INTERFACE
Lode Ergometer – Welch Allyn CardioPerfect
V2.00

STEP I Setting up the hardware

1. For controlling the Ergometer by the Welch Allyn CardioPerfect you need an 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 TxD
5 GND	----------	5 GND

2. Connect the RS232 cable to the ergometer *(see picture 1).*
3. Connect the RS232 cable to the Welch Allyn CardioPerfect *(see picture 2).*

STEP II Setting up the ergometer

4. Switch on the ergometer

   The Corival ergometer is default shipped with the LODE RS232 communication protocol. (If it is not set to this RS232 protocol it should be set to the LODE RS232 Protocol.) You can change the RS232 protocol 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 PROTOCOL" and press enter.
   - Save the selected RS232 protocol or restore the default RS232 protocol, which is also the LODE PROTOCOL.
   - Switch off the ergometer.

5. For controlling the ergometer by the Welch Allyn CardioPerfect 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.

6. The Lode ergometer is now ready for external control.

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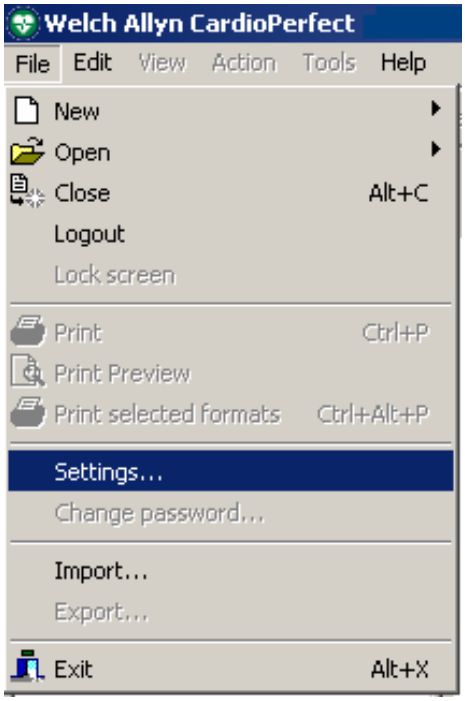
STEP III	**Setting up the Welch Allyn CardioPerfect**

Start the CardioPerfect software and select the menu “FILE” and goto “SETTINGS”



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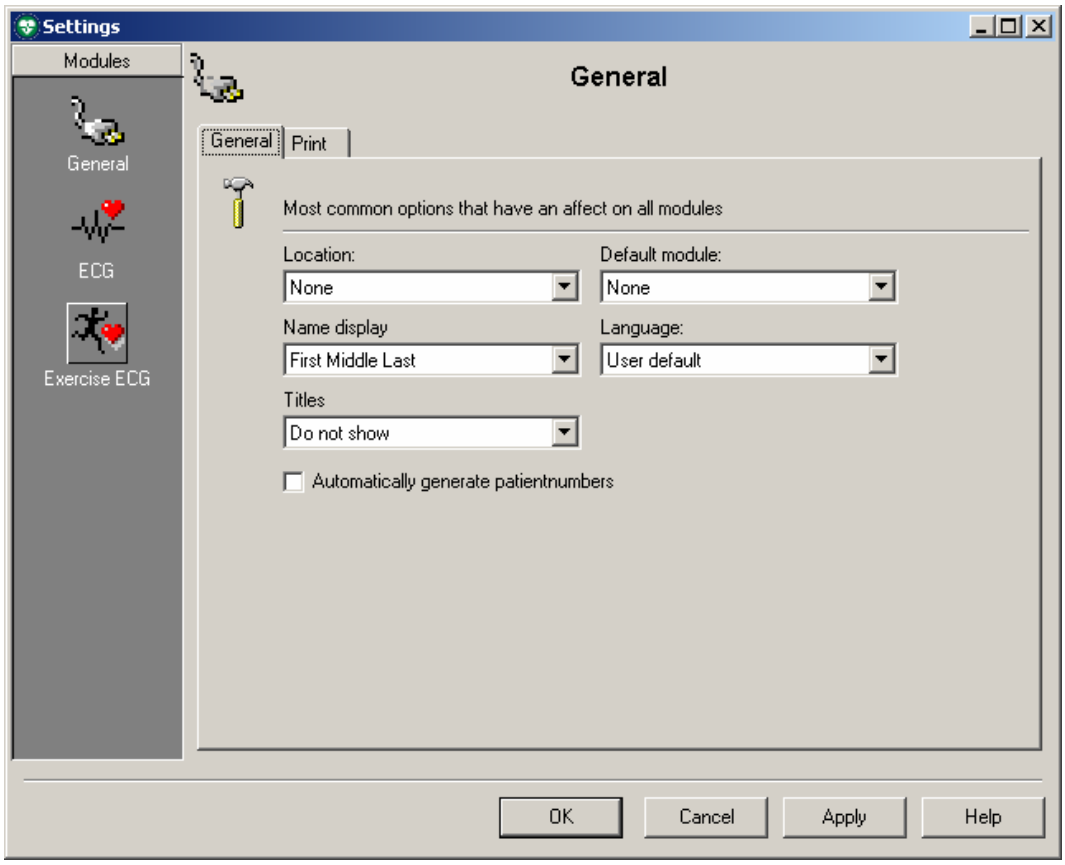
The following window will appear, select “Exercise ECG”.



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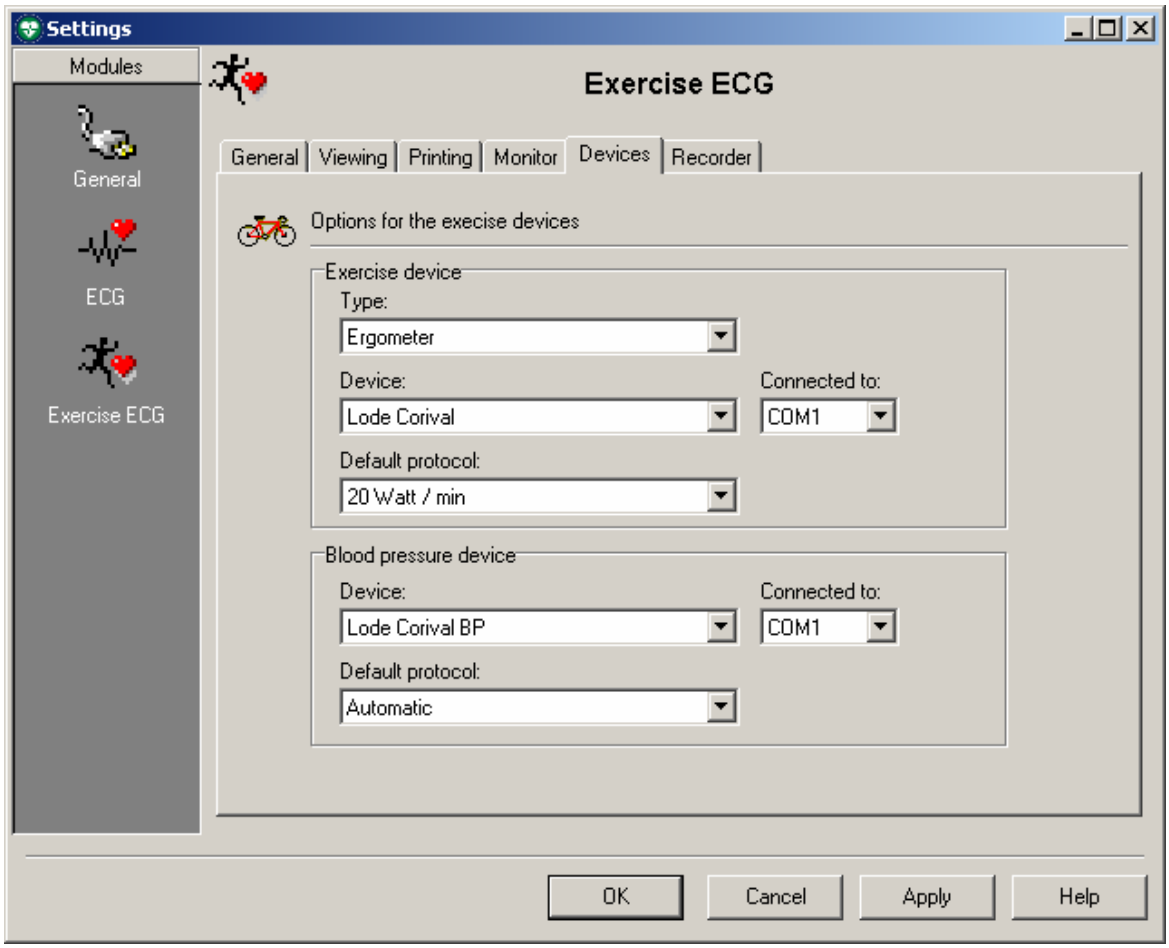
Make the following settings in the Exercise ECG window, and press Apply and OK.



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

the standard in Ergometry

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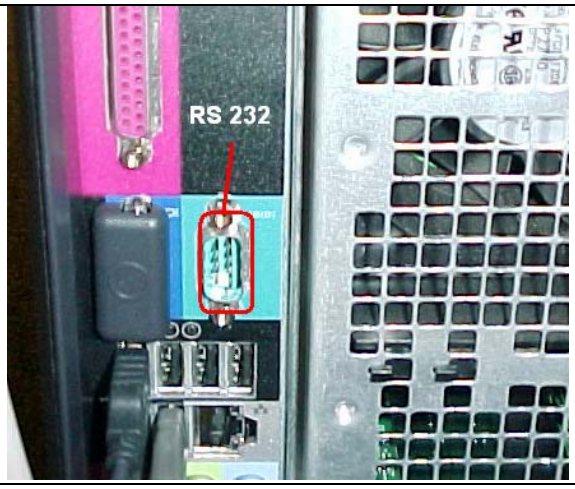
Picture 1: Connection to the Ergometer



Picture 2: Welch Allyn CardioPerfect

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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