INTERFACE

Lode Ergometer – Lode Ergometry Manager Multibike

STEP I Setting up the hardware

1. For controlling the first ergometer by the Lode Ergometry Manager you need a RS232 cable (part no. 930911), The lay-out of the cable is as follows:

Straight RS232 cable 930911		
D-con 9 pin female		D-con 9 pin male
2 RxD	----------	2 TxD
3 TxD	----------	3 RxD
5 GND	----------	5 GND

2. Connect the RS232 cable to the RS232 in port of the ergometer *(see figure 1).*
3. Connect the RS232 cable to the computer of the Lode Ergometry Manager *(see figure 2).*
4. For connecting a following ergometer to the computer with the Lode Ergometry Manager Multibike software you can either connect it to a free COM port on the computer by using the straight RS232 cable 930911 or connect the next ergometer to the previous ergometer by using the RS232 cable (part no. 928717) The layout of the cable is as follows:

RS232 cable 928717		
D-con 9 pin male		D-con 9 pin male
2 RxD	----------	3 TxD
3 TxD	----------	2 RxD
5 GND	----------	5 GND

5. Connect the RS232 cable to the RS232 in port of the ergometer *(see figure 1).*
6. Connect the RS232 cable to the computer of the Lode Ergometry Manager *(see figure 2)* or connect the RS232 cable to the RS232 out port of the previous ergometer *(see figure 1)*

STEP II Setting up the ergometer

7. Switch on the ergometers

   The Lode ergometers are default shipped with the LODE RS232 communication protocol. It should be set to the “LODE prot 38K4” RS232 protocol.
   You can change the RS232 by following the procedure below:
   - Switch on the ergometer and press enter.
   - You will be in the "MAINMENU"
   - Select, by using the up/down keys, the menu "SYSTEM PARAMETER" and press enter
   - Select, by using the up/down keys, the menu "SETTINGS" and press enter

- Select, by using the up/down keys, the menu "RS232 PROTOCOL" and press enter
- Select, by using the up/down keys, the "LODE prot 38K4" RS232 protocol and press enter.
- Save the selected RS232 protocol .
- Switch off the ergometer.

8. For using the ergometers in a Multibike session you have to make sure that every ergometer has a unique Device number.

   The device number can be set as follows.
   - Switch on the ergometer and press enter.
   - You will be in the "MAINMENU"
   - Select, by using the up/down keys, the menu "SYSTEM PARAMETER" and press enter
   - Select by using the up/down keys, the menu "SETTINGS" and press enter
   - Select by using the up/down keys, the menu "DEVICE No" and press enter
   - Give every ergometer a unique number by using the up/down keys and press enter to confirm, make sure you save your selection.

9. For controlling the ergometer by the Lode Ergometry Manager the ergometer should be set in "TERMINAL" mode. The "TERMINAL "mode should be selected as follows. After switching the ergometer on press enter, and select " TERMINAL " and press enter again

   NOTE: You can also let the ergometer startup in "TERMINAL "mode every time you switch on the ergometer, by using the default start menu. To set up the ergometer for starting up in "TERMINAL" mode proceed as follows:
   - Switch on the ergometer and press enter.
   - You will be in the "MAINMENU"
   - Select, by using the up/down keys, the menu "SYSTEM PARAMETER" and press enter
   - Select, by using the up/down keys, the menu "SETTINGS" and press enter
   - Press enter to confirm the menu "DEFAULTSTARTMENU" and press enter

   If you switch off the ergometer it will start-up in the "TERMINAL "mode every time when the ergometer is switched on again.

10. The Lode ergometer is now ready for external control

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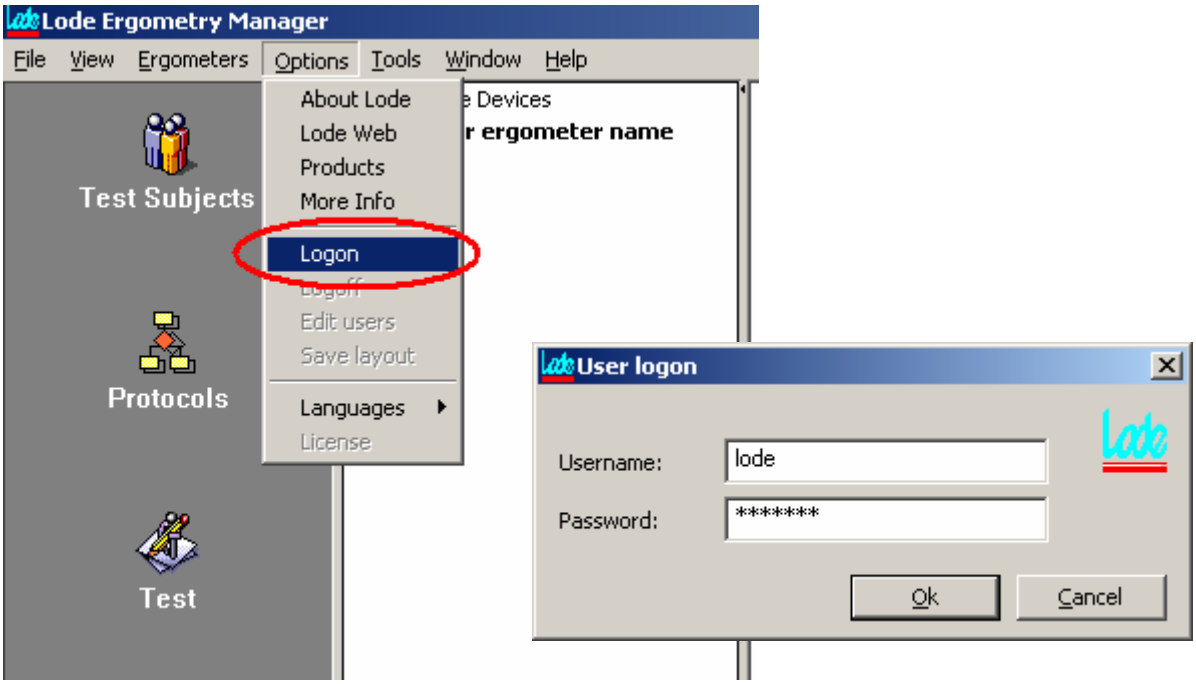
STEP III	Setting up the Lode Ergometry Manager



Make sure you login on the LEM (Lode Ergometry Manager) software, default ***Login name : lode*** and default ***Password : service.***

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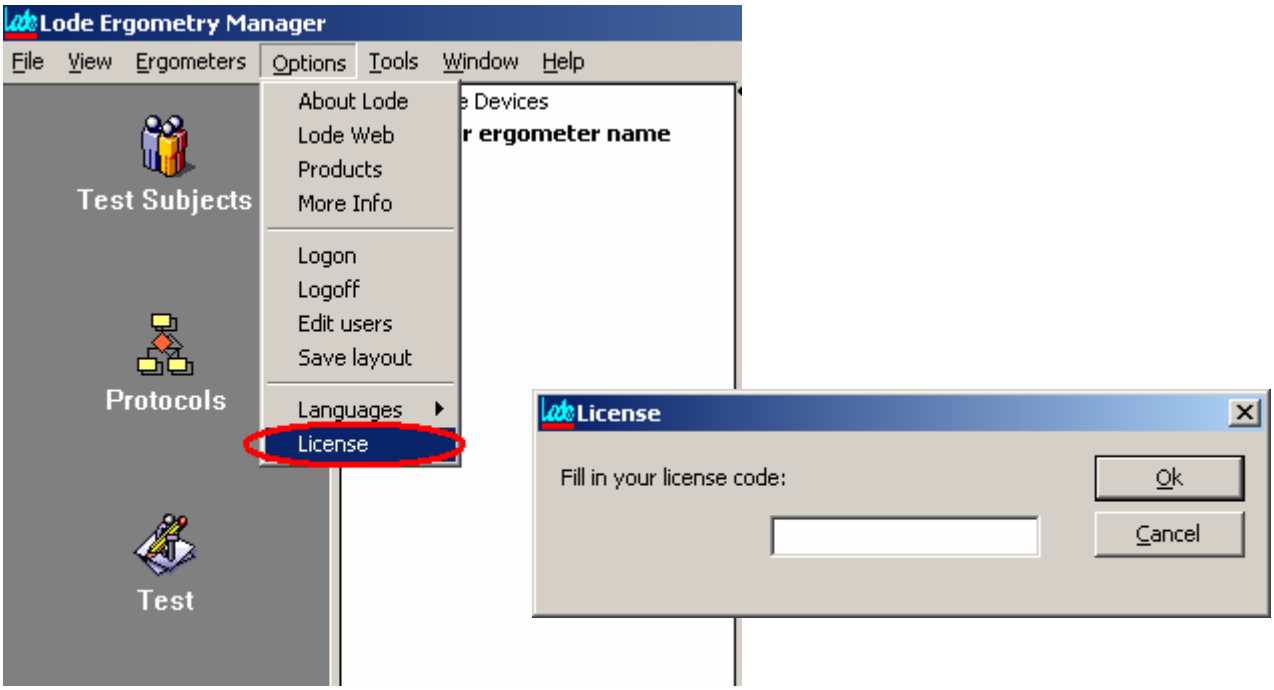
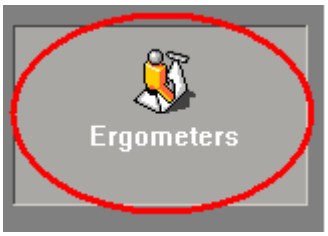
Lode Ergometer – Lode Ergometry Manager Multibike



Enter the correct license, this number has been written on the LEM CD and the LEM CD box.



Select ***Ergometer*** and proceed with Edit.

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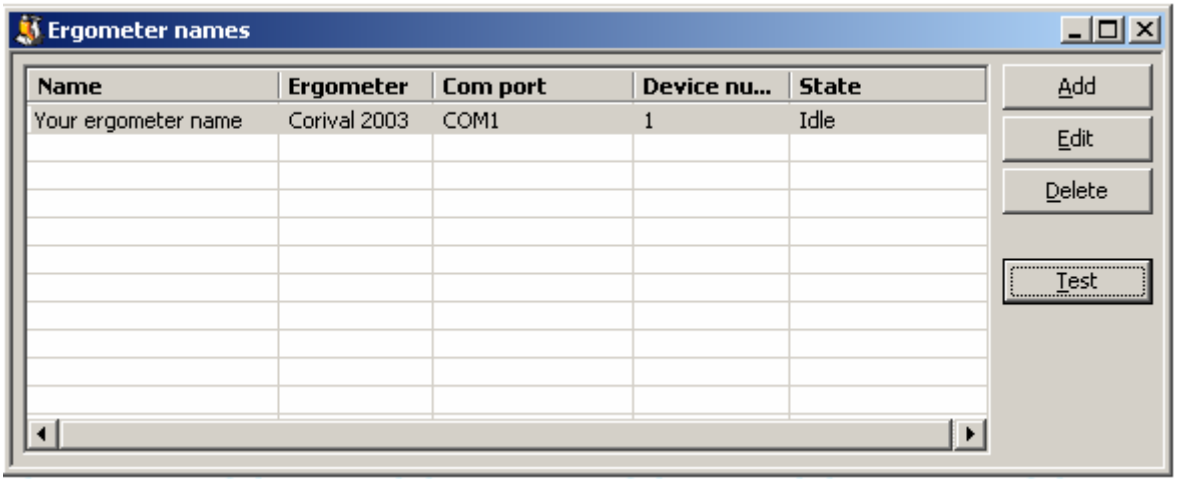
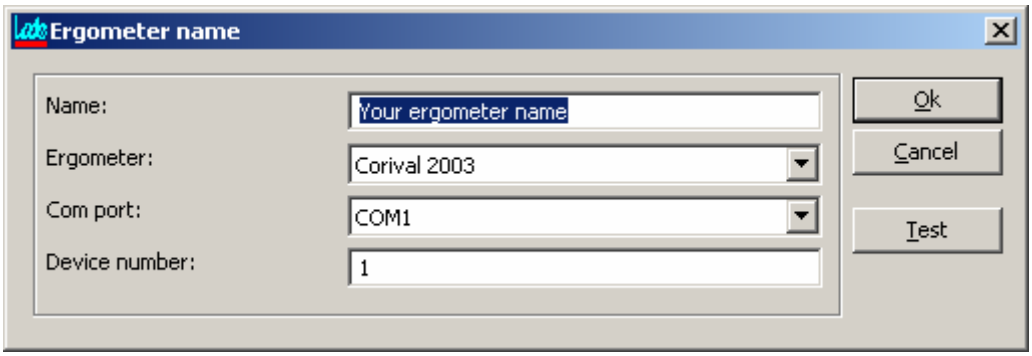


Select ***Add***, a new ergometer.



Give the ergometer a name and enter the correct Ergometer model, select the serial port on where the ergometer(s) is or are connected. Enter the unique device number for the Ergometer you have selected.
You can use the ***Test*** button to test the communication between the ergometer and the LEM software.
You can repeat this step for all the ergometers.

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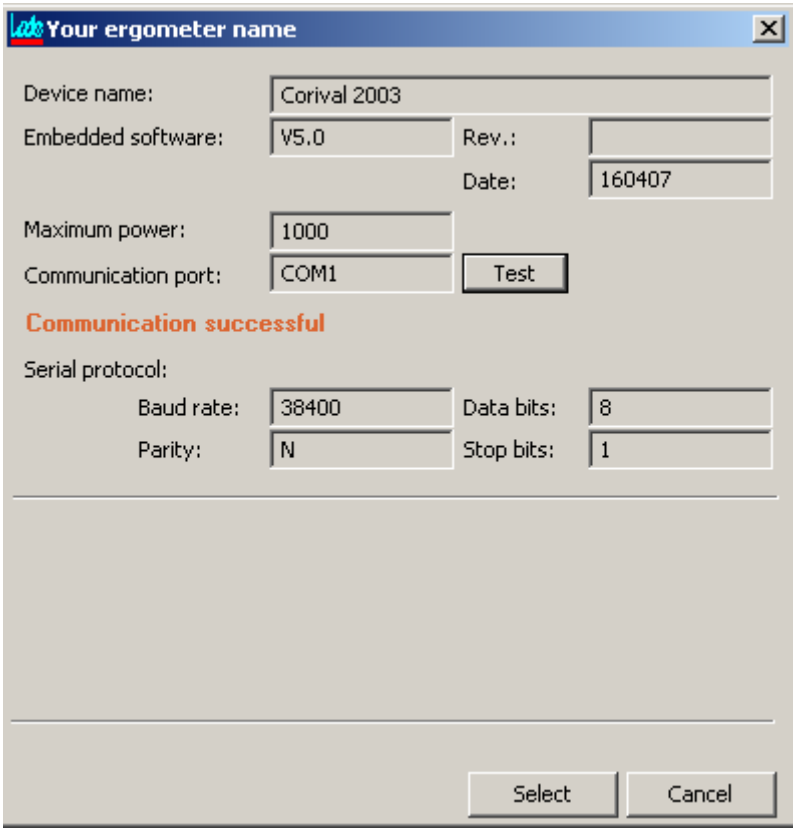

After you have pressed the *Test* button the above message should be displayed.

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Figure 1

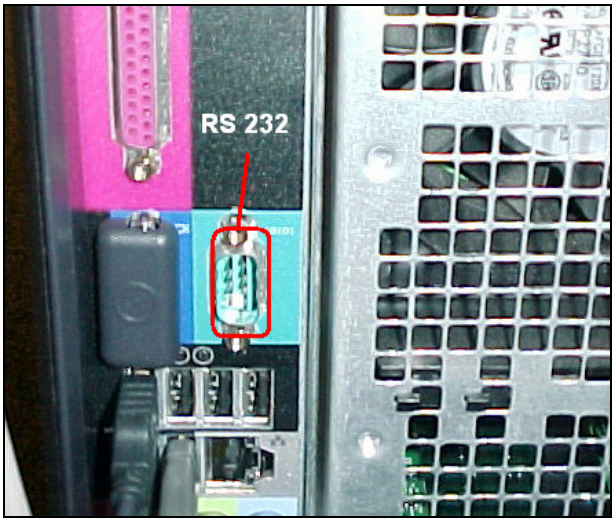

Figure 2

Restart the ergometer and computer and then your system is ready to be used.

Remarks:

- The installation procedures of the Lode ergometers Corival, Angio and Excalibur (Sport) are all the same. The connection of the cables may be on slightly different places.

For questions and comments, you can contact the Lode service department by e-mail at service@lode.nl or by telephone at +31 50 5712811.

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