

**Question:**

We have a problem when connecting Lactoscan to a PC – what is the reason?

In the process of production connection between Lactoscan and computer type IBM PC on RS232 is a must, i.e. it is not possible the device to be produced without working RS 232 communication. The possible reasons for occurring problems in communication are as follows:

- The analyzer is with Net Number different from 0. In order to speed up the communication with the computer, on principle, all software tools for work with the computer are developed with Net Number 0. The operator has to check the number of the analyzer and to set it to 0 using the current program or using the procedure, described in the analyzer's Operation Manual.
- The cable, used for connection is with diagram, different of the described in the operation manual. The operator has to use either original cable, production of the company-producer or to make it using this diagram. This cable has to be connected towards port with inscription RS232 at the back panel of the analyzer.
- The COM port of the analyzer, where the cable was connected, was not correctly chosen. The Desktop type computers are with embedded 2 COM ports – numbered 1 and 2. The possibility is cable to be connected towards one port and the other to be pointed out in the program. If the ports are not numbered on the computer, change the coupling or point out another number in the program.
- Incorrect installation of USB to RS232 converter, when used computer type Laptop, with out embedded serial ports. After completion of such installation, using Start->Settings->Control Panel the operator must check whether the converter is correctly installed as COM1 or COM2, in other case the port will not work. Possible reason for this can be incorrect installation or incompatibility of the computer's chipset and converter. In such case more information from the converter's producer is needed.
- Available another, constantly working program (or virus), which occupies the chosen communication port. Please, ask your system administrator to determine the working capacity of the communication ports of your PC using system tools like establishing communication between two computers via COM ports. Only after you are convinced that the COM ports of your computer function problem free you may pass to the concrete test of the connection with the analyzer using the current program.
- Loosen connections on the cable/coupling connecting the rear panel of the analyzer with the main PCB, situated in the device – you may check it only with analyzer opened. Possible reasons for this may be vibrations during transportation of device to the customer.

## Program control:

After the program is started the display shows the following:



### Control buttons:

- Run** – starts the communication test.
- Set: 0** – writes in the analyser Net Number 0 – default value for fast communication.
- Exit** – exit from the program.

### Radio button:

#### COM Port

- 1 – COM 1 connection
- 2 – COM 2 connection
- 3 – COM 3 connection
- 4 – COM 4 connection

### Edit Boxes (Read Only):

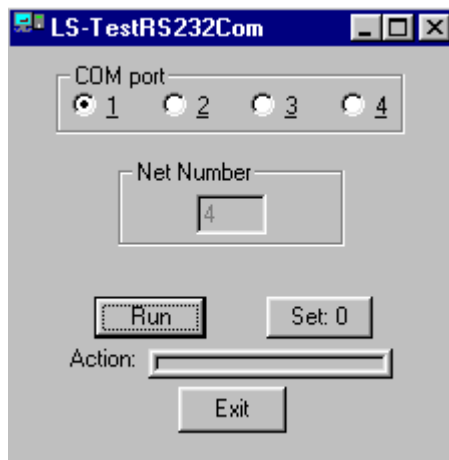
- Net Number** – shows the current Net Number.

### Test execution consequence:

Connect the analyzer using the cable. Switch on the analyzer and wait till the pump stops working. Press the button Run in order to start the test. If the connection is OK, display shows the following:



The current Net Number of the device is shown.



If it is different from 0 and the operator is planning to use another programs for connecting the device with the computer, press the button Set: 0, in order to change the current number with 0. If the procedure was successfully completed the display will show the following:



This completes checking the connection and the Net Number is set to 0 (default number). Switch the analyser off and on again. Now it is ready to work with all the programs for connection with PC as for example milk collection data program or other software tools.

In case of any problems with the communication, the display shows the following:



Eventual reasons for this could be found at the beginning of the current document.