SoundEar PRO

MANUAL

SoundEar PRO

CONGRATULATIONS ON YOUR NEW SOUNDEARPRO

We are pleased that you have chosen one of our products. For maximum product performance, please study these directions for use.
Keep these directions for use ready at hand. For any questions or comments, please contact us on tel: +45 39 40 90 02
or on e-mail support@soundear.dk

Yours sincerely,
SoundEar A/S

TABLE OF CONTENTS

SOUNDEAR PRO UNITS

Check package contents depending on the package purchased by you.

SOUNDEARPRO BASIC 1

1 ProController
1 ProSampler
1 USB split cable.
2 USB Adapter cable (A-plug to mini-B)
2 Power Supply
2 Suspension
1 CD with software

SOUNDEARPRO BASIC 2

1 ProController
5 ProSampler
1 USB split cable.
6 USB Adapter cable (A-plug to mini-B)
6 Power Supply
6 Suspension
1 CD with software

SOUNDEARPRO ENTERTAINMENT

1 ProController
1 ProSampler
1 SoundEar Wireless
1 USB split cable.
2 USB Adapter cable (A-plug to mini-B)
3 Power Supply
2 Suspension
1 CD med software

BEFORE THE SYSTEM IS STARTED, ALL UNITS ARE TO BE RESET

1. Reset ProController as follows:
   a. Keep Reset button in using a paper clip, and connect USB adapter cable (mini-B).
      Keep button in for min. 5 seconds.
   b. Remove USB plug from ProController.
   c. Put USB plug in ProController.
2. Reset all ProSampler units in the same way as for ProController.

The system is now ready for setting up.

SETTING UP OF SOUNDEARPRO BASIC 1 AND BASIC 2

Connect ProController with USB adapter cable to computer USB port. The ProController power indicator will emit green light when the unit is connected properly.

Connect your ProSampler with USB adapter cable to the power supply which is plugged into a power point. The ProSampler power indicator will emit green light when the unit is connected properly.

The network indicator will flash yellow once a second when your ProSampler has contact with your ProController.

If the signal flashes several times per second, there is no contact to your ProController.

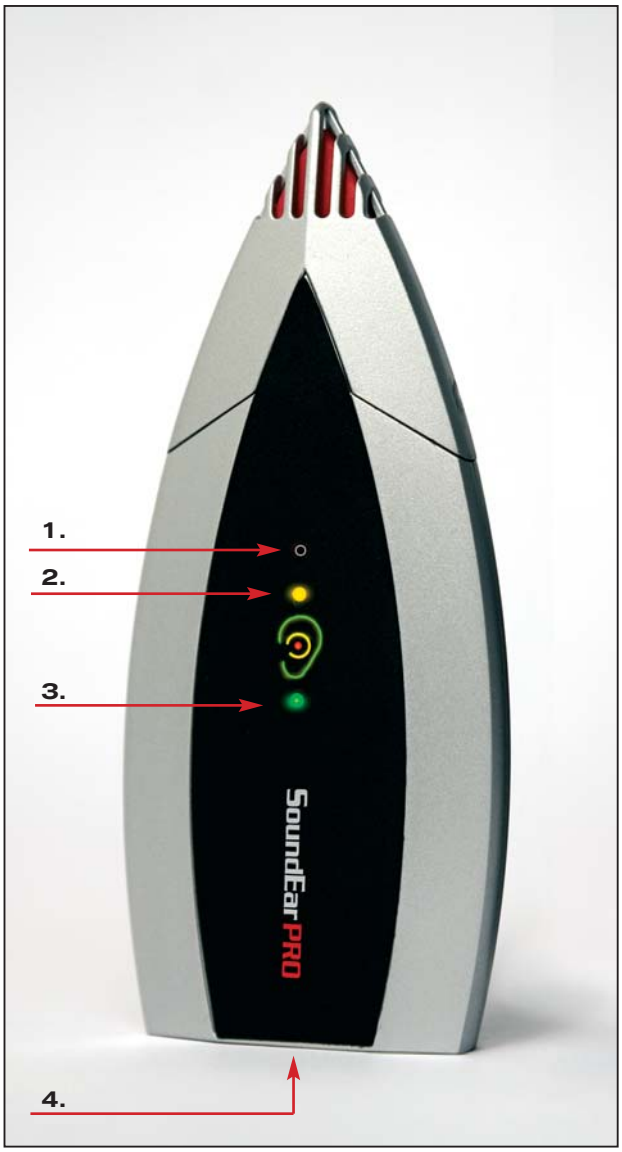
SETTING UP OF SOUNDEARPRO ENTERTAINMENT

Connect ProController with USB adapter cable to computer USB port. The ProController power indicator will emit green light when the unit is connected properly.

Connect your ProSampler with USB adapter cable to the power supply which is plugged into a power point. The ProSampler power indicator will emit green light when the unit is connected properly.

The network indicator will flash yellow once a second when your ProSampler has contact to your ProController. If the signal flashes several times per second, there is no contact to your ProController.

Connect SoundEar Wireless to the power supply, and plug it in.

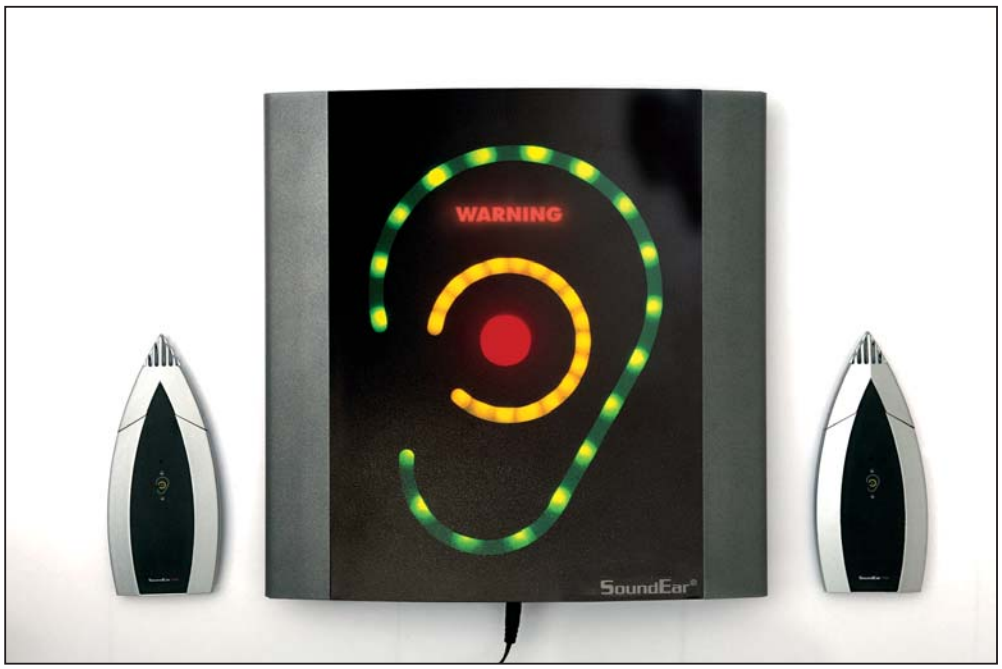


1. Reset button
2. Network indicator
3. Power indicator
4. USB connection (mini-B)

USING SOUNDEARPRO WITHOUT PC

Measurements from your SoundEarPRO system may be saved in your ProController without having it connected to a PC.

1. Connect your ProController to power supply and PC through USB split cable and USB adapter cable.
2. Switch on your ProController, ProSamplers, and any Displays.
3. Start your SoundEarPRO program, check that your ProController has been connected correctly, and that measurements are received from the ProSamplers connected.
4. Your PC may now be switched off or disconnected from your ProController without switching off your ProController.
5. Measurements will now be stored in the ProController internal memory.
6. When the ProController is connected to the PC again, the SoundEarPRO program is started, and the measurements saved will automatically be transferred.



SoundEarPRO may be "stand alone" mounted on a tripod (for free field measuring) or hung directly on a wall.

INSTALLATION OF SOUNDEARPRO SOFTWARE

Install your SoundEarPro software in the manner described below.

1. Insert the CD-ROM provided in the computer CD-ROM drive.

2. After a while, an installation wizard will be displayed. If the installation does not start automatically, select:
   Start -> Run -> Browse -> (drive with DVD/CD-ROM) -> Setup.exe -> Open -> OK.

3. Then follow the guide.

INSTALLATION OF SOUNDEARPRO HARDWARE

When the software has been installed, the hardware may be connected.

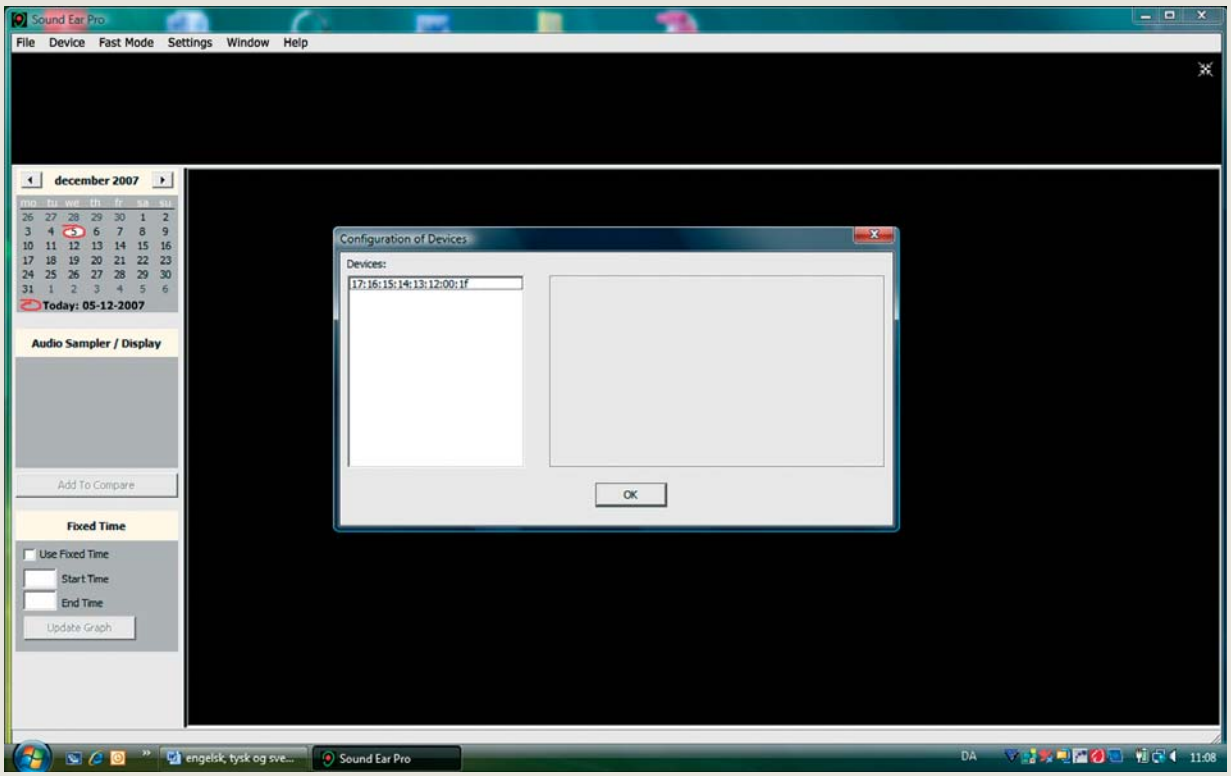
1. Connect ProController to a free USB port.

2. Windows will now install the necessary driver
("new hardware" will show at the bottom left hand side of the screen).

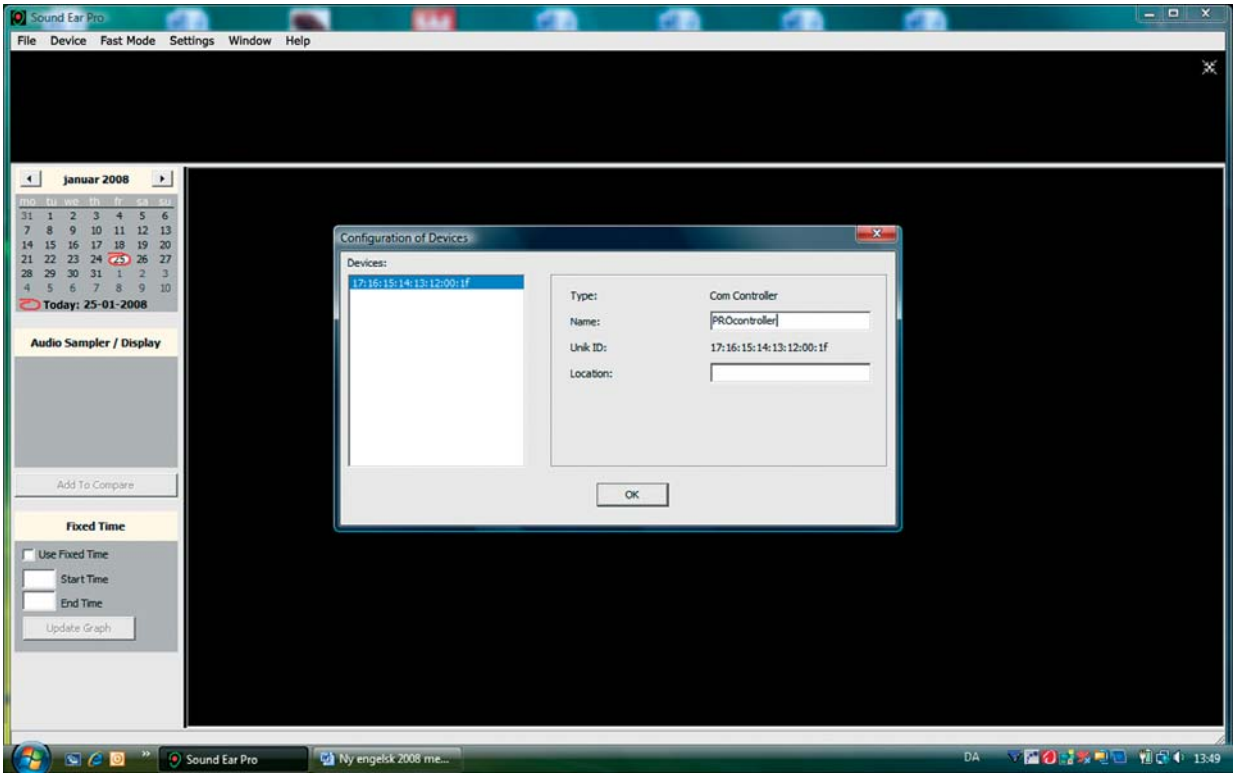
3. Start the SoundEarPRO program.

4. When the program starts, it will start looking for the connected ProController
(this may take a while).

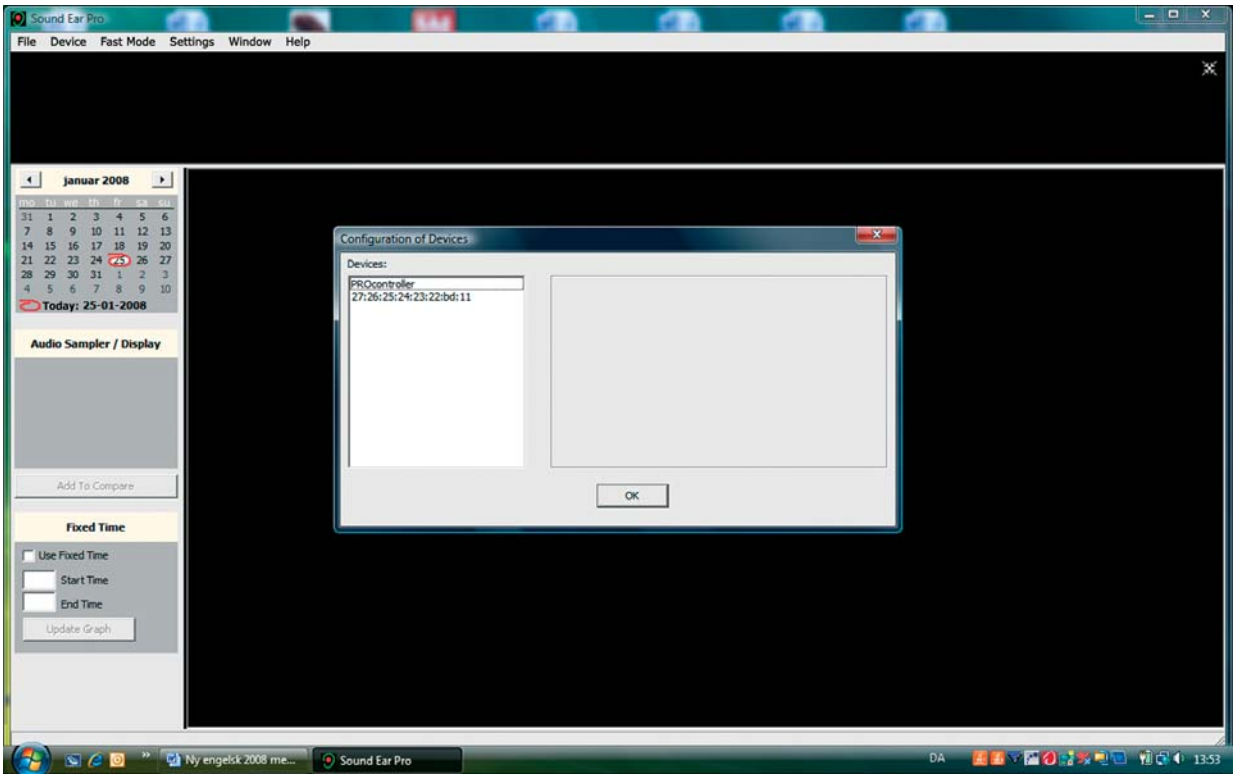
5. When the ProController has been found (the first time), the "Configuration of Devices"
dialogue box will be displayed with a unique id number.



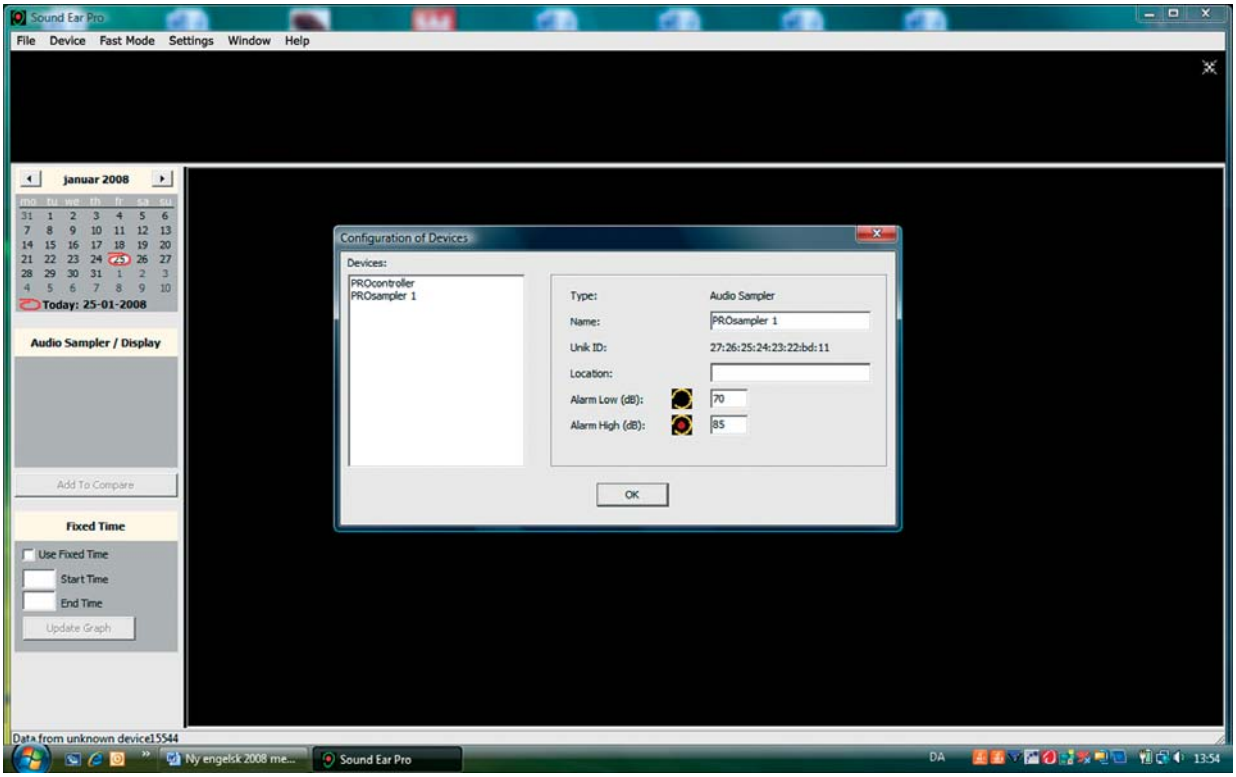
6. Select the unit and choose a more descriptive name of your own choice for it (such as PROController) and choose OK.



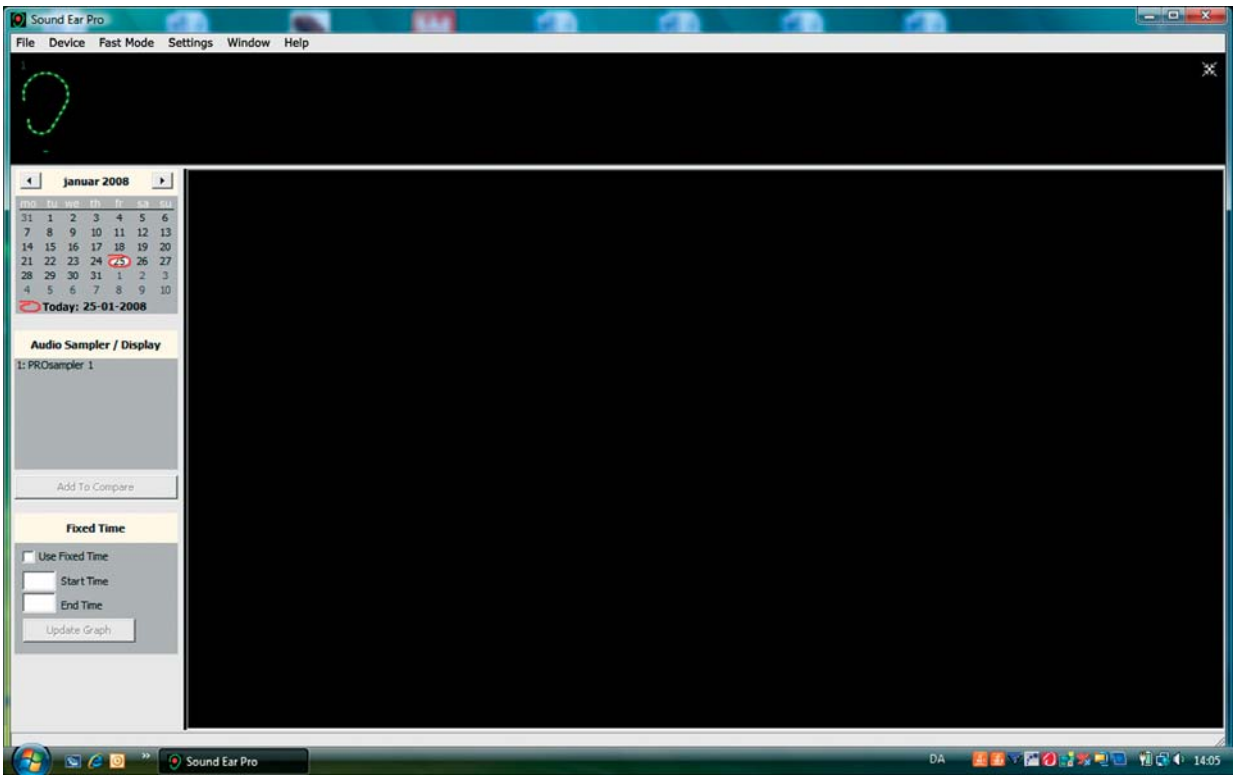
7. Switch on power to a ProSampler.
8. After a while (max. 2 minutes), the ProSampler will be found by the system, and the “Configuration of Devices” dialogue box will be displayed.



9. Select the new unit and choose a more descriptive name for the unit (such as PROSampler 1), and state dB values for yellow and red ear, and choose OK.



10. An ear will now be shown for the connected ProSampler, and after a few seconds, current metering values for the ear will be displayed.



11. Repeat steps 7. - 10. for all ProSamplers and Displays that need to be connected.

USER INTERFACE
MAIN WINDOW

Minimizing the program window to "Control View".

Showing each noise meter connected as an ear. A square will be shown around the ear last chosen.

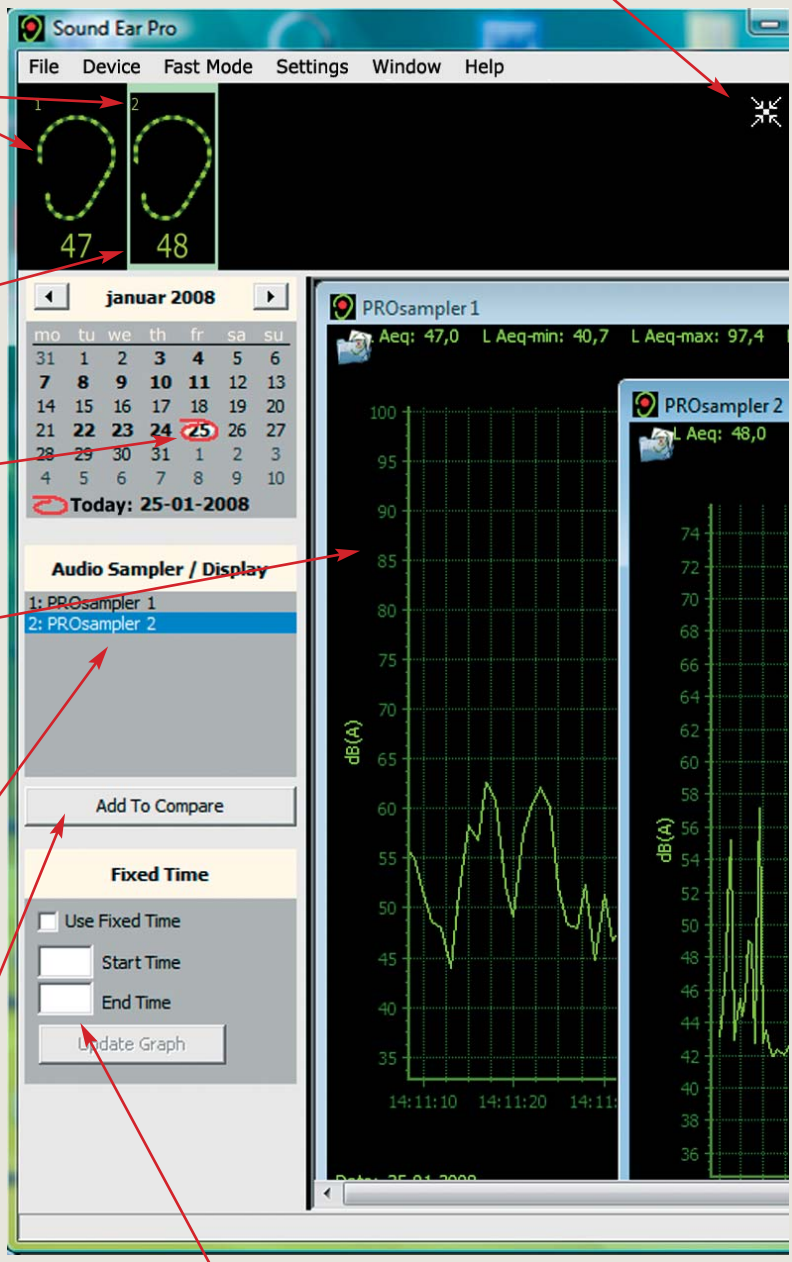
If the program receives data from the noise meter, the current value will be displayed.

Choice of date to view historical metering data.

Clicking an ear will display metering data graphically (See metering data window).

Showing the name of the noise meter. Clicking the name will show metering data for the noise meter chosen.
If the ProSampler is connected to a display, the name of the display will also be shown.

Add data for the chosen day and noise meter to the comparison graph.



State a fixed start and stop time for the graph shown.

MEASURING DATA WINDOW

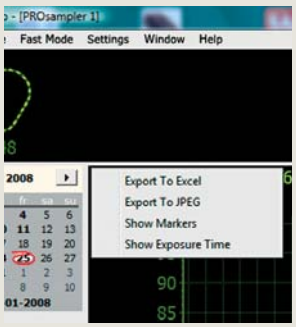
If the program receives data from the noise meter selected, the current value will be displayed.

The values shown (LAeq-min, LAeq-max, LAeq-average, and LCpeak) apply for the day chosen.

Export data for the day chosen to an Excel document.

Export the graph shown to a JPEG image file.

Clicking the icon will produce a menu (or right-click your mouse).



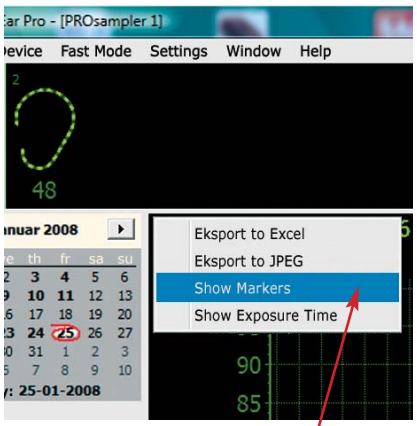
1. Export data for the day chosen to an Excel document.
2. Export the graph chosen to a JPEG image file.
3. Show/hide cursors 1 and 2.
4. Show/hide exposure time.

Move the graph forward or backward in time, or all the way to the start/stop time.

Move the graph forward or backward in time using your mouse:

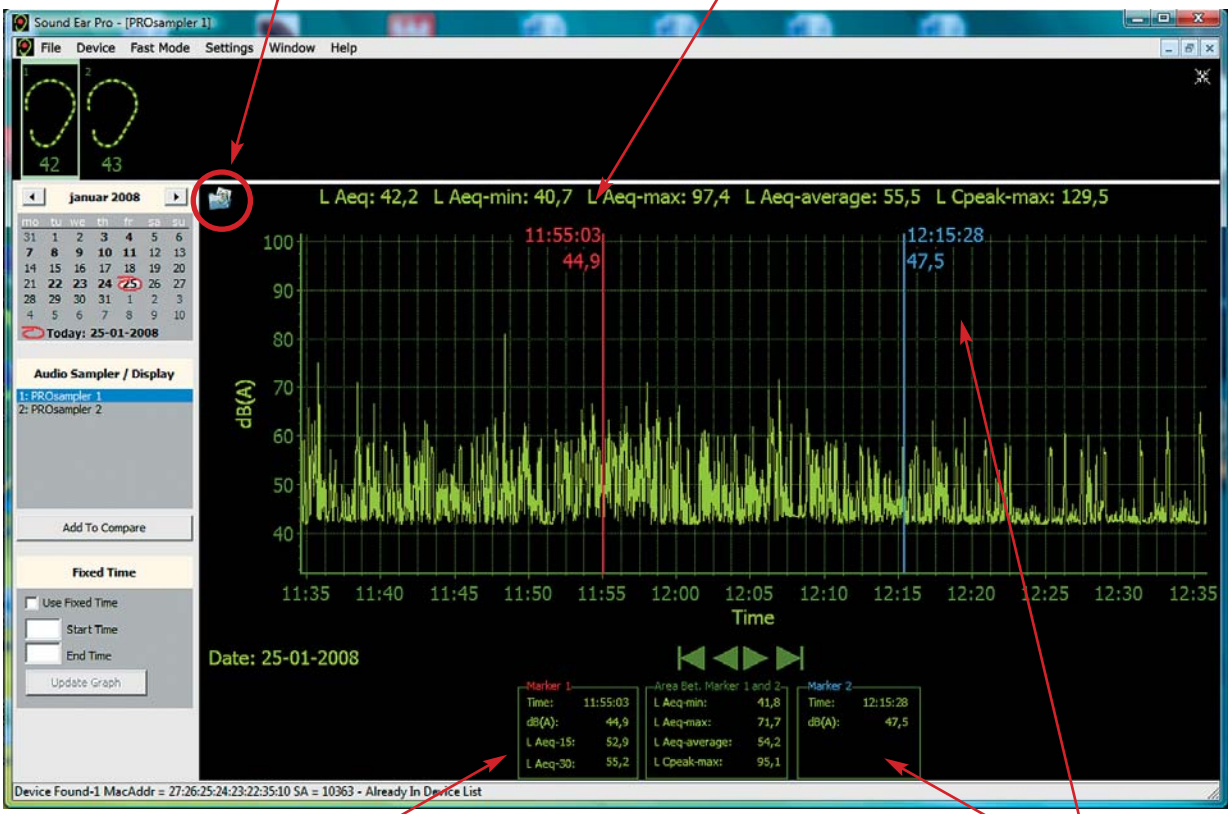
1. Place the mouse icon on the graph.
2. Click your right mouse button and keep it depressed.
3. Move your mouse right/left.
4. Release your mouse button at a random point.

MEASURING DATA WINDOW WITH CURSORS



The cursor may be placed at any time. Your cursor is moved by:

1. Placing your mouse over the red or blue cursor.
2. Click your left mouse button and keep it depressed.
3. Move your mouse right or left – thus moving the cursor to a new position.
4. Release your mouse button at the position required.



LAeq-15 and LAeq-30 have been calculated from the position of the red cursor and 15 and 30 minutes back, respectively.

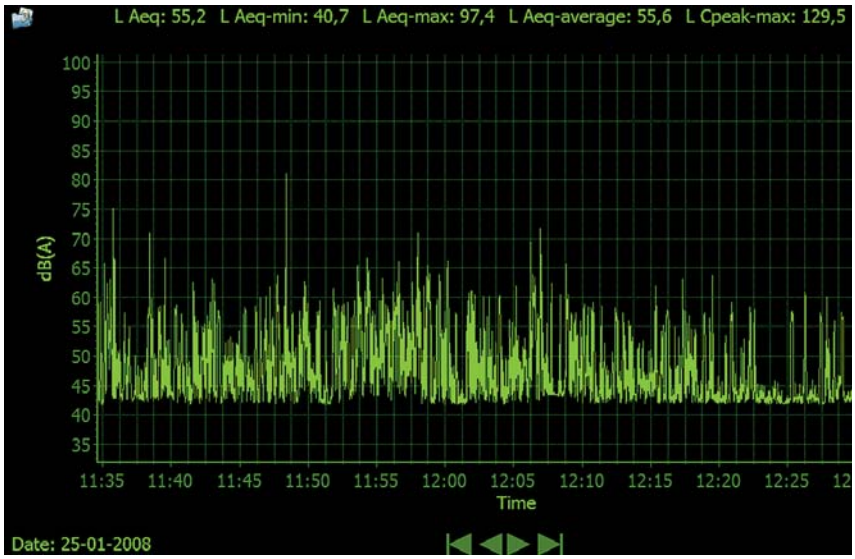
Showing the time and dB value on which the cursor has been placed.

The values shown (LAeq-min, LAeq-max, LAeq-average, and LCpeak) apply to the area between the two cursors.

MEASURING DATA WINDOW – ZOOM FUNCTION

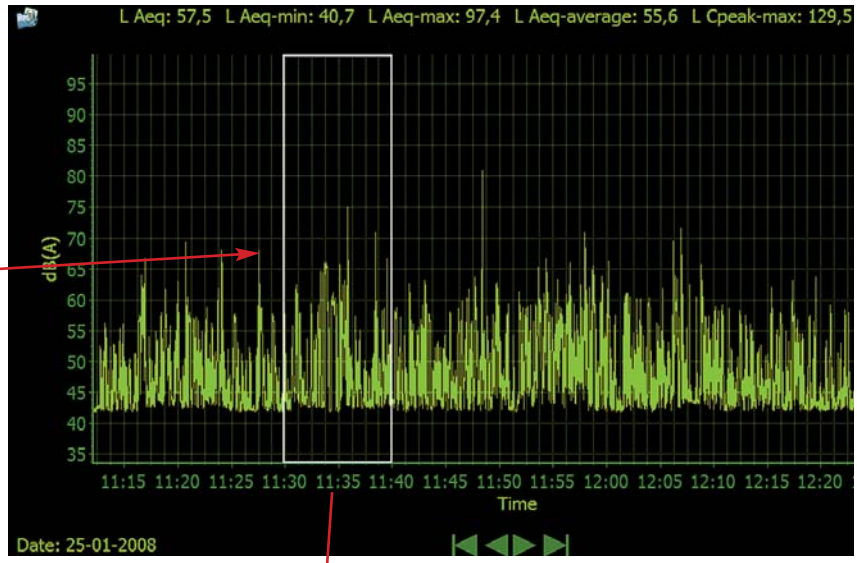
When data is displayed in the graph, you can zoom in on a selected area.

1. Current Display.



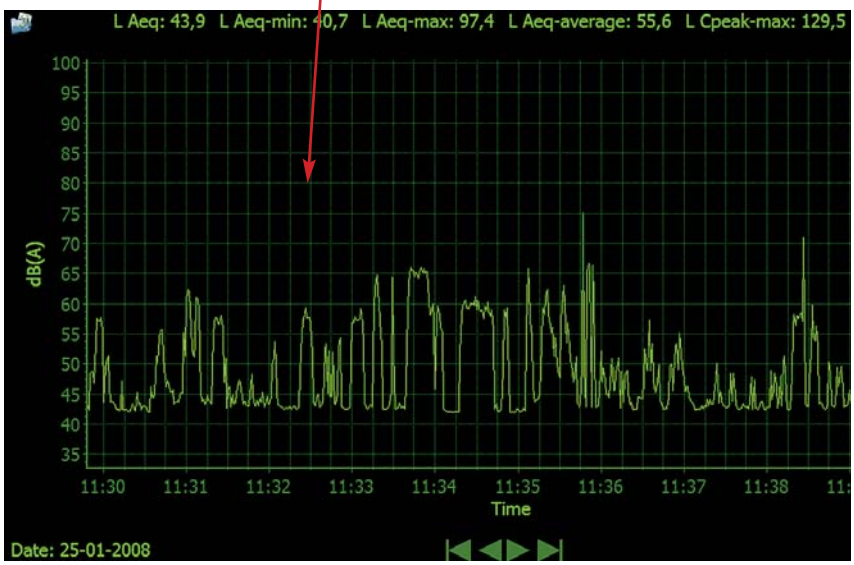
To zoom in on any part of the graph:

2. Place your mouse at any point of the graph.
3. Depress your left mouse button and move your mouse to the ***right*** at the same time, thus producing a square.
4. Release your mouse button when the area required has been marked.
5. The zoom area is displayed.



To cancel the zoom function:

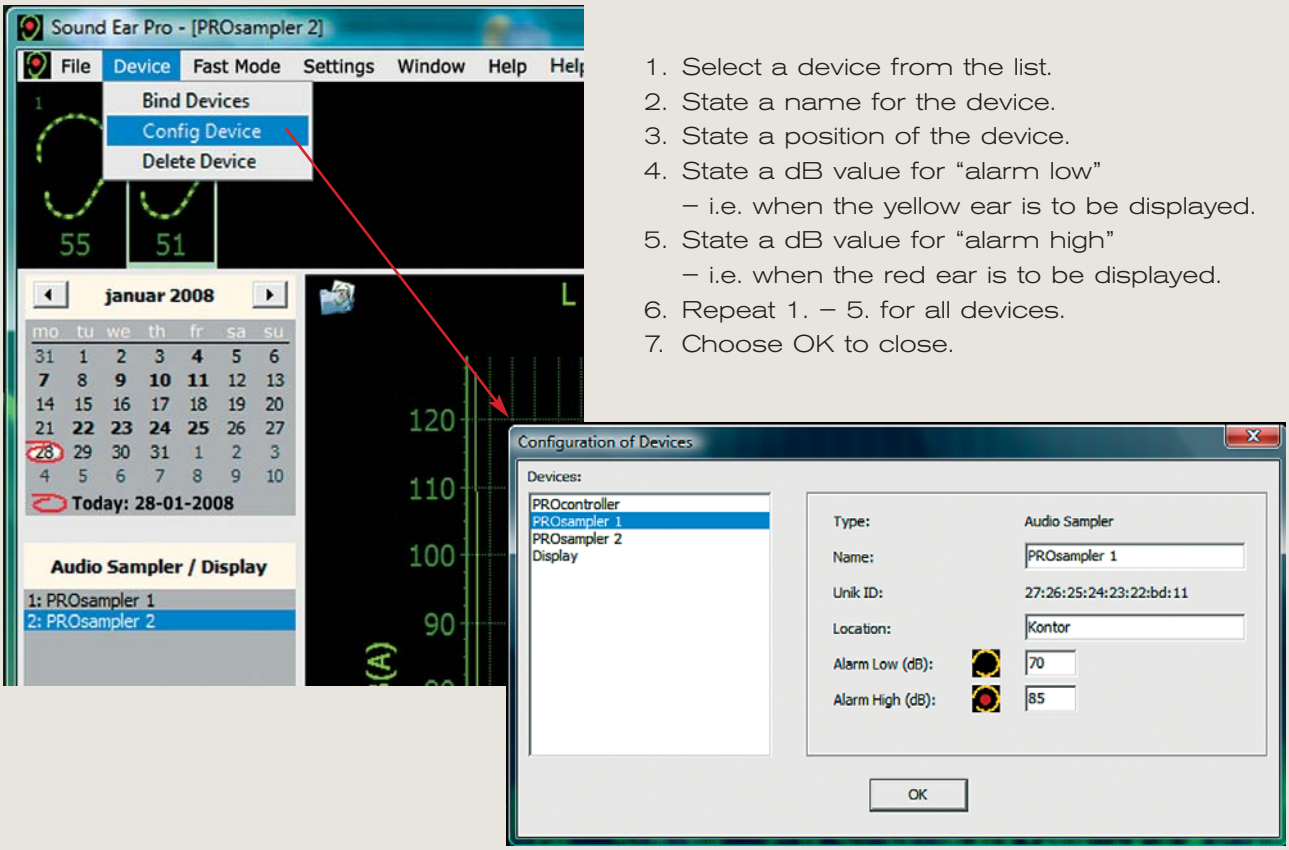
1. Place your mouse at any point of the graph.
2. Depress your left mouse button and move your mouse to the ***left*** at the same time.
3. Release your mouse button when the square is no longer displayed.



CONFIGURATION OF DEVICES

Under "Configuration of Devices", the specific unit can be configured.

• Select Device – Configure Device.



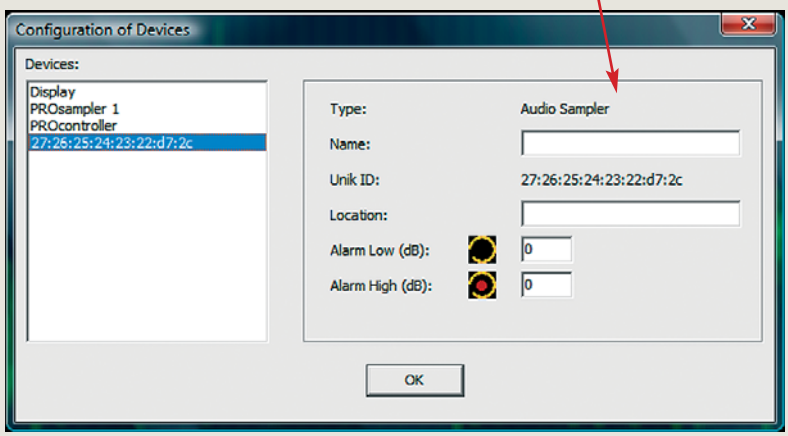
1. Select a device from the list.
2. State a name for the device.
3. State a position of the device.
4. State a dB value for "alarm low"
   – i.e. when the yellow ear is to be displayed.
5. State a dB value for "alarm high"
   – i.e. when the red ear is to be displayed.
6. Repeat 1. – 5. for all devices.
7. Choose OK to close.

Stating type of device:
- Display
- Sampler
- Controller

When a new device is connected to the system, it will be displayed with a long number.

Such number will be unique for the device, and may be retrieved on the back of the physical device.

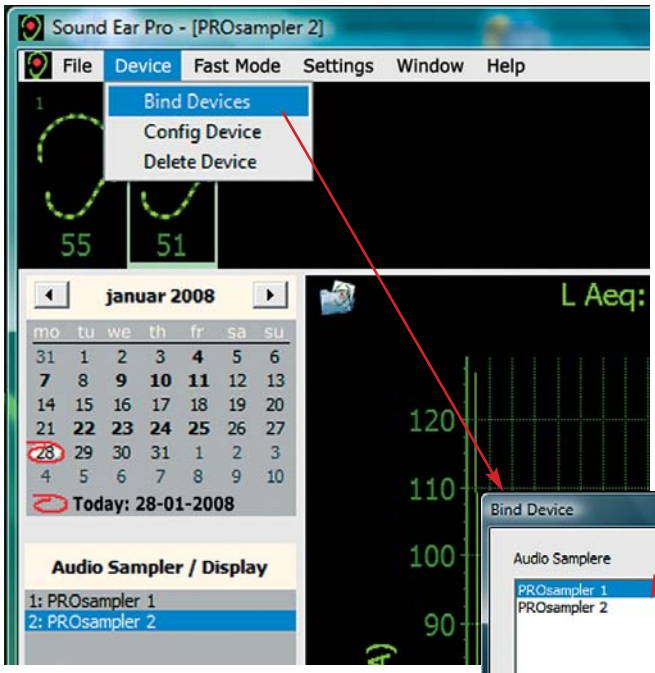
When the device is known by the system, it can be renamed by choosing a more descriptive name.



CONNECT DEVICES

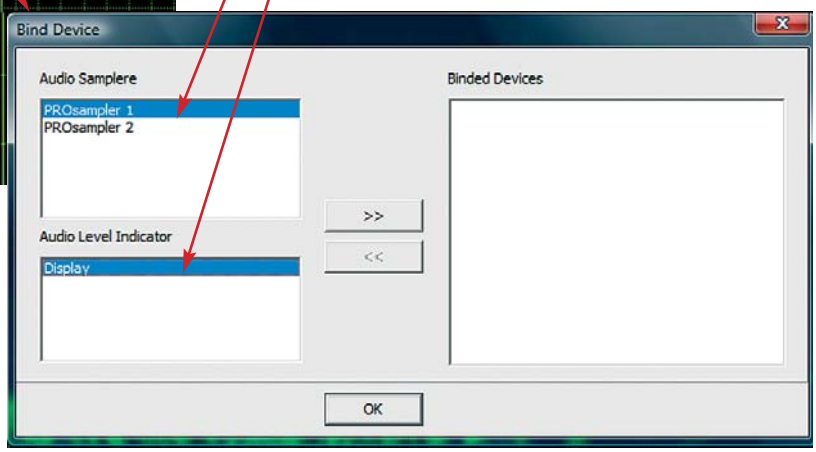
Under "Bind Devices", a Sampler may be logged on to a Display. Thus enabling the Display to switch between green, yellow, and red, depending on the sound pressure metered by the connected Sampler.

- Select Device – Bind Devices.



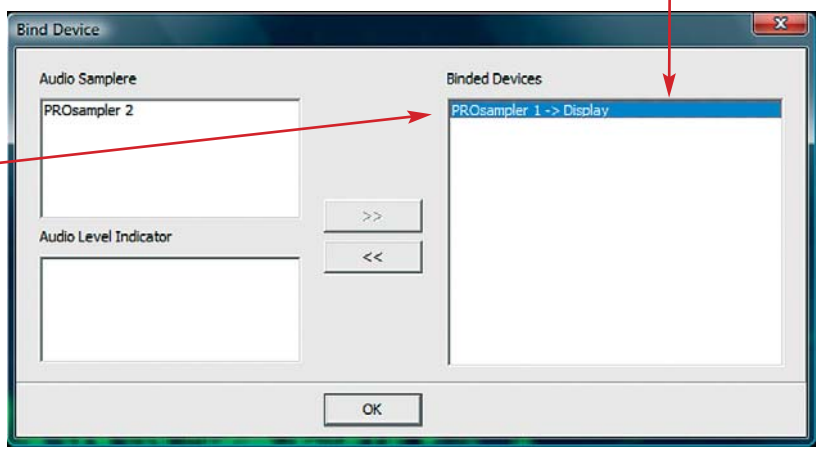
If a binding between two devices is required to be created:

1. Select a ProSampler from the list.
2. Select a Display from the list.
3. Click the button [>>] to connect the two devices chosen.
4. Choose OK to close.



If a binding between two devices is required to be removed:

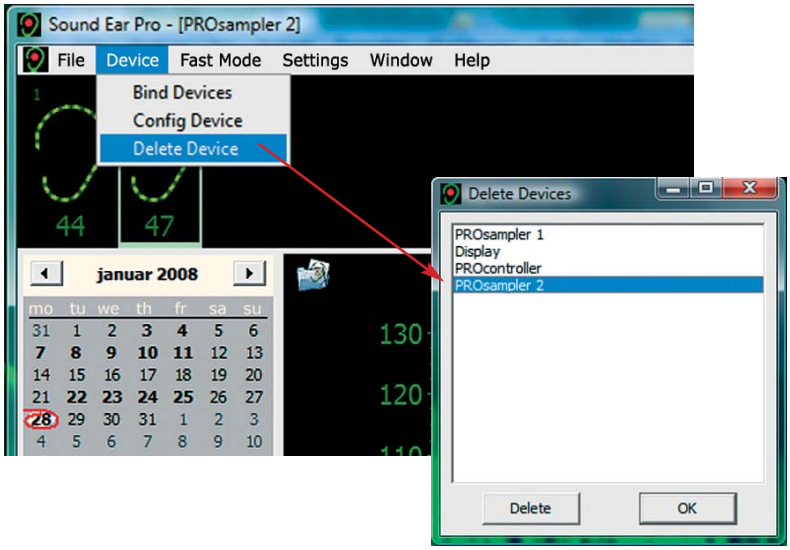
1. Mark the device binding.
2. Click the button [<<] to remove the binding.
3. Choose OK to close.



DELETE DEVICE

If a device is removed permanently from the system, it may be deleted from the program. Note, however, that:

- If a ProSampler is deleted, historical data for the particular sampler can no longer be viewed.
- If the ProController is deleted, samplers or displays can no longer be contacted.

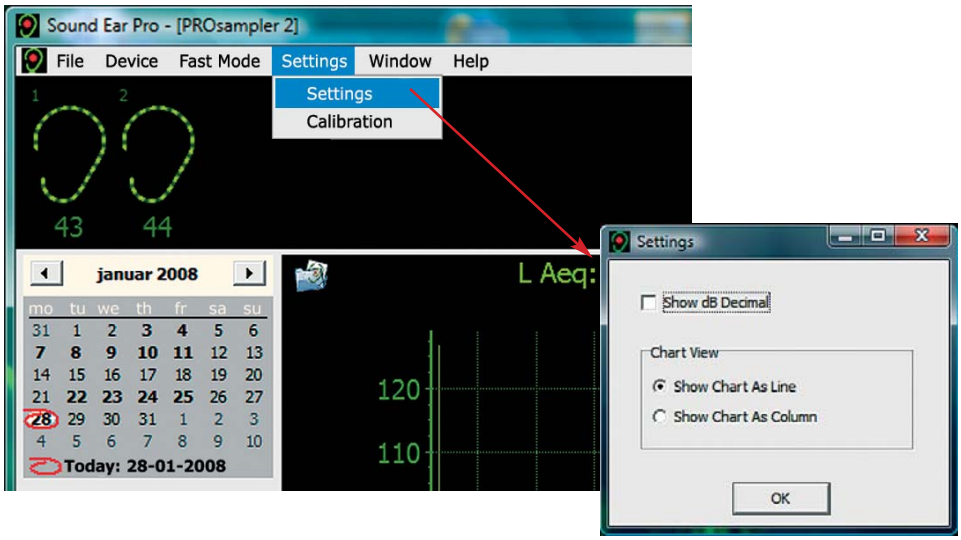


1. Select the device to be deleted.
2. Choose delete.
3. Choose OK when the device in question has been deleted.

SETTINGS

Under "Settings", the general settings can be adjusted.

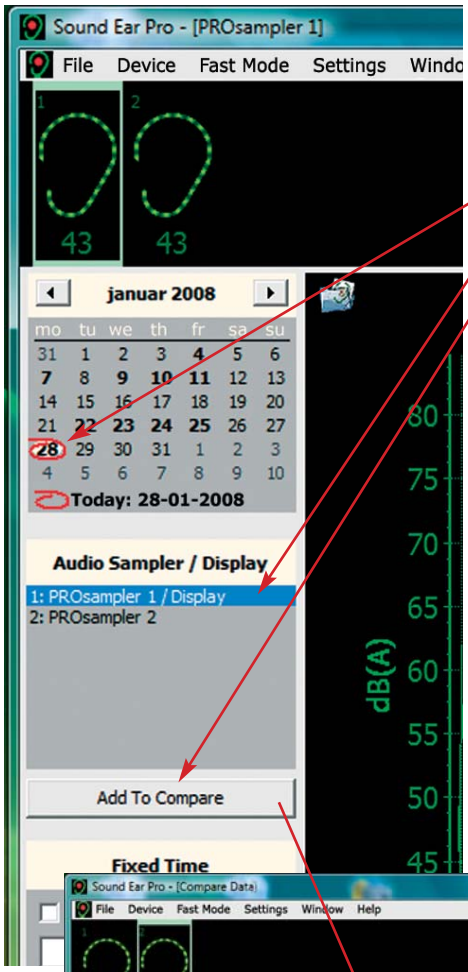
- Choose Settings – Settings.



Choose whether the particular dB value is to be displayed with or without one decimal.

COMPARISON OF DATA

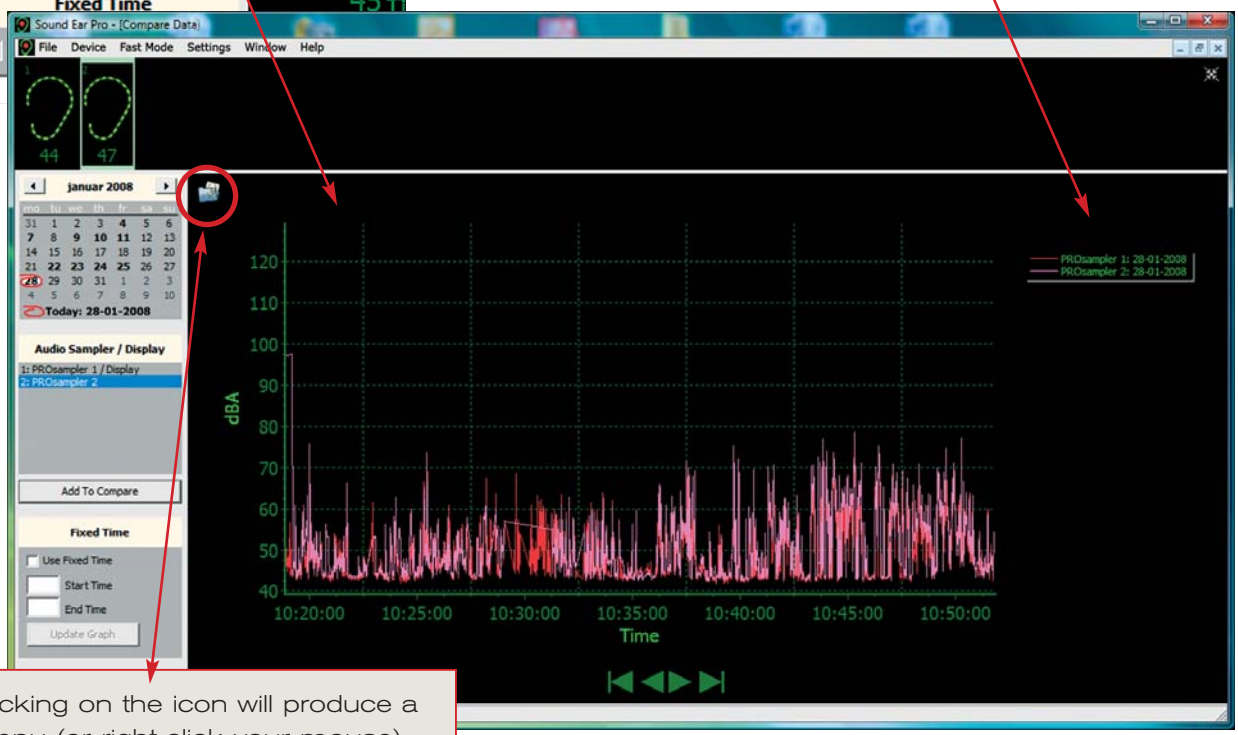
Using your SoundEarPRO, you may compare data from various meters from various days.



1. Choose a date.
2. Select a ProSampler from the list.
3. Click [Add To Compare].

4. Repeat 1. – 3. for other ProSamplers or for the same sampler, but with a different date.

Showing the samplers/days added to the comparison graph.
(Here displaying two samplers on different dates).



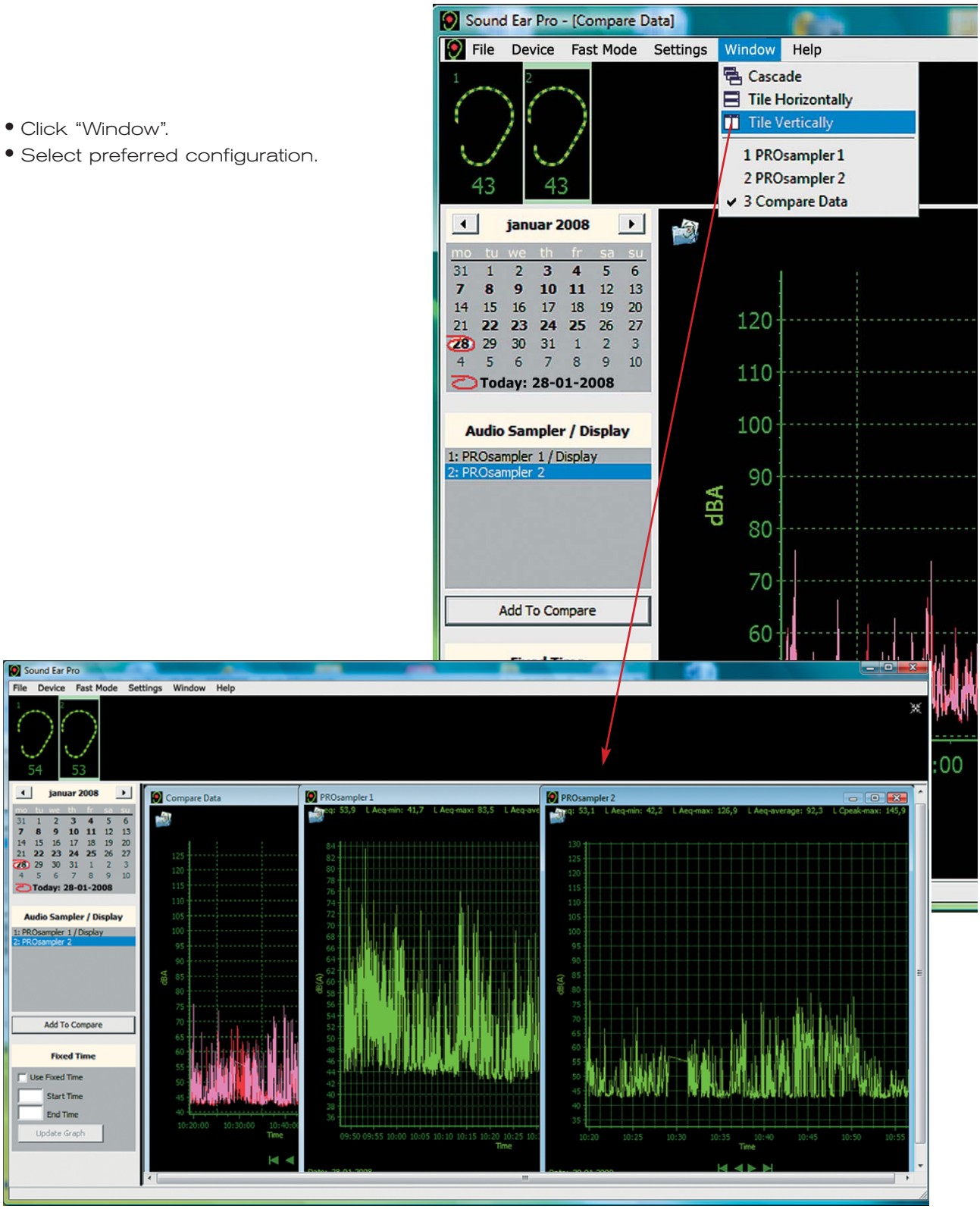
Clicking on the icon will produce a menu (or right-click your mouse).

1. Export to JPEG
2. Reset

SHOW SEVERAL GRAPHS SIMULTANEOUSLY

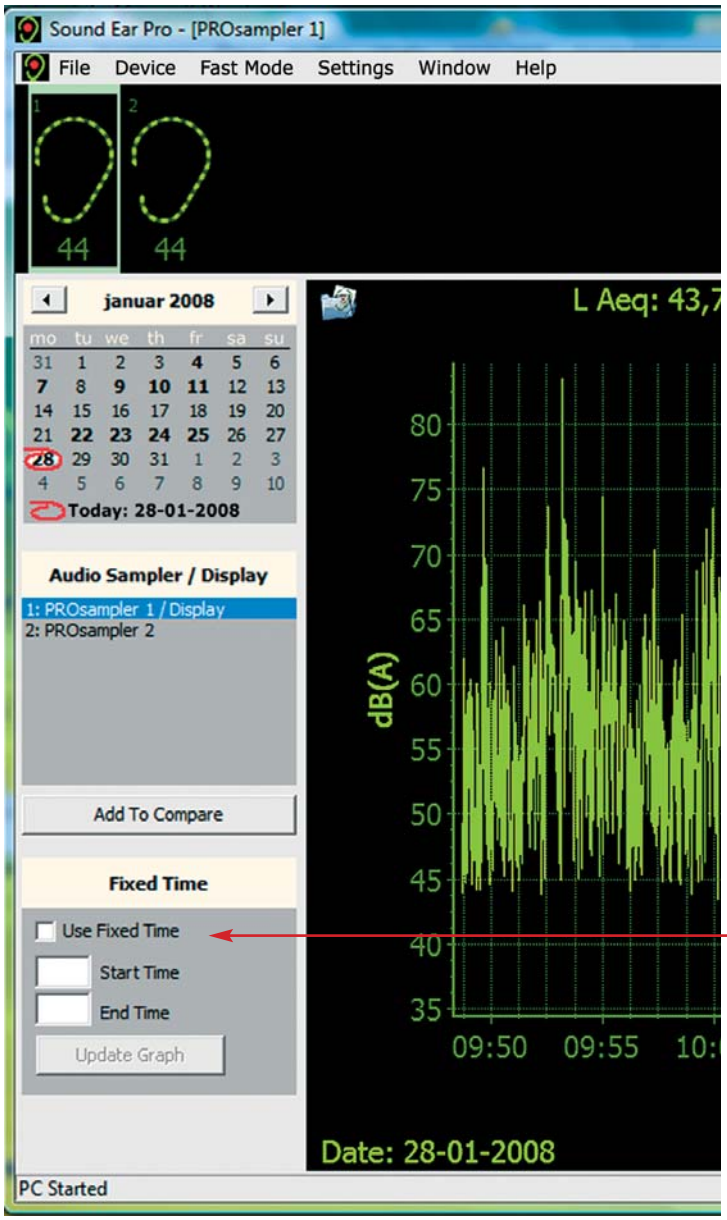
Several graphs may be shown simultaneously.

- Click “Window”.
- Select preferred configuration.



FIXED TIME

Using "Fixed Time", you can choose a time interval to be displayed on the graph.



Select “Used Fixed Time” and type in the interval required.

1. Choose ”Use Fixed Time”.
2. Type in Start Time, for instance 0900.
3. Type in Stop Time, for instance 1800.
4. Choose ”Update Graph”.

When a fixed interval on the graph is no longer required, deselect at “Use Fixed Time”.

Tip:
If several meters/graphs are required to be synchronized while new measurements are coming in, a start time may be entered, such as 0900 hours, and a stop time such as 2359 hours. After this, all active graphs will show metering data synchronized with the time.

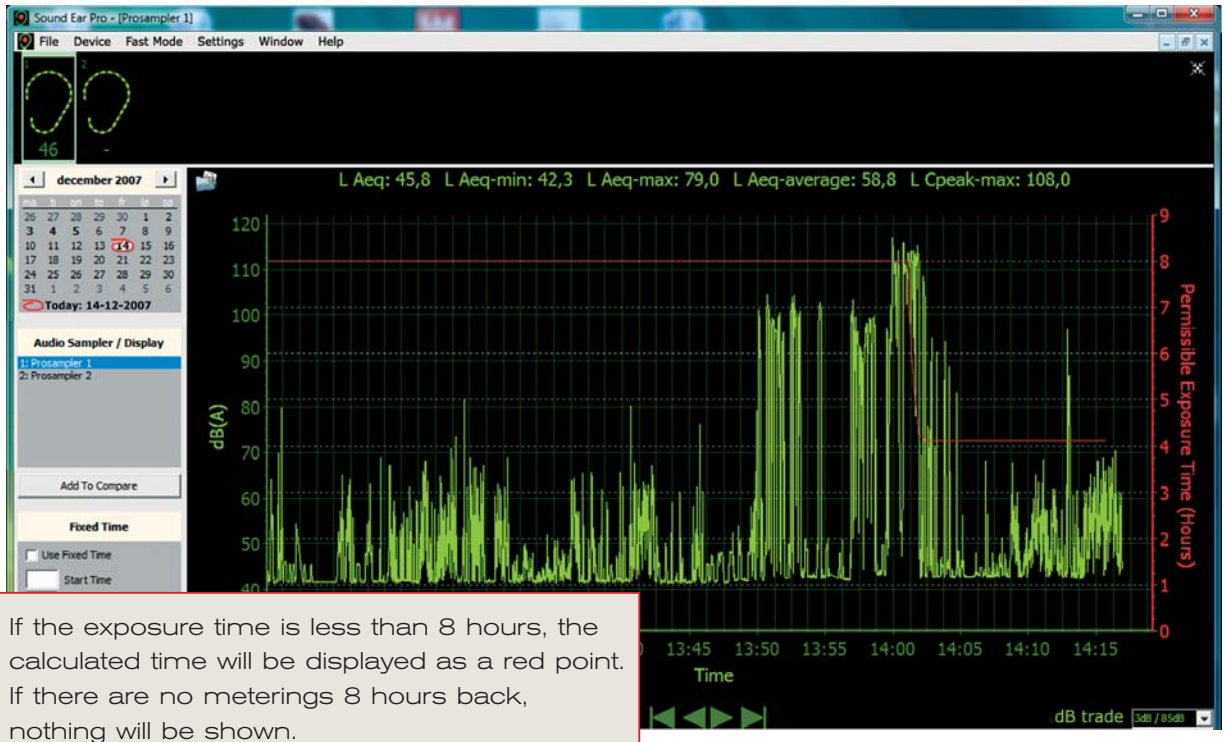
SHOW PERMISSIBLE EXPOSURE TIME

Average noise impact in relation to time.

- If the exposure time is more than 8 hours, this will be shown as a red point.
- If there are no meterings 8 hours back, nothing will be shown.

Show Permissable Exposure Time calculated on the basis of meterings 8 hours back.

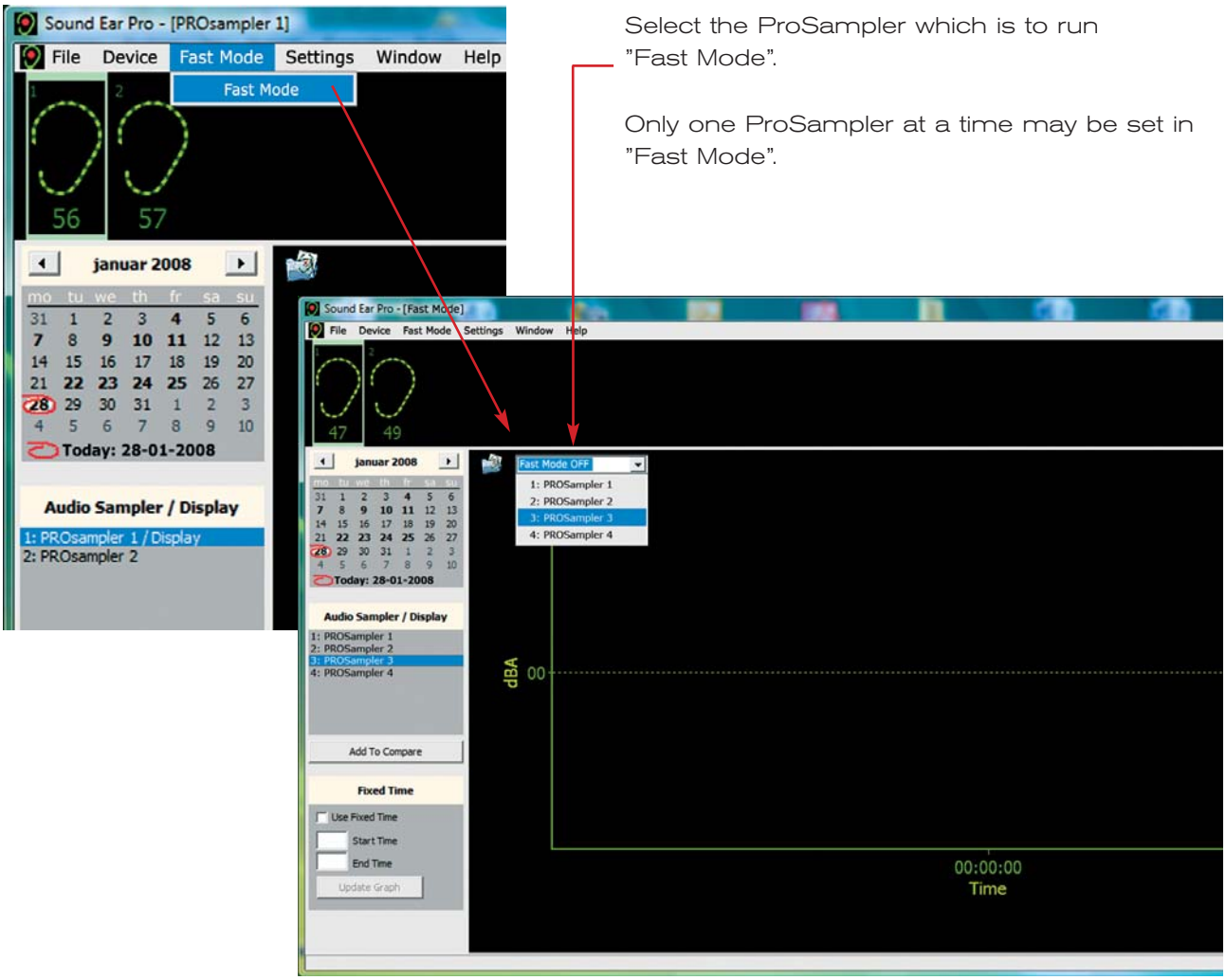
Choose from a dB trade of "3dB/85dB" or "3dB/90dB".



- If the exposure time is less than 8 hours, the calculated time will be displayed as a red point.
- If there are no meterings 8 hours back, nothing will be shown.

FAST MODE

Selecting “Fast Mode” will produce a higher resolution on the graph.
In ”Fast Mode”, measurings will be performed and shown 40 times per second.

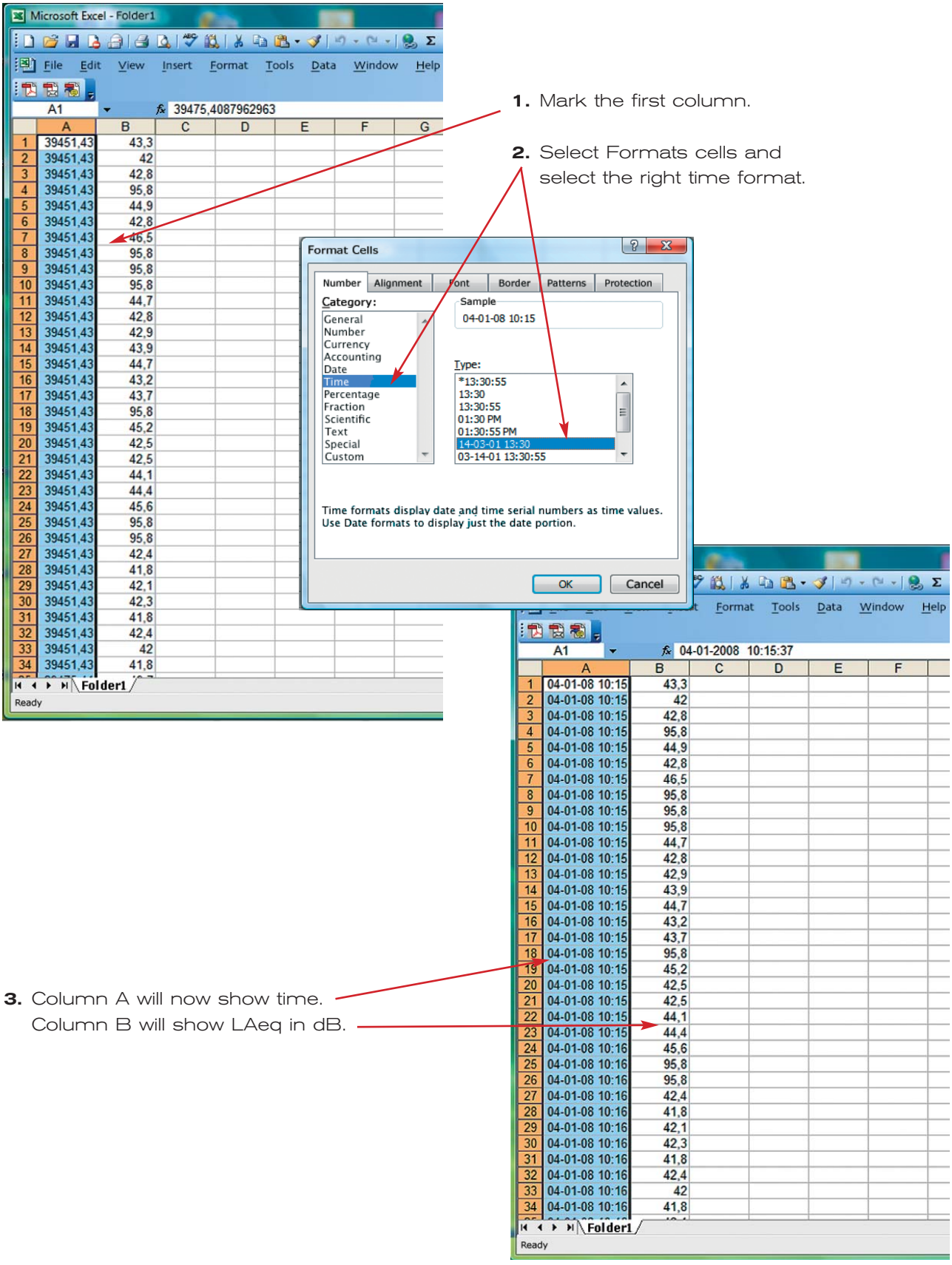


Select the ProSampler which is to run ”Fast Mode”.

Only one ProSampler at a time may be set in ”Fast Mode”.

EKSPORT OF DATA TO MICROSOFT EXCEL

As described above, data for a chosen day may be exported to an Excel file. When the data is entered in Excel, the first column will have to be formatted to the right time format.



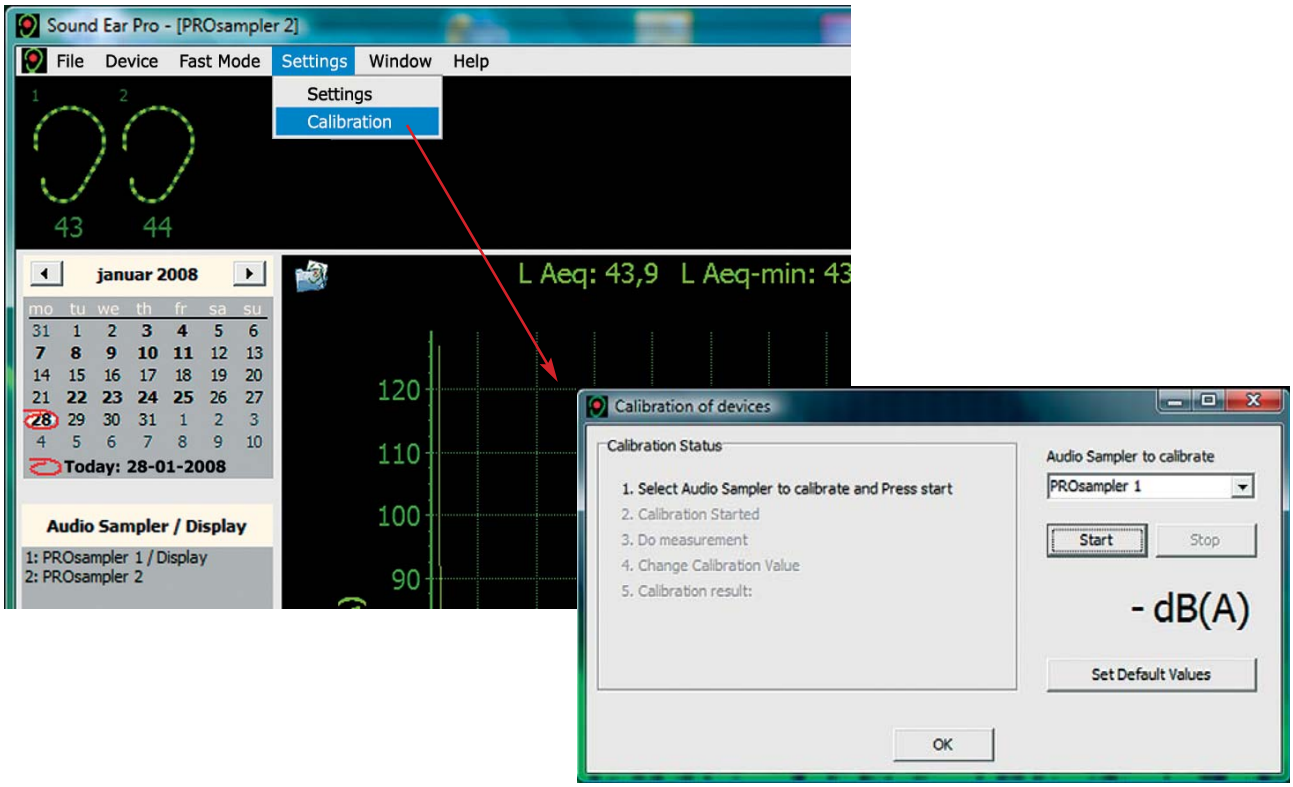
1. Mark the first column.

2. Select Formats cells and select the right time format.

3. Column A will now show time.
Column B will show LAeq in dB.

CALIBRATION

Open the calibration dialogue under the ”Settings” menu.



1. Select the ProSampler to be calibrated in the drop-down menu.
2. Place a calibrator with a reference of 94 dB(A) on the ProSampler selected, and switch on the calibrator.
3. Click [Start], and the calibration is started.
4. 10 measurements will now be run.
5. New calibration values will then be calculated and sent to the sampler.
6. Repeat steps 3. and 5. until 94 dB +/- 0.1 dB has been reached.
7. When 94 dB has been reached, the new calibration values are saved in the ProSampler, and it will say: ”Calibration result: Successfully performed. New calibration values saved”. Steps 3. and 5. can only be repeated ten times. If 94 dB has not been reached, it will say ”Calibration result: Error – Audio Sampler off area. Check calibrator level”.

You may then try again.

The [Set Default Values] button can be used if the calibration failed and you need to start all over.

TROUBLESHOOTING

Starting your program does not establish connection to one or more ProSamplers:

1. Switch off each particular ProSampler; this will make it re-start, and it will seek contact to your ProController after max. 1 minute.

2. This may be due to the fact that contact cannot be established for reasons of distance or layout/arrangement. This problem may be solved by inserting an additional ProSampler or SoundEar Wireless between your ProSampler and your ProController so as to increase the range. This is due to the fact that each particular ProSampler and SoundEar Wireless works as a "repeater" for the other units.

Program start not establishing connection to your ProController (solution – reset all units):

1. Reset ProController as follows:
   a. Keep Reset button in using a paper clip, and connect USB adapter cable (mini-B). Keep button in for min. 5 seconds.
   b. Remove USB plug from ProController.
   c. Put USB plug in ProController.

2. Reset all ProSampler units in the same way as for ProController.

Q & A as well as the latest updates available on www.soundear.dk

CLEANING

The units may be cleaned using a soft moist cloth.
Note !! Never use any type of chemical detergent.