

# BALANCE-X-SENSOR

OPERATING MANUAL

Medicine, Health & Well-Being



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## 1. GENERAL INFORMATION

Thank you for choosing this Soehnle Professional product. All the features of this product were designed to the state of the art and are optimised for simple and straightforward use. If you have any queries or experience any problems with your Balance-X-Sensor not addressed in this operating manual, please contact your Soehnle Professional service partner, or visit us on the web at [www.soehnle-professional.com](http://www.soehnle-professional.com).

### ■ Intended use

The Balance-X-Sensor Pro 7860.20.001 is a measuring instrument to determine the quantitative condition functions and disorders in the motorial and sensorial vestibular system and measure the ergometry of the muscles in the upper and lower extremities and the torso.

#### Applications:

- Detect the risk of osteoporosis early
- Estimate the risk of falling due to neuromuscular deficits
- Test for balance in case of vestibular disorders, diagnose giddiness, vestibulospinal reflex
- Diagnose bone diseases caused by sarcopenia
- Determine biological age
- Monitor physiotherapeutic exercise and muscle re-education after fractures and injuries
- Verify, optimise and assess the success of muscle training programmes
- Assess the power of sportspersons, select sportspersons, conduct power comparisons, benchmarking

### ■ Appliance versions:

Balance-X-Sensor Basic 7860.01.001

Balance-X-Sensor Standard 7860.10.001

Balance-X-Sensor Pro 7860.20.001

### ■ Technical data



- Measuring range:
  - Static load: 2000N at max. 5N // 2% deviation
  - Dynamic load: 5000N at max. 5N // 2% deviation
- Ambient temperature in operation: -10°C to +40°C
- Storage temperature: -40°C to +70°C
- Humidity: 20% to 85% rel. hum. non-condensing
- Mains power: 100 to 240V ~, 50 to 60Hz, 1.25 to 0.5A

### ■ CE sign

The product carries the CE sign in accordance with the following directives:

- 2004/108/EC Electromagnetic Compatibility
- 2006/95/EC Low Voltage Directive
- 93/42/EEC Medical Product (Class I with measurement function), named body of the EU, ID number 0118
- EN 60601-1 Medical electrical appliance
- EN 60601-1-2 Medical electrical appliance

### ■ Classification

- Class I medical product with measuring function.
-  Electrical safety class I (shockproof, with protective earth terminal)
-  The standing platform is the only part with which the test person may come into contact. This applicator is classified as Type B.
- Waterproof to IEC529:IPX2

### ■ Safety instructions


Before putting the Balance-X-Sensor into operation, please read with care the information given in the operating instructions. It contains important instructions for installation, intended use and maintenance of the Balance-X-Sensor.

#### The manufacturer shall not be liable for damages arising out of failure to heed the following instructions:

When using electrical components subject to increased safety requirements, always comply with the appropriate regulations. Never perform work on the Balance-X-Sensor while the power is switched on. Improper installation will render the warranty null and void. Ensure the voltage marked on the power supply unit matches your mains power supply. The Balance-X-Sensor is designed for indoor use. Observe the permissible ambient temperatures for use (technical data). The Balance-X-Sensor meets the requirements relating to electromagnetic compatibility. Do not exceed the maximum values specified in the applicable standards.

- The Balance-X-Sensor has no power switch. When the power plug is plugged in, the Balance-X-Sensor is supplied with power. This is indicated by an indicator lamp on the column or, in the version without column, directly on the power supply unit.
- The mains socket with the integrated power adapter must be fully visible at all times.
- If the Balance-X-Sensor becomes moist due to a change in ambient temperature, it may only be switched on after it is completely dry. Power supplies which have become moist may not be switched on at all. They must be replaced by a technician.
- Intended use: measuring the force of a person's body. The Balance-X-Sensor may only be used for this purpose. Any other use is prohibited.

### ■ Use of additional devices

 Only additional devices (printer, computer) may be connected to the USB port if they conform to European Standard EN 60601-1 or if a suitable disconnecting device is connected in series.

### ■ Maintenance and service

The measuring inspection test was conducted by the manufacturer. A further measuring inspection test is not necessary unless there is a suspicion that the test function sustained damage. For verification purposes, an object or a person of known weight can be placed on the measuring instrument. The weight in kg multiplied by a factor of

10 is equivalent to the weight force in Newtons about which the frequency curve of the force-time series oscillates as an average value. Repairs may only be carried out by a centre authorised by Soehnle Professional using genuine parts.

### ■ Cleaning

Before the appliance is cleaned, switch off the notebook and disconnect the Balance-X-Sensor from the mains by removing the power plug from the wall socket. Only clean the Balance-X-Sensor using a moist cloth. On no account may water be allowed to enter into the appliance. Disinfectants may only be used on the hand rails, stand and platform. **The following disinfectants are permitted:** methylated spirits, Iso-propanol; 2% Kohrsolin, 1% aqueous Sokrena solution, 5% Sagrotan or 5% Gigasept. It is prohibited to spray the notebook.

### ■ Ambient conditions

The Balance-X-Sensor may only be operated in dry rooms. Ambient temperature in operation:  $-10^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$

### ■ Transport

The Balance-X-Sensor may only be transported in its original packaging. When relocating the Balance-X-Sensor inside your premises, lift and carry the appliance with care. Do not drop! Make sure you comply with the storage temperature specifications.

### ■ Disposal



According to the present state of the art the Balance-X-Sensor contains no special environmentally harmful substances. This product is not to be treated as regular household waste, but should be handed in to an electrical/electronic equipment recycling centre. You can obtain further details from your local council, your municipal waste disposal company or the company from which you purchased the product.

### ■ Warranty/liability

If the appliance is delivered with a fault or defect which is within Soehnle Professional's scope of responsibility, Soehnle Professional is entitled to either repair the fault or supply a replacement appliance. Replaced parts remain the property of Soehnle Professional. Should the fault repairs or replacement delivery not be successful, the statutory provisions shall apply.

The period of warranty shall be two years, beginning on the date of purchase. Please retain your receipt as proof of purchase. The Balance-X-Sensor is a medical appliance and may only be used by persons who are capable of handling it correctly as a result of their training or their knowledge. Before using the Balance-X-Sensor, the user must ensure that it is functional and in proper working order. The operator must know how to operate the Balance-X-Sensor. The Balance-X-Sensor is not designed for use in medical rooms which are subject to explosion

hazards. Explosion-hazard areas may occur if flammable anaesthetics, skin cleansing agents and skin disinfectants are used.

These operating instructions are part of the Balance-X-Sensor. They must always be kept close to the appliance. Compliance with these operating instructions is mandatory in order to ensure the correct function and operation of the Balance-X-Sensor. If the Balance-X-Sensor fails to function correctly, the appliance may be damaged. If your appliance requires servicing, please contact your dealer or Soehnle Professional Customer Service. Only genuine spare parts may be used if an authorised service station carries out repairs. Genuine parts and order numbers are contained in the service documentation (Spare Parts List 470.014.036). Soehnle Professional will only assume responsibility for the safety of the Balance-X-Sensor if these instructions are observed and the Balance-X-Sensor is operated in compliance with the operating instructions.

**No responsibility shall be accepted for damage caused by any of the following reasons:** unsuitable or improper storage or use, incorrect installation or putting into operation by the owner or third parties, natural wear and tear, changes or modifications, incorrect or negligent handling, overuse, chemical, electrochemical or electrical interference or humidity, unless this is attributable to negligence on the part of Soehnle Professional. If operating, climatic or any other influences lead to a major change in conditions or material quality, the warranty for perfect functioning of the Balance-X-Sensor shall be rendered null and void. If Soehnle Professional provides an individual warranty, this means that the appliance supplied will be free from faults for the warranty period.

Always keep the original packaging in case you have to return the Balance-X-Sensor.

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## 2. PUTTING INTO OPERATION

### ■ Installing the Balance-X-Sensor

The measuring platform must be placed horizontally on a hard or firm floor. It may not stand on carpet flooring since the soft material may dampen the floor reaction. The floor may not have any tendency to vibrate since this could have a negative effect on the test results, balance and also the test results.

#### Anti-tilt bumpers (Fig. 1)

The anti-tilt bumpers may not contact the floor during the measuring operation. The adjustable anti-tilt bumpers on either side of the front load cell must be adjusted to a floor clearance of 5mm. If the floor clearance is too small, it could lead to incorrect test results. If the floor clearance is too large, there is a risk of the appliance tilting.

**Important: After every transportation, check that the anti-tilt bumpers have the correct floor clearance.**

### ■ Mounting and connecting the notebook

#### Supply of the Balance-X-Sensor with notebook

Place the notebook in the bracket and plug in the USB cable. Then plug the mains adapter cable to the notebook and plug the power plug into the wall socket. The test input and measuring instrument power supply is via the USB port of the computer.

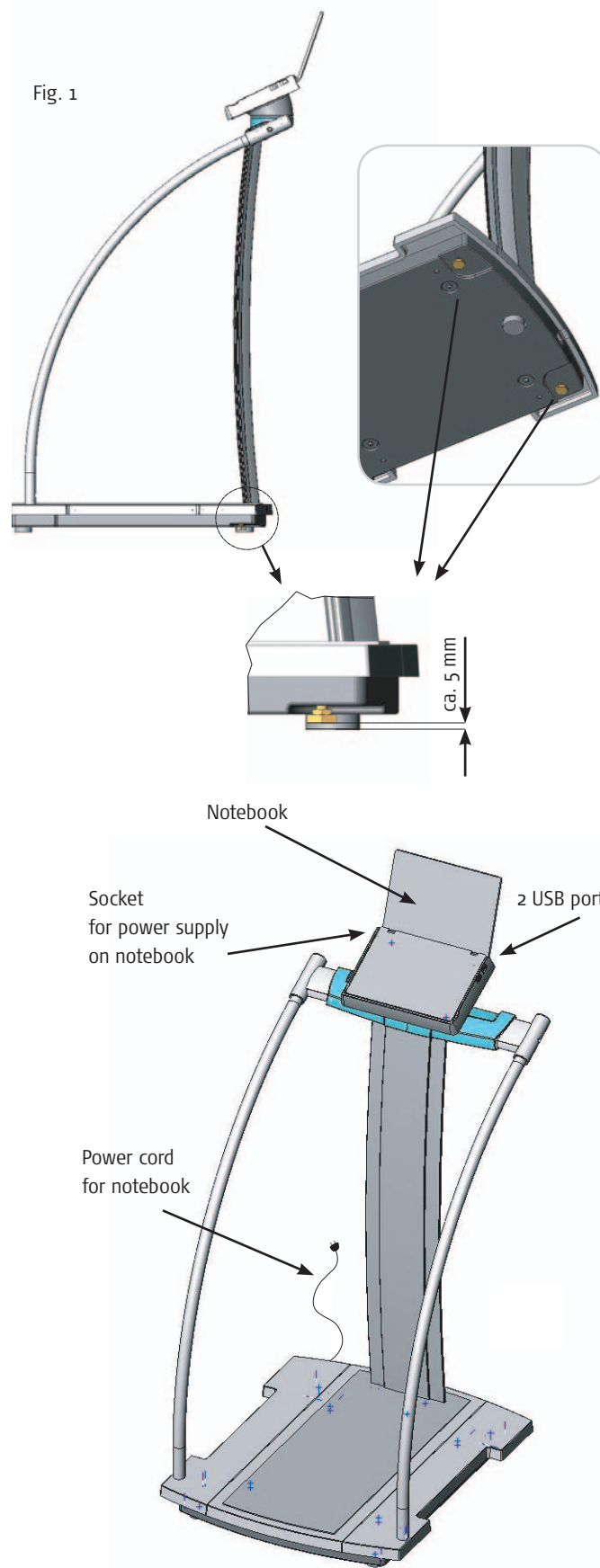
A commercially available notebook running on the Windows operating system is used. The familiar options contained in the Microsoft File Manager are available for file management. The test software is already installed on the notebook. After all the components are connected as described above, switch on the notebook (continue with 4. Operating the Balance-X-Sensor, page 8).

#### ■ Supply without notebook

If you are using your own computer, first install the supplied software on your computer (continue with 3. Software installation, page 6). Connect the computer as usual to a power source and switch on.

**Important: Do not yet connect the measuring instrument and the computer using the supplied USB cable!**

**Caution:** If there is interference on the mains cable (ESD, burst or surge), the device switches off for safety reasons. In such case, it is only possible to conduct a restricted test in compliance with EN 60601-1-2. For this reason, only operate the device in the correct environment.



### 3. SOFTWARE INSTALLATION (when supplied without PC)

#### ■ Installing the Balance-X-Sensor program

System requirements: Windows 2000 or higher  
 Monitor resolution: min. 1280 x 800 pixels

1. Insert the supplied program CD in the CD drive.
2. Open the "Installation CD" folder on the CD.  
 Double-click on the "install.exe" icon to load the setup program (Fig. 2).
3. Accept the license terms.
4. This is followed by a description of the software and driver setup.  
 Click on the green arrow to start program installation (Fig. 3).
5. The program is installed on your PC in the folder **C:\Soehnle-Professional** unless you specify a different path. You may create an alias link for the program on your desktop and in the Start menu to load the program faster.  
 Confirm by clicking on "Continue".
6. The message "Setup completed" appears.

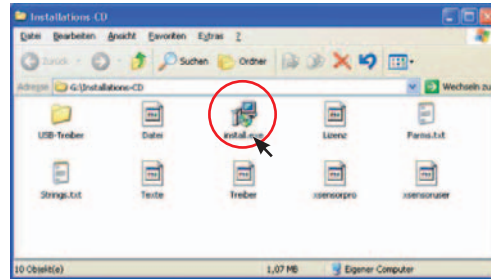


Fig. 2

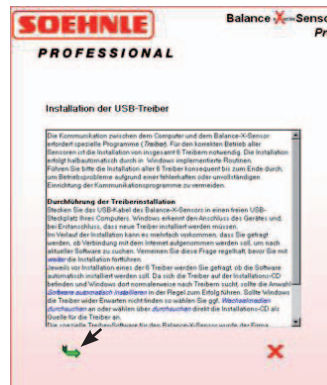


Fig. 3

#### ■ Installing 6 drivers

Communication between the computer and the Balance-X-Sensor requires special programs (driver). The correct operation of all sensors requires the installation of a total of 6 drivers. Installation is semi-automatic by means of routines implemented in Windows.

**Please carry out the installation of all 6 drivers completely through to the end** in order to avoid operating problems due to the incorrect or incomplete setup of the communications programs.

1. Plug the USB cable of the Balance-X-Sensor in a free USB socket on your computer. Windows recognises the first installation of a new appliance and the requirement to install new drivers.
2. Select "Install software automatically" and click on "Continue" (Fig. 4).
3. Ignore the Microsoft warning message and continue the installation.
4. Windows searches for the driver on the CD. This may take a few seconds. A driver is then installed automatically (Fig. 5).
5. Click on "Finish" to end the installation of the first driver (Fig. 6).

Now you have installed one of a total of 6 drivers. The Plug and Play Manager would like to install the next one. Repeat the installation procedure from 1 to 6 until you have installed all 6 drivers on your computer.

**When you install under Windows VISTA, you are only requested to install the driver twice.**

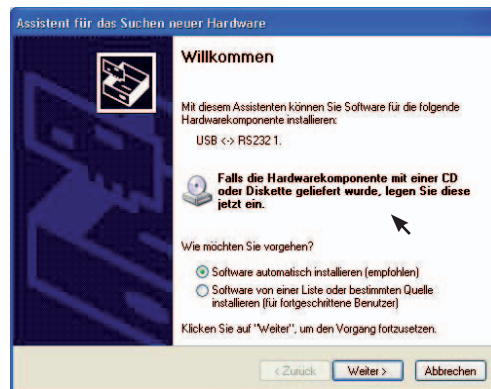


Fig. 4



Fig. 5

## ■ Instructions and error messages in Windows

### Windows wants to create a link to the World Wide Web

During installation, you may be asked several times whether the computer should connect to the web to search for software updates. Reply „no“ to this question each time before continuing the installation by clicking on “Continue”.

### Windows cannot find the drivers on the CD

Before installing one of the 6 drivers, you are asked whether you want to install the software automatically. Since the drivers are on the installation CD and Windows normally searches there for drivers, the option “Install software automatically” will normally be successful. However, should Windows fail to find the drivers, select “Browse data carriers” or select the installation CD directly as the driver source by clicking on “Browse...”.

### Windows warning messages

The special driver software for the Balance-X-Sensor was not presented to Microsoft for registration. For this reason, a message indicating that the software has failed a Windows test may pop up several times during installation. Ignore these messages and continue the installation.



Fig. 6

### 4. OPERATING THE BALANCE-X-SENSOR

#### Starting the Balance-X-Sensor program

Activate the Balance-X-Sensor program by double-clicking on the icon on your desktop or in the launch bar. The program starts immediately with a **zero point measurement** (yellow bar). During this time, there should be nothing on the platform and nothing should be touching the appliance. The load on the platform is tared. The Balance-X-Sensor can be retared at any time.

#### Parameters measured by Balance-X-Sensor

- External muscle activation
- Force vector area
- Orthostatic power
- Movement power
- Maximum force
- Force ratio to body weight

#### Program platform

Labels in the screenshot:

- Personal data + test clear
- Input boxes for personal data
- Selection of sex
- Function Zoom
- Select test mode
- Select investigator
- Input test duration
- Add investigator and mode
- Edit text in "strings.txt" (C:/Soehnle Professional/Files)
- Indication of version number while moving the cursor over "Balance-X-Sensor"

Software Interface Data:

Balance-X-Sensor Pro 24.01.2008 15:23:02

At this line could be shown the name of the company or practice, and at this line the name and address of the boss (can be edited in Files/Strings.txt Header1 and 2)

Personal Data: Name: Test person, First, Mid: 1, DOB: 01.01.0200, Height: 169 cm, BMI: 24.3, Mode: Romberg, open, Investigator: Dr. Test, Date: 24.01.2008 15:21, Duration: 10.0 s

Force Series: Force [N] vs Time [s]

Balance: Vector Trace [cm]

Frequency Spectrum: Power [W/Hz] vs Frequency [1/s]

Muscle Function Results: Power 0,397 W, Force 680,2 N, Force Factor 1,06

Balance: Vector trace area 2,5 cm<sup>2</sup>, Trace / sec 114 mm

Muscle Frequency: Mean 5,25 Hz, Standard dev. 2,38 Hz

Buttons: Search File..., Read File, Show Trend, Abandon, Print, Save, Force measure, Measure, Close

Button Functions:

- Search for stored test person parameters
- Load stored file (display)
- Table of all test results of a person
- Clear test data
- Print the present screen view
- Save the data
- Start the force test
- Start test
- End the program

Fig. 7

(The buttons can be operated by keying in the underscored letters.)

#### Force-time series

This chart shows the chronological curve of the overall force acting on the platform. Use the Zoom button to view a section of the chart in detail. Define the zoom area with the mouse (left button) (drag from top left to bottom right).

#### Balance

This chart shows the trace of the force vector (black) over the test time. The body centre of gravity is located within this trace. One of the areas is green and shows good vestibular posture during the orthostatic test in 68% of test persons (2 sigma range). The yellow area indicates vestibular disorders.

#### Power spectrum

This chart shows the power spectrum of the power parts at each power interval. Coarse, slow forces are located on the left; fine, rapid force impacts are on the right of the spectrum.

## Test routine

The Balance-X-Sensor measures and logs the forces that the test person exerts on the platform over time. The purpose is to measure the quantitative control capability of motorial and sensorial systems. A classic semi-quantitative variant is known by the name of tandem stand test.

The tandem test measures the test person's capability of holding a position for 10 seconds with the feet placed at a precise distance apart (heel to toe) without taking a supporting step. This test can be objectively assessed with the Balance-X-Sensor. The appliance records the time taken and the fineness of sensor-motorial control over the test duration. If the tandem stand cannot be held for 10 seconds – even after repetition, test variants of less difficulty can be made (semi-tandem stand, Romberg stand).

Every healthy young person should be able to hold the tandem stand with their eyes closed. When the test person stands on the platform, the appliance records the forces exerted by the muscles to maintain the body's centre of gravity. From these forces, the measuring program measures the position of the centre of gravity forces at the centre of which is the centre of gravity.

The Balance-X-Sensor is capable of measuring the exertion of force applied within a definite period of time, i.e. muscle power as in ergometry.

The recorded forces result from the positive or negative accelerated motion of masses against gravity. They may stem from the body trunk mass, the extremities or additional foreign masses. The appliance records the external force and calculates the force exerted. It does not record internal forces occurring in the musculature, forces that are not directed against the force of gravity, or that cancel each other out. The very fine acceleration forces produced by the muscles to maintain an erect posture and correct balance are analysed over time. This results in the following parameters:

### Parameters obtained during the stand test (Fig. 7)

- **Force vector area [cm<sup>2</sup>]**  
Balance area of the body's centre of gravity, representing steadiness when standing and walking. A small area indicates a high degree of steadiness. Trace length (mm/s)
- **External muscle activation [Hz]**  
The speed of postural muscles, representing training condition. A high power indicates excellent training condition.
- **Orthostatic power [watts]**  
Muscle power exerted when standing during the test, representing the interaction of vestibular organ, nerve conduction and muscle function condition. Here, low power indicates an efficient interaction.

### Parameters obtained during the movement test (Fig. 8)

- **Movement power [watts]**  
Muscle power expended during the test to counteract the effects of gravity, such as knee bends, stand-up test, dumbbell exercises, jumps, etc. indicate the force exerted.  
(The force exerted during jumps is recorded correctly, however, the power calculation is erroneous)
- **Maximum force [N]**  
Indication of the average force as well as the highest and lowest values measured during the movement test.
- **Force ratio to body weight**  
Parameter to assess osteoblastic efficiency, calculated from the maximum force/body weight attained.

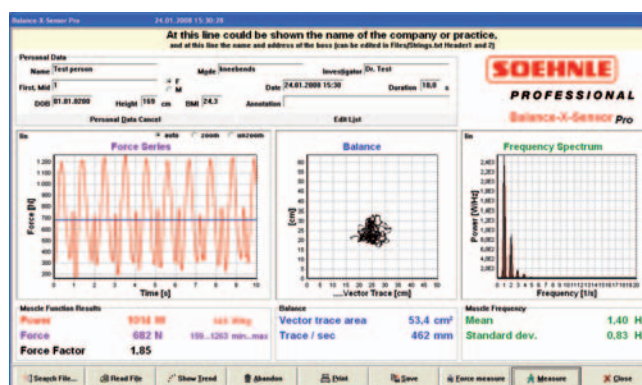


Fig. 8

## 1. Program settings before the test

### Entering personal data

Before a test, personal data must be entered. Surname, first name and date of birth (DD.MM.YYYY). When you enter the height, the Body Mass Index (BMI) is automatically calculated. When this information is entered, a folder is created in which test data is stored under the same name. Please make sure your inputs are correct, otherwise two folders may be created for the same test person. Corrections can be carried out later using the Windows File Manager.

**Advise:** The saving of personal data can also be done in advance and without a measuring operation.

### Loading personal data from the archive:

With existing test person entries, the master data fields can be loaded by selecting the person in the archive (Search for .../Read File). The old test loaded in the file is automatically deleted by the new test.

### "Mode" = Select test mode

Move the mouse over the "Mode" field. Two windows containing test modes open. Left -> static test and right -> dynamic test.

Select the test mode required.

- **Static test:** Tandem, semitandem, Romberg, etc.
  - **Dynamic test:** Knee bends, dumbbell lifts, push-ups, etc.
- New test modes can be added using the function "Edit list".

### "Investigator" = Select the medical specialist

Move the mouse over the "Investigator" field. A selection box containing saved investigators opens. Select the investigator you require and click.

### "Edit list" = Add investigator and mode

Click the mouse on the "Edit list" button. In the top part of the menu window, select the content you want to edit (Fig. 9). Delete or add contents in the bottom window. Click on the "sort" button to sort the contents alphabetically. Click on "end" to confirm your inputs and return to the main menu.

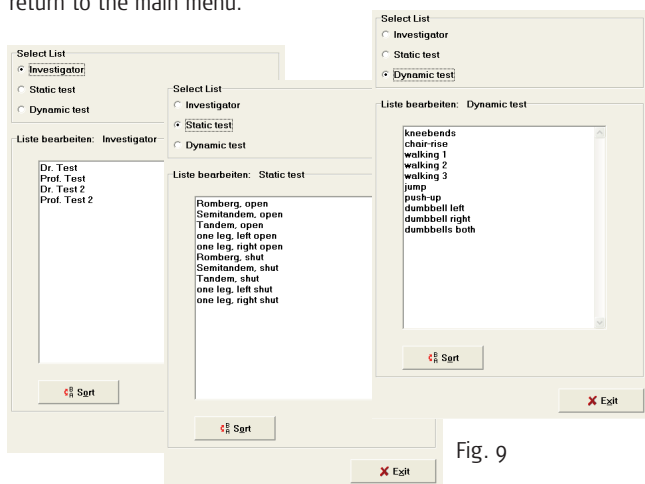


Fig. 9

### Setting the measuring time

Enter the measuring time in seconds here. Setting with maximum 600 seconds.

## 2. Force test

**Force measure** The force test must always be the first test performed. The test person stands on the measuring platform. He/she must stand unaided and not touch the side hand rails. Click on **"Measure force"** to launch the test. The body weight force is measured in Newtons (mass x 9.81). The force test must be performed every time there is a new test person.

## 3. Balance and power test

**Measure** After the force test, the test person assumes the intended test posture (e.g. tandem stand) or prepares to perform the discussed exercise (e.g. knee bends). During the balance and power test, the test person must stand unaided and the side hand rails may not be touched. The holding rail is provided as a precaution if the test person loses his/her balance. **With test persons at risk, an assistant should be at hand to provide support if necessary.**

Click on **"measure"** to launch the test. Cancel the current test by pressing the ESC key on the keypad. The time axis adapts automatically to the actual test time.

**Advise:** The measuring start is delayed by one half second to avoid an inaccuracy of the measuring by touching the button.

**F11** The end of the record can be **acoustically indicated** by pressing F11. Pressing F11 again switches off this function.

## 4. Evaluating test results

The measured values are evaluated automatically. The result parameters are displayed in the results field below the chart window.

**F12** By pressing the function key F12, an evaluation of results in form of indicating round instrument at a statistical test (valid at tandem stand with closed eyes). This allows for a simple and easily understandable readability of results. The confirmation of the key „blank“ results in a more detailed illustration of the results (Fig. 7). Pressing F12 again, switches off the function.

## 5. Additional functions in Program menu

### Zoom functions: "auto", "zoom", "unzoom"

You can enlarge the view in all 3 charts. Hold the left mouse button down, drag the zoom frame over the required area and release the mouse button. The selected section is then displayed in the chart in enlarged form.

- a) **"Balance" and "Power spectrum" charts**
  - "unzoom"** Press the "unzoom" button (appears at top right in enlarged view) to return to full view.
- a) **"Force-time series" chart**
  - "auto"** Return to full view
  - "zoom"** Display the zoomed section again
  - "unzoom"** Makes the force axis coordinates (N) start at zero

**Abandon** An unacceptable test can be deleted by pressing the **"discard"** button.

**"Personal Data Cancel"** deletes the input fields Surname, First Name, Date of Birth, Height and Test.

**Print** Press the **"print"** button to print out the screen contents to a printer connected to the Windows system and selected accordingly. Make sure that you select the landscape format before printing.

## 6. Save data

**Save** Test data can be saved as raw data by pressing the **"save"** button. If no folder was created previously, a new folder is generated automatically with the first test and contains the surname, first name and date of birth. The data record is then stored in the new or existing folder. The files are saved to standard folders managed in Windows. The path to the test person folders is: C:/Soehnle Professional/Archiv/

### Saving test results

Two files with identical test results are saved.

#### a) Internal test result file with extension \*.BXS

The file name consists of a combination of surname, first name, date of birth, test date and time.

Example: Noname M. 31.12.1990 20.05.2007 10\_22\_13. Scale surname, first name and date of birth must be entered correctly in order to create a unique folder, or save new tests with an existing test person to his/her folder.

The test result data can be retrieved in the main menu at any time.

#### b) External test result file with extension \*.txt

The file name consists of a combination of surname, first name, test date and time.

Example: Noname M. 20.05.2007 Romberg, open.Txt

This file is generated automatically. In future, all further test result data of the test person are saved to this file when the same test is carried out in the same mode. The test result data can be evaluated externally, e.g. in Excel.

**Important:** The "Show trend" functions uses this txt data for display.

**F10** The data can be saved in an **additional list/data** by pressing the function key F10 after saving new data or for archive data. This function facilitates the scientific evaluation of test series. The data is available under Soehnle Professional/archive/. Pressing F10 again switches off the function.

#### "results.txt" file – Reads out the files of individual sensor parameters.

In addition, the "results.txt" file (C:/Soehnle Professional/) is updated (overwritten) with every save operation. The file contains all measured sensor parameters and the evaluation of the last test. This allows force curves to be analysed in greater detail in Excel, for example.

**Caution: The file is always overwritten by the results of the most recent test. You can save the contents permanently by copying and changing the name of the file.**

#### Changing file and folder names

The folder names and file names can be changed in Windows, i.e. they can also be corrected under certain circumstances.

Any interventions in this system should only be carried out by trained technicians. For example, if you want to create a new group of test persons, you can rename the folder "Archive" (e.g. "Archive\_II"). However, a new, empty folder named "Archive" must be created at the same location. Changing incorrect entries may damage the file structure of the Balance-X-Sensor.

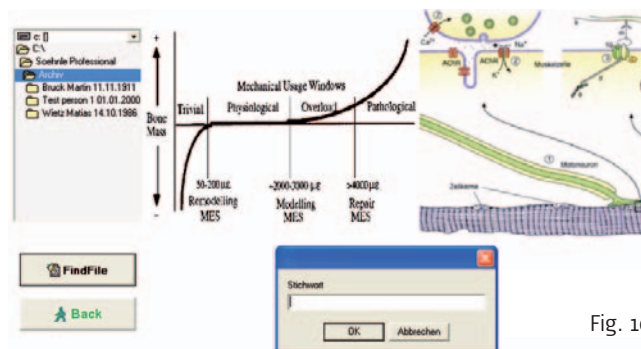


Fig. 10

## 7. Search file

**Search File...** Press the "Search File" button to open the search window (Fig. 10).

#### a) Window top left:

Shows the Windows file directory C:/Soehnle Professional/Archiv/

#### b) Window bottom left:

Shows the "Archive" folder containing the test person folders.

You can use the alphanumeric keyboard to skip faster to certain sections when the mouse cursor is active in the window. You can double-click on the folders to open them. When you select a file, double-click on the file to open it and display the contents in the main menu.

Return to the main menu without saving the data by clicking on the "Back" button.

#### c) Window on the right:

Short display of test results of a selected test person file.

The "Find File" button opens a dialog box that requests you to enter a search word, e.g. part of a name. The entry may not contain any blanks.

## 8. Read file

**Read File** The "Read File" button opens a Windows window. Open the Archive folder, select the required test and close the dialog window by clicking "OK". This displays the contents in the main menu.

The plug in at the measuring application is a precondition for reading a file. An optimal program module (accessories) allows additionally the operation with a measuring application (e.g. in the network). Here-with, the program searches for the measuring value (message: measuring application not found, please check the plug in) but all function except for „measure power“ and „measuring“ can be used.

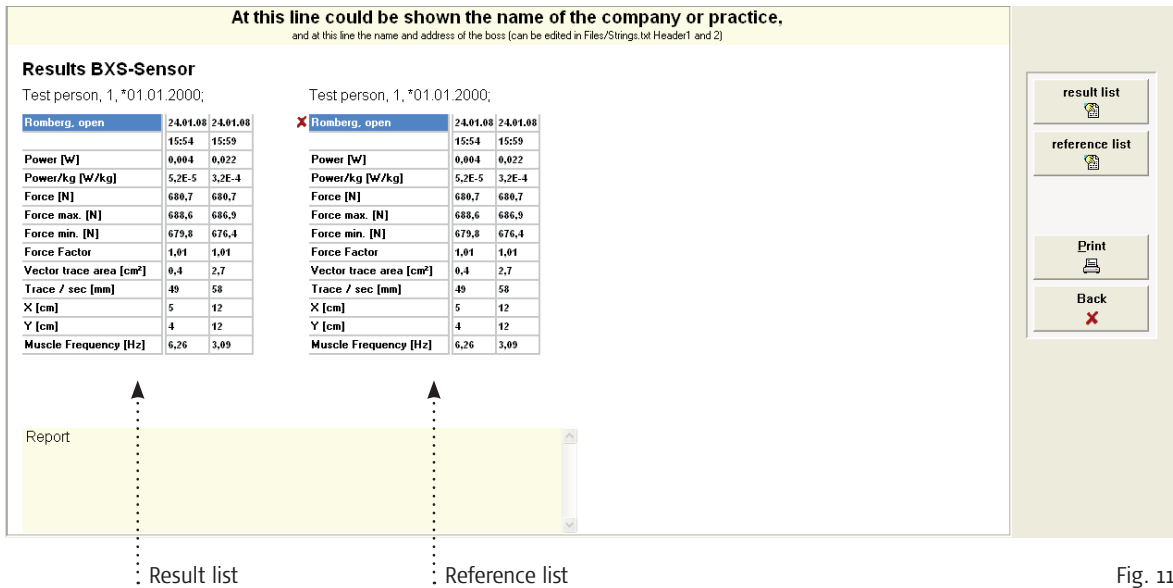


Fig. 11

### Show Trend

The "Show Trend" function displays the complete test results in the txt file of a test person and a test mode in a table. This is an optimal way to compare the parameters. (Fig. 11).

The "Show Trend" button opens a Windows window. Open the Archive folder, select the txt file and close the dialog window by clicking "OK". The contents are displayed in a separate window.

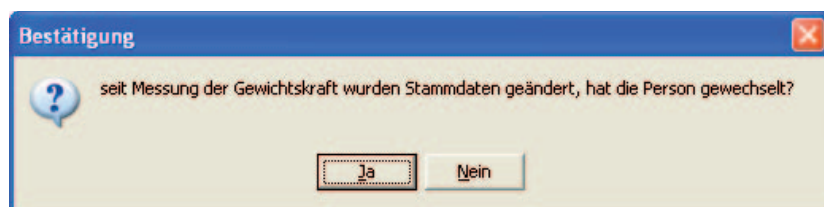
Open a different txt file

Open an additional txt file for comparison

Print out window contents

Return to main menu

## 5. ERROR MESSAGES



### After pressing "test"

- if there is no change in test person -> No
- if there is a change in test person -> Yes and then repeat "test" and enter test person data



### After pressing "measure"

You have carried out a new power/balance test without performing the force test.



### After pressing "save"

Enter the test person's personal data before saving.

# ENGLISH

BALANCE-X-SENSOR

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