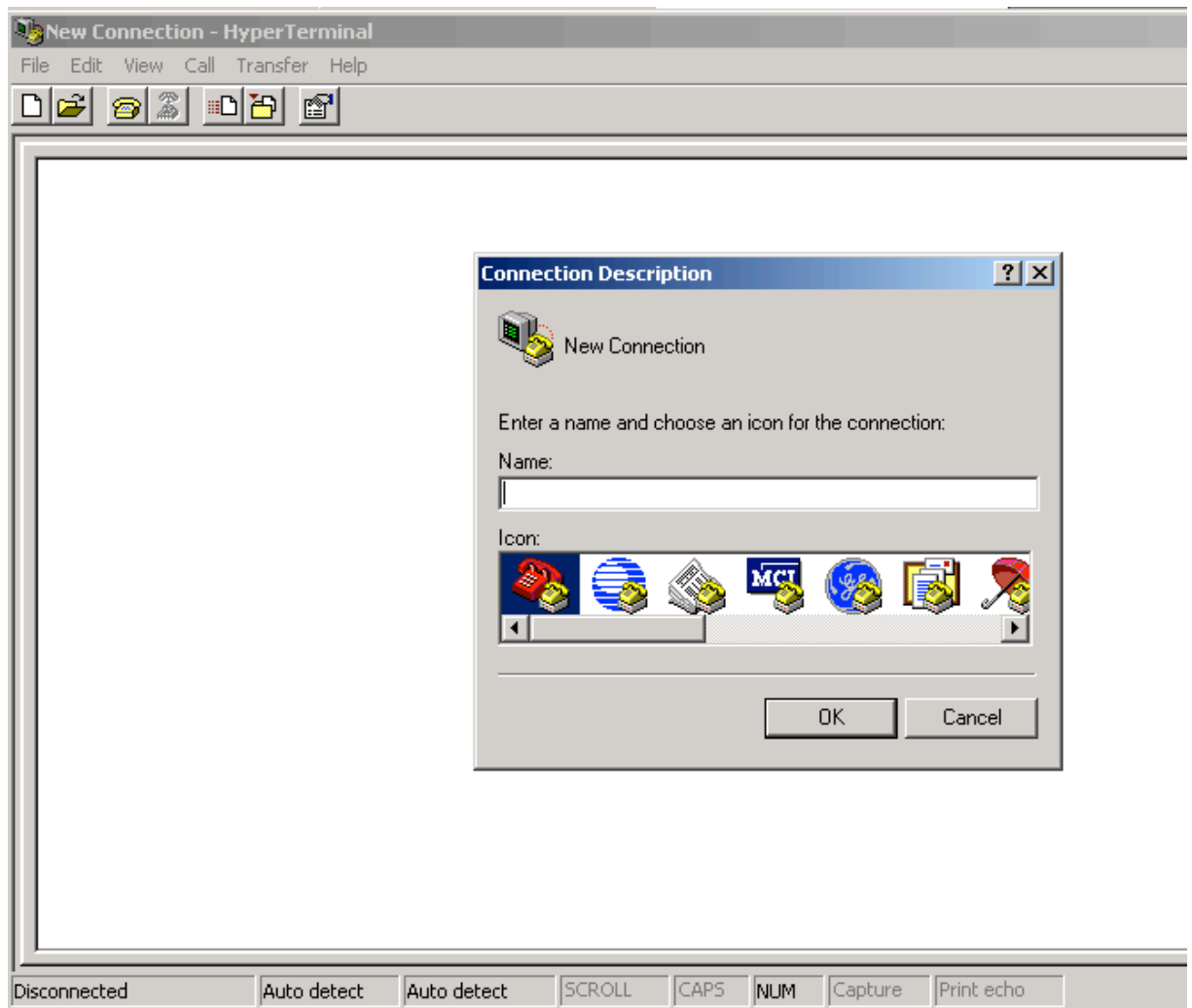
## Test with Hyper Terminal

- If you still can't connect, run Hyper Terminal. Go to START menu and find **All programs** (or just **Programs**), then go to Accessories --> Communications --> Hyper Terminal:
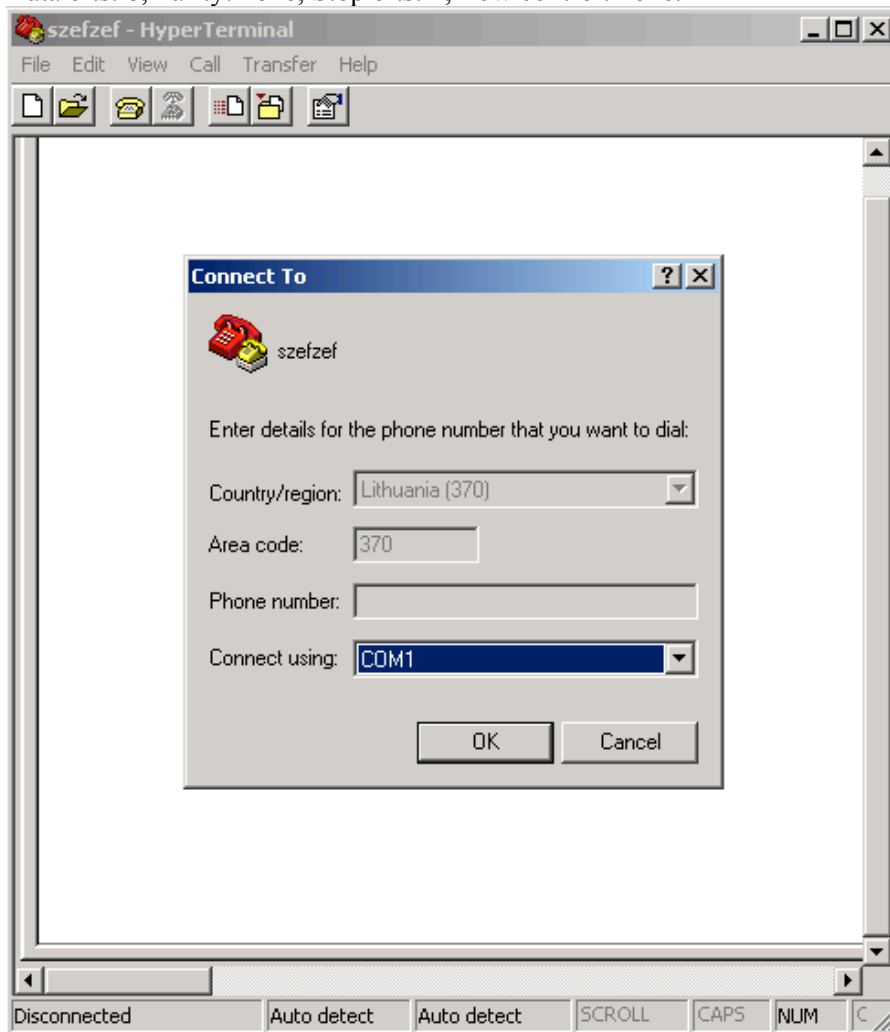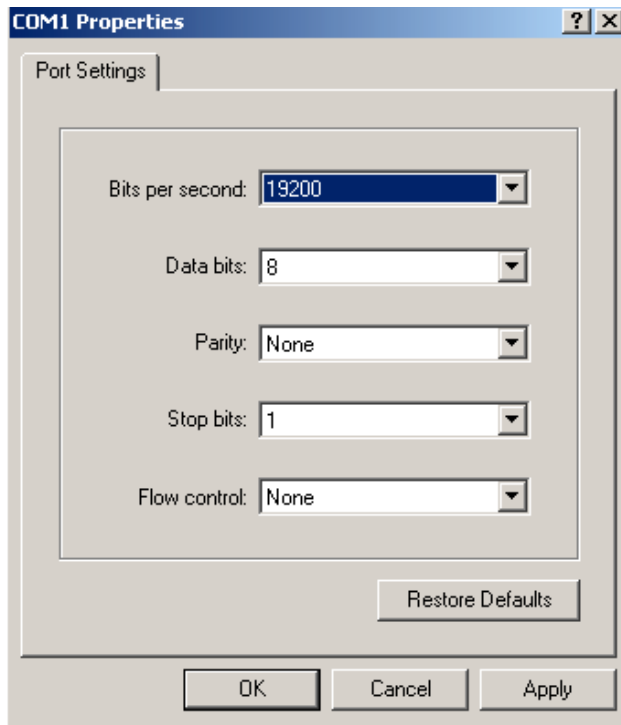
- Before running Hyper Terminal you need to type the name:

- Choose the same COM port as you are using in the LabVIEW program and set port settings:

Data bits: 8, Parity: none, Stop bits: 1, flow control: none.

**COM1 Properties**

Port Settings

Bits per second: 19200

Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Restore Defaults

OK          Cancel          Apply

- Now type the message in hyper terminal's blank page (you can't see what you are typing).
- Every message is enclosed in brackets **[]**. Enter **[SAY]**. Don't forget that the command interpreter of the laser is case-sensitive! When you will type the second bracket you should get an answer, for example: **[PC:READY=0\PL]**.
- If you get it that means that the problem is with the PC software.
- If there is no answer you can try turn off and turn on the laser. Getting greeting message from the laser like **[MS:PowerON\PL]** means that communication from the laser to PC functions. Check your keyboard, local settings, caps lock position. USB-RS232 adapter failure may be a cause too.
- If there is still no messages, disconnect RS232 cable from the laser but the other end leave connected to the PC. Take the wire and make the loop back by shortening the second and the third pins. Now type something. If you can see what you are typing the problem can be with a cable (use only Ekspla's cable). If you still see only empty hyper terminal's page perhaps you have chosen the wrong COM port or something is wrong with the PC hardware.