



- User manual

for

the PC software

„Survey meter OD-02 V2.0 en.exe“

Software for data acquisition for the Survey Meter **OD-02**

(Version V2.0 en , release Feb 2013)



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1. Installation

The software was developed to automatically receive, display, analyse and storage of readings of the Survey Meter **OD-02**, produced by STEP Sensortechnik und Elektronik Pockau GmbH.

System requirements:

- 32 or 64 bit Microsoft- OS (NT4.0, Windows 2000, Windows XP or Windows 7)
- USB-connection. (Connection via RS232 is also possible)

[Installation software:](#)

Please **copy completely** the content of CD ,OD-02' on your hard drive into C:\
The result must be the new folder: **C:\OD-02** with sub-folder `\data` and `\protocol` :



All necessary directories will be set up automatically while starting the program for the first time.

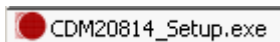
Note: The start of program directly from CD is also possible !

[Installation USB- driver:](#)

Attention: Install USB- driver before connecting device OD-02 on PC !

Use the provided special cable for the transfer of real time readings from OD-02 via the USB-interface. It may be necessary to install the corresponding USB-driver at the initial connection.

You will find the USB- driver on the CD ,OD-02' in the directory ,*USB-driver*'.
The driver is an execution file, named:



For installation please run the file 2 time by double clicking and follow the commands of your operating system while installation. At the 2nd Run a DOS window will appear as follows:



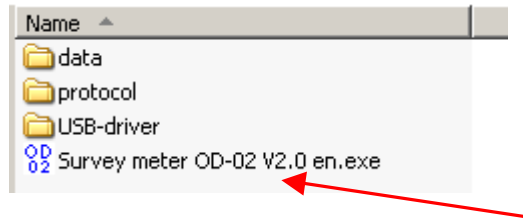
After that, the driver is installed.

2. Start-up / Device connection / Program start

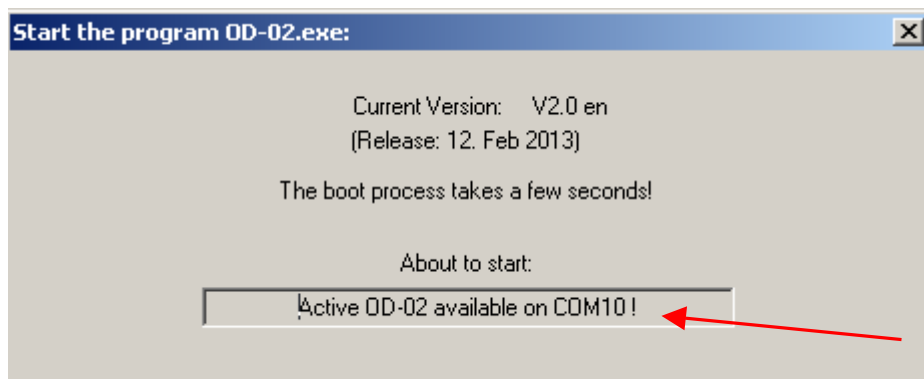
Before starting the program, please connect your OD-02 via the provided special cable between the OD-02 and an USB- Port on your PC / Laptop and turn on the device according the user manual of OD-02!

The program can be started by double-click on the file (also possible directly from the CD):

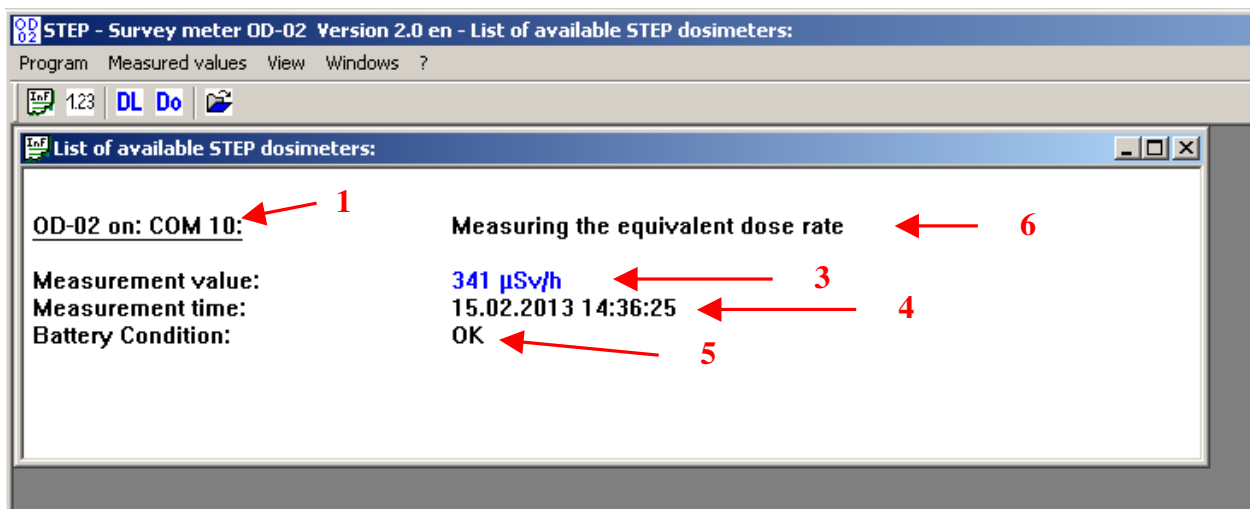
„Survey meter OD-02 V2.0 en.exe“



At program start, all available interfaces will be automatically checked regarding a connected OD-02. After successful detection of the corresponding interface with the connected device, the start-window pops up:



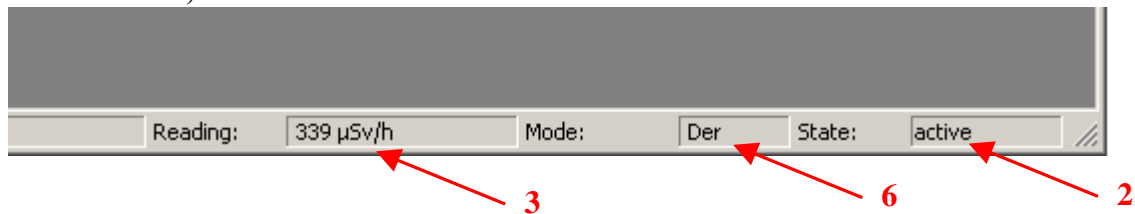
Afterwards, the program-window opens:



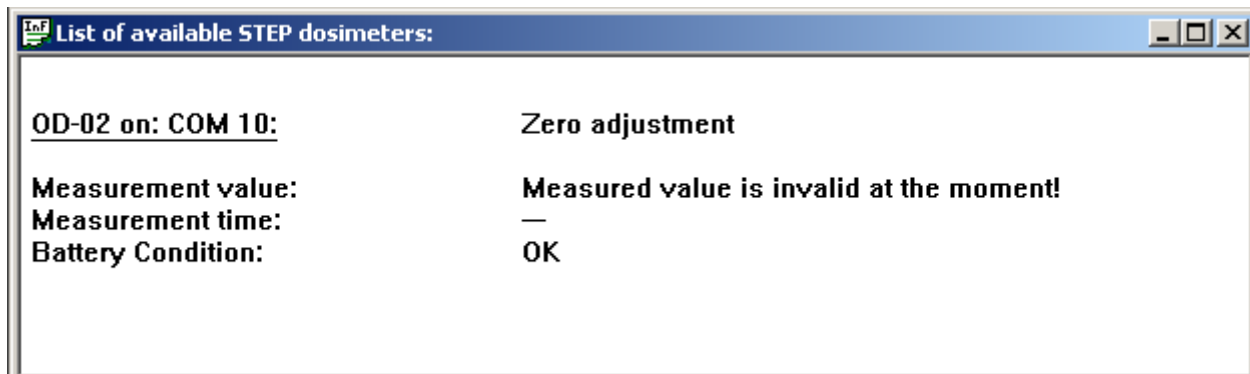
In this program-window, there is a list of the available dosimeter with entries regarding:

- Detected interface (1)
- Current state of the device (in status line) (2)
- Current measuring value (3)
- Time of the current reading (4)
- Condition of the internal battery (5)
- Measuring mode (6)

In addition, the current measured value you can see in the status bar (also the measurement mode and the device state):



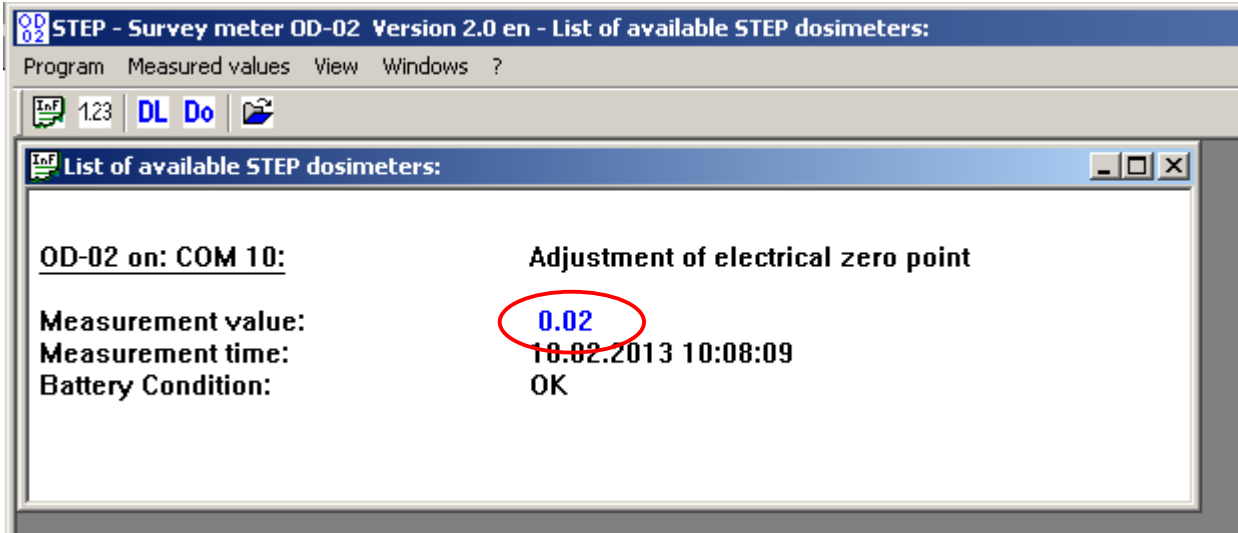
When you still have not made a zero adjustment by the device OD-02, the following windows appear:



Therefore the zero adjustment of OD-02 is necessary, please look in user manual of OD-02.

2.1 Zero adjustment

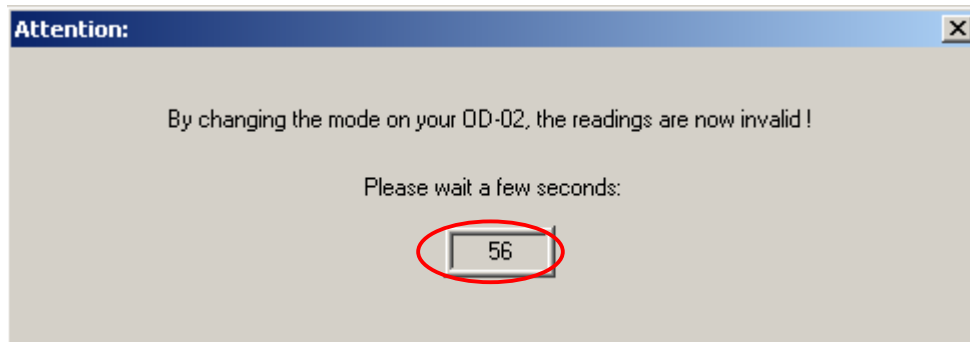
During the zero adjustment of OD-02 the following info appears in start window:



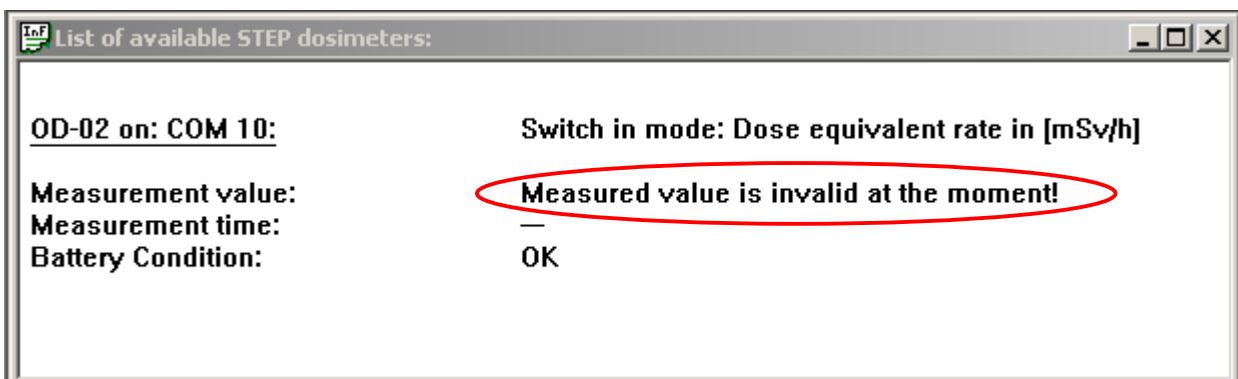
Attention: The range of correct zero point must be: **0 ... 0.05 !**

2.2 Switch mode on device

When the user switch the mode on device OD-02, the switching is detect by software (with the remaining time):



No measured value is available during the time of switching:

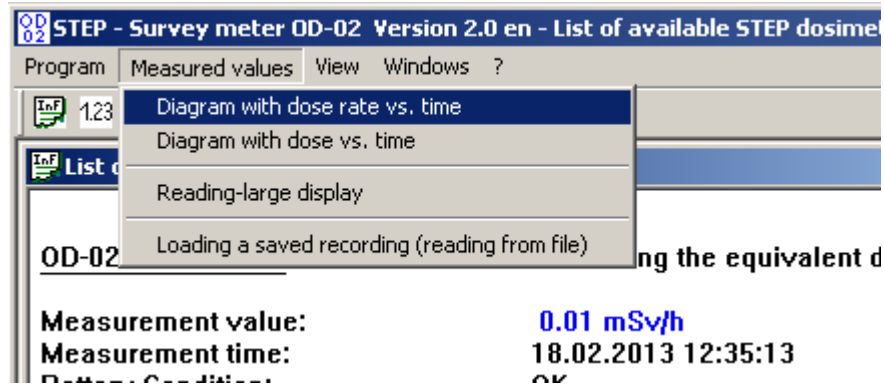


3. Real time collection of dose and dose rate reading

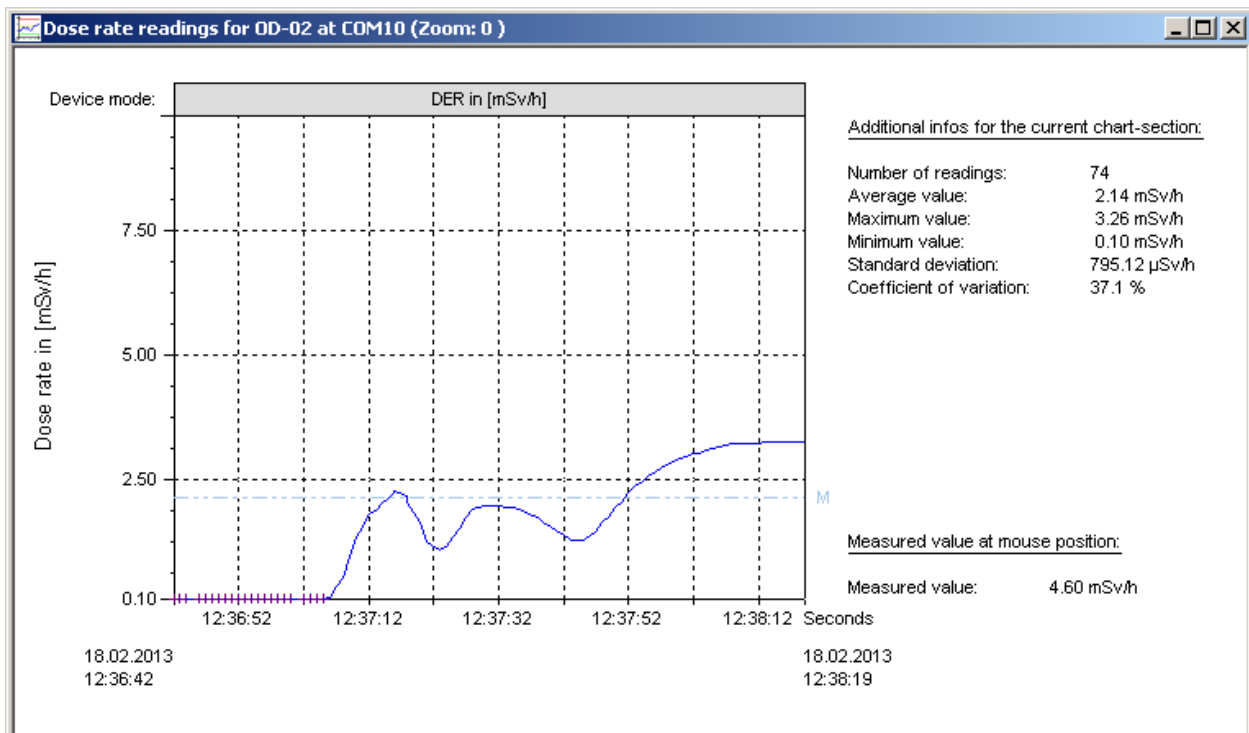
Once the software detected an active OD-02, the values of a measurement will be read. To display the readings in a diagram use the following software function:

3.1 Open diagram

You can open a diagram window by selecting the menu *Measured values* → *Diagram with dose rate vs. time*:



The following window opens:



On the left hand side, the diagram with the corresponding values is depicted. On the right hand side, additional information are shown that correspond to the visible range of the diagram .

Note:

In case there are new readings, the time axis will be automatically updated after the window is opened.

Zoom- function:

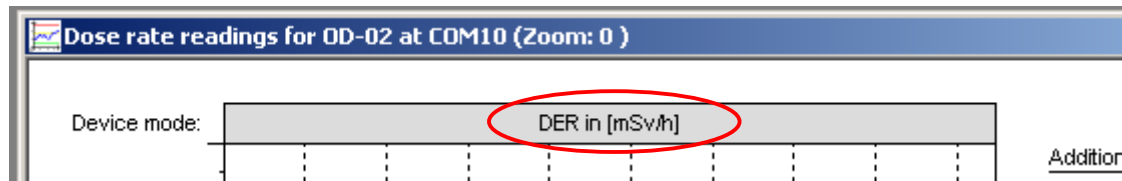
Using the mouse, a selected area of diagram can be enlarged. Do this, position the mouse in the upper left corner of the new window, drag the mouse with the pressed left mouse button until the desired lower right end of the new window.

With the ESC- button you get back into the previous window.

Attention!

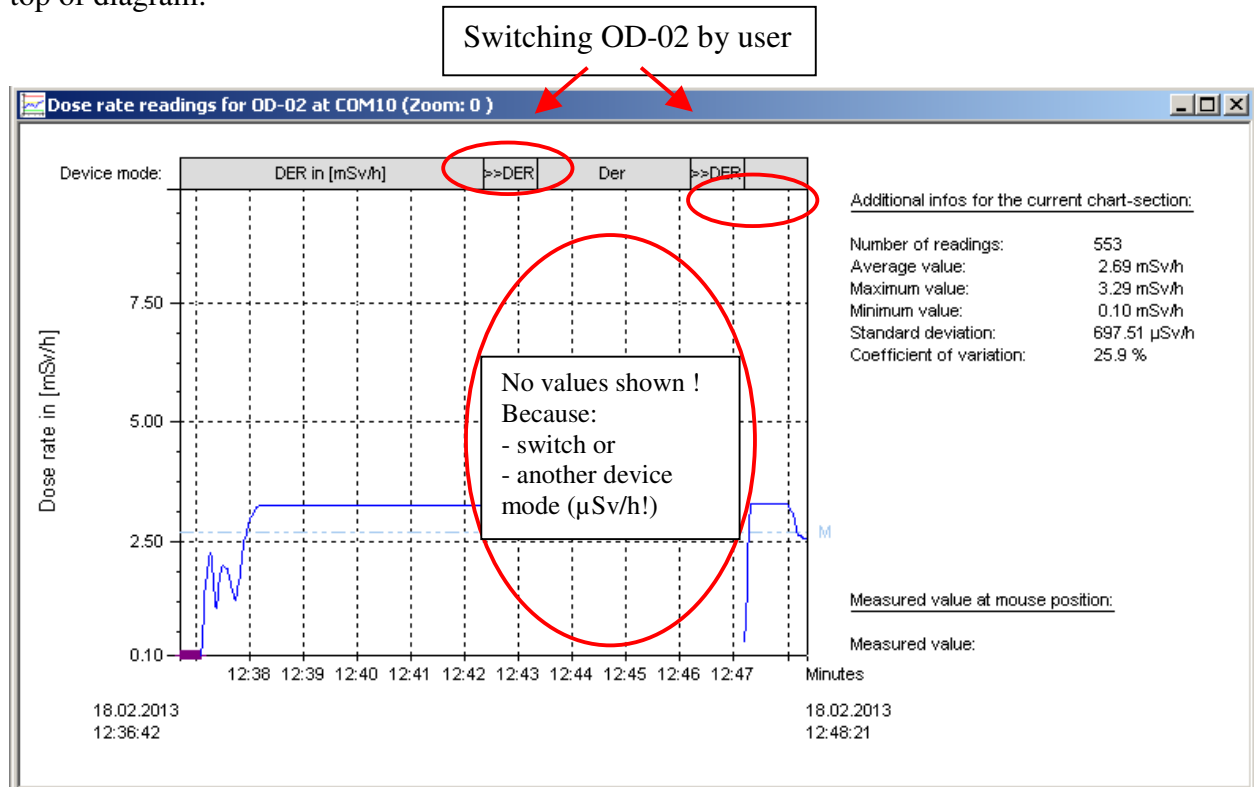
In the diagram ,Dose rate vs. time', are shown exclusively dose rates value. If the device is in the mode ,Dose', the dose readings are not displayed in the diagram ,Dose rate vs. time'. To show these values, please open the diagram ,Dose vs. time'.

At the top of the diagram, the current measurement mode of the connected OD-02 is show:



- Der ... Dose equivalent rate vs. time in μ Sv/h
- >> Der ... Switch to dose equivalent rate in μ Sv/h
- DER ... Dose equivalent rate vs. time in mSv/h
- >> DER ... Switch to dose equivalent rate in mSv/h
- DE ... Dose equivalent vs. time in μ Sv
- ZE ... Zero- adjustment (electric adjustment)
- ER ... Error
- ST ... Start of OD-02

When the user switch des mode on OD-02, the switching is also shown in the same line in the top of diagram:



In this case the user start the OD-02 in mode: Dose equivalent rate in **mSv/h**.

In 2. step the user switch to mode: Dose equivalent rate in **µSv/h**.

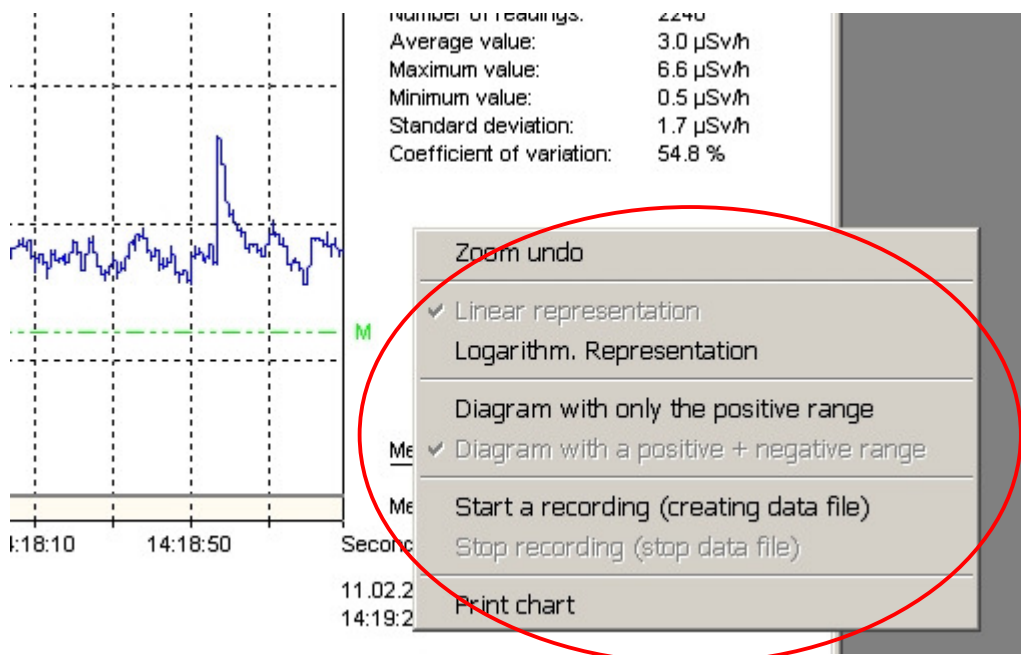
In 3. step the user switch back to mode: Dose equivalent rate in **mSv/h**

Important:

In the diagram with dose equivalent rate in mSv/h don't shown measured values in µSv/h !

3.2 Context menu in window ,Diagram'

Position the mouse in the diagram window, press the right mouse button and the context menu is opening:



Among others, different types of displays or the below described functions can be activate over this context menu.

3.3 Printing of diagrams

Click on menu ,Print diagram' to get a print-out (what you see is what you get) of the shown diagram. Printing is done automatically on A4 in landscape format.

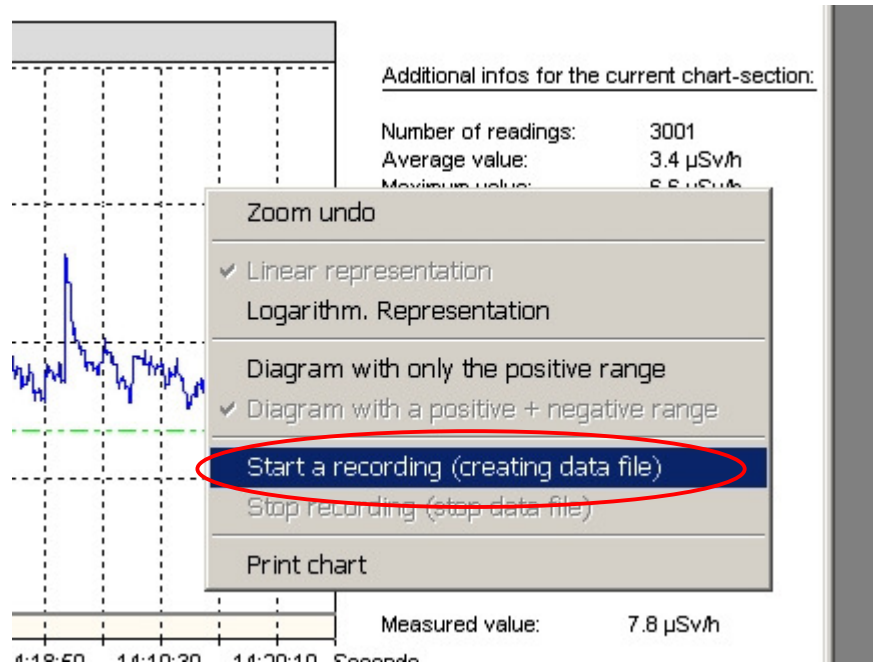
3.4 Zoom into a diagram

To zoom into a diagram proceed as follows: Use the mouse cursor and navigate to a certain point in the diagram. Hold down the left mouse bottom and move the mouse cursor to another point downright. A successful enlargement is stated in the window's title bar. The procedure can be repeated up to the desired size of the diagram section.

Use the Escape-button or the context menu ,Zoom undo' you get back to the previous window.

3.5 Start a recording

To save the history of a measurement, use the context menu 'Start a recording':



Note: The context- menu 'start a recording' is only active in the chart with current readings (not on the chart with stored records)

A new dialog box opens where the user can enter additional data regarding the current measurement

- Name of the user
- Place/location of the measurement
- Other remarks

By selecting one of the three options under 'Precision of the data storage', you can select how many values are stored for each time interval.

Please note the maximum recording time are 13 hours by storage of one reading per second!
In case of option '1 measurement per minute' the mean value of last 60 values was saved, because the OD-02 send 1 measured value every second.

In case of option '1 measurement per hour' the mean value of last 3600 values was saved.

Additional data for recording:

Beginning of the recording: 18.02.2013 13:04:03.od2
End of the recording:

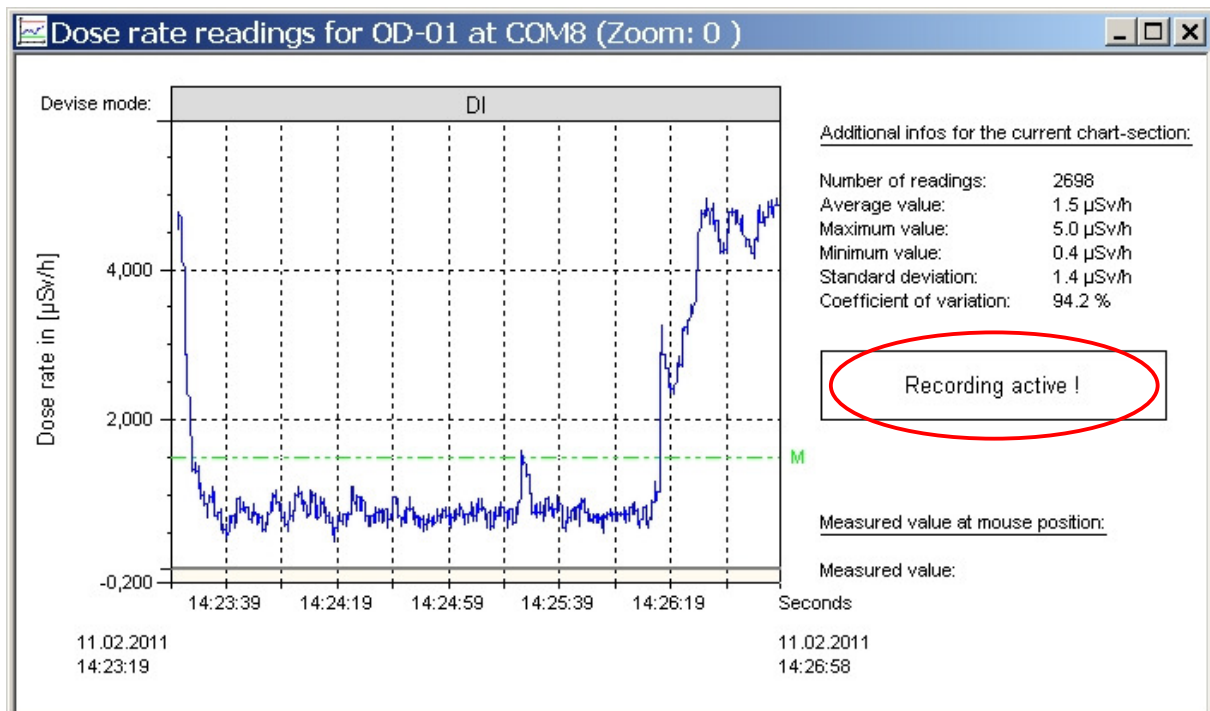
Precision of the data storage: 1 measurement per second (max. recording time: about 13 h)
 1 measurement per minute (max. recording time: about 30 days)
 1 measurement per hour (max. recording time: unlimited)

Name: Mr. Miller
Location: Nuclide lab
Notes: Radiation behind the wall

Saving to file:
Folder: C:\OrtsdosimeterSTEP\data\
File Name: OD-02 record from the 18.02.2013 130403 .od2

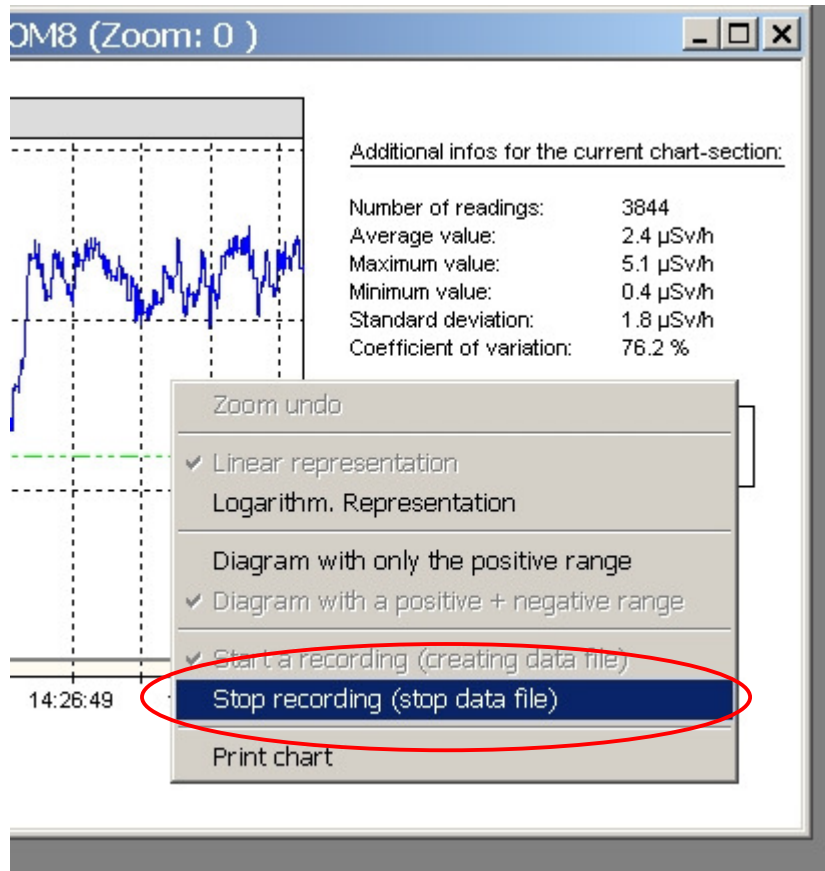
Confirm Cancel

Click on *Confirm* to start the record of the measurement, which is saved into a separate file. On the right side is flashing the words 'Recording active!' during process of recording:



3.6 Stop a recording

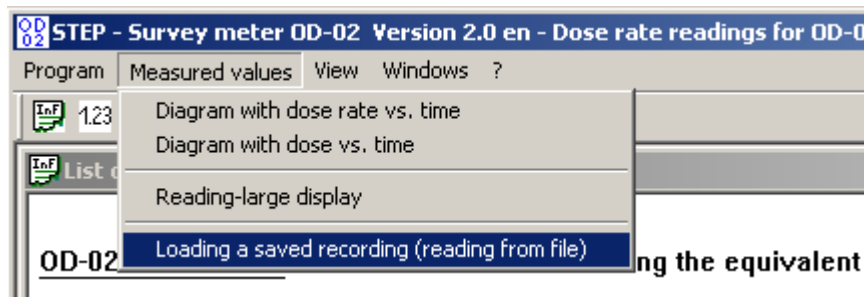
To end the recoding, right-click on the diagram, open context- menu and chose ‚Stop recording?’:



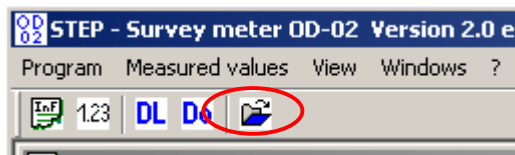
Recording will stop automatically when the window is closed.

3.7 Open a saved record/reading file

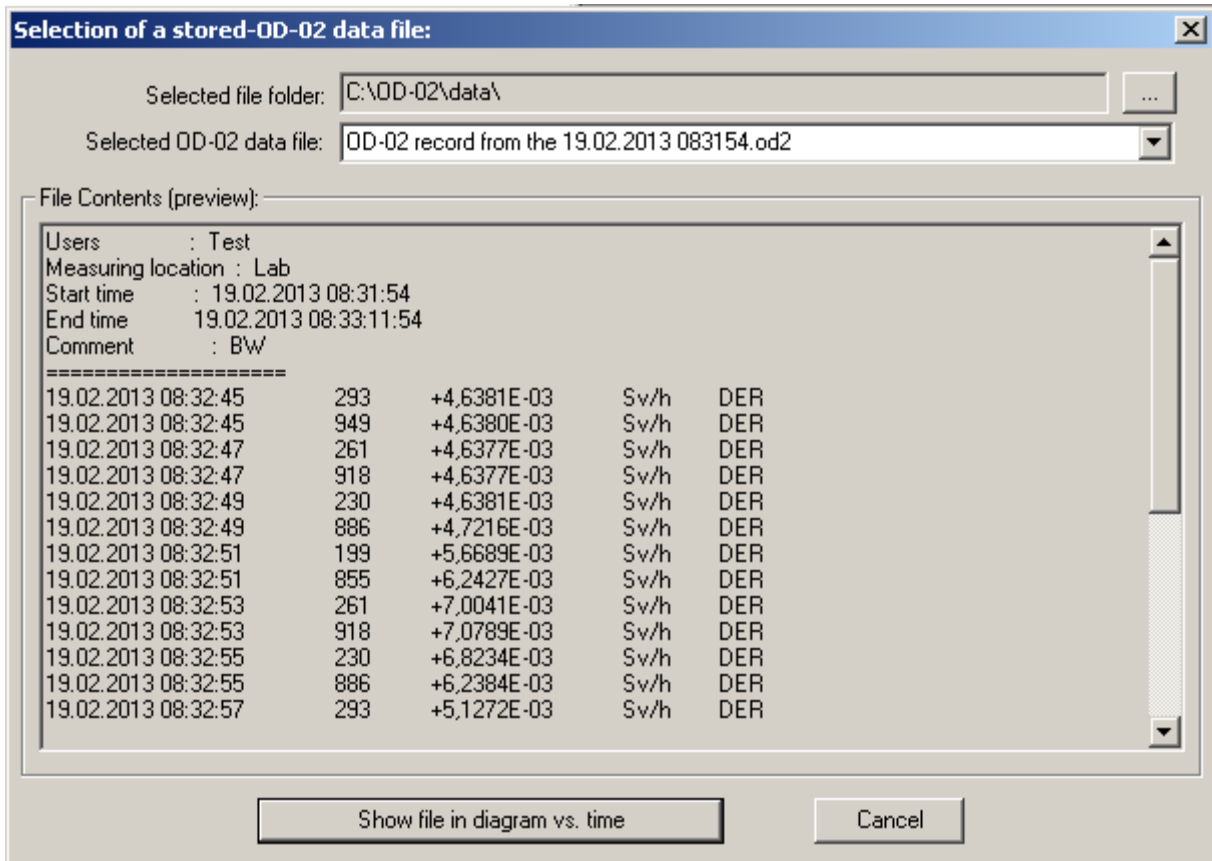
To open a recorded measurement from the separate file chose menu: Measured values → *Loading a saved recording (reading from file)*



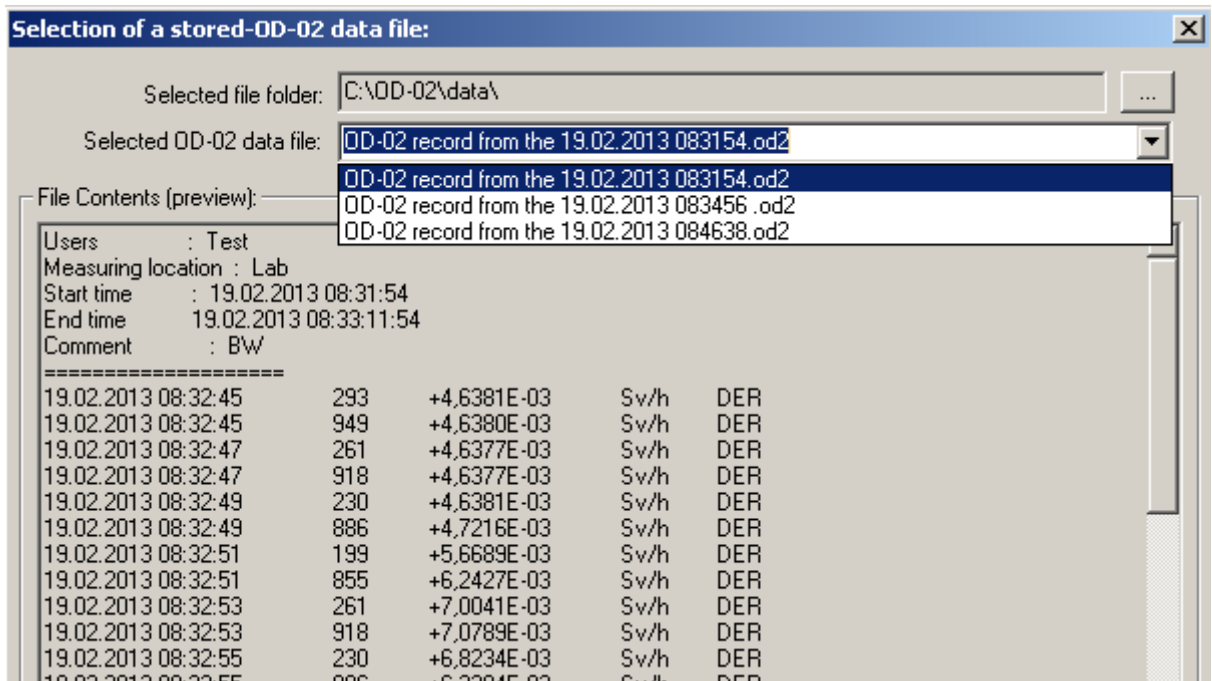
You can also use the icon in symbol bar:



The following dialog window appears:




The lower part of the window consists of an excerpt of information on the reading-file. Chose the corresponding file via the drop-down list box:

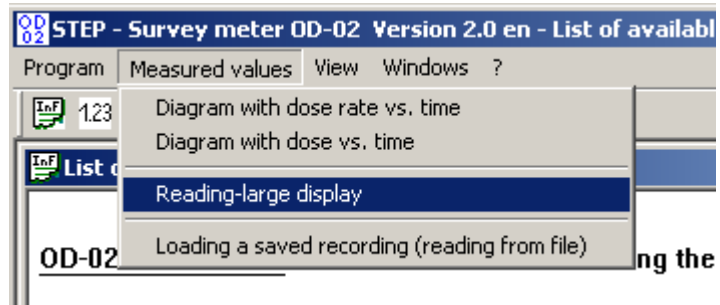


To open the select click the Button

Show file in diagram vs. time

4. Window with large measurement display

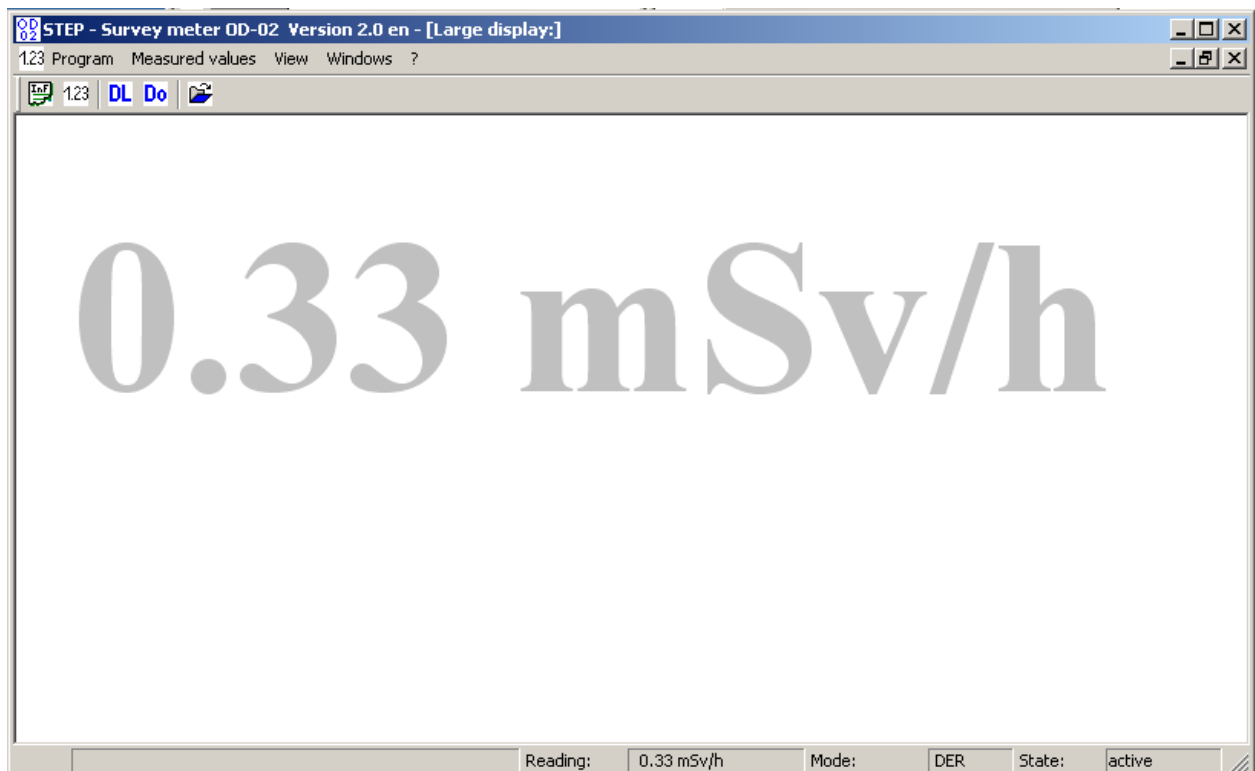
With the Icon  or the following menu:



a window can be displayed with an enlarged view of current measurement Value:



This function can be advantageously used for presentations :



Final Notes

Please contact us by problems of installing or using!

A free tool for quickly help is the software for remote support from www.teamviewer.com .
If your pc has a connection to world wide web, so we can help you to solve the problems!

Help to improve the software:

Error messages and other information to improve the PC software ‚*Survey meter OD-02.exe*‘
should be addressed to:

STEP Sensortechnik und Elektronik Pockau GmbH
Siedlungsstrasse 5 – 7
09509 Pockau
Germany

info@step-sensor.de

