🕮 User's guide

A4000 Download

Application:

- This is a simple program for transferring data from the Adash 4100/4200 instruments.
- Export measured data to file.
- View graphs with measured data.
- Print graphs with measured data.

Characteristics:

- Hardware requirements: Intel® Pentium® or compatible, CD ROM, 64 MB RAM, 2 MB hard disk space, SVGA or higher resolution monitor (800x600, 256 color)
- Microsoft® Windows® 95, 98, NT, 2000, XP

Ref: 25062008 KM

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Preface

This manual includes the user description of the A4000 Download program, which enables to transfer measured static and dynamic data from the memory of the Adash 4100/4200 instruments to PC. The manual includes in particular information on how to work with the A4000 Download program, on its graphic and text possibilities of measured data presentation and on a possible data export etc.

The program is intended for operating systems Windows 95/98/NT/2000.

This manual does not include information on the Adash 4100/4200 instruments, such as technical parameters, instructions manual etc. Such information exists in the user's manual of a particular instrument, for which refer to your dealer or directly to the manufacturer Adash CZ.

The A4100/4200 instruments can be divided, in respect of measured data storing into memory, in three groups (See User's Manual of the Instrument):

- Instruments without a memory. Such instruments do not offer in their main menu the F2 key and do not enable to store measured data into memory and to further process them in other programs.
- Instruments with a memory for off-route measurements storing (F2 – Memory). Such instruments enable to store measured data to their memory and to further process them by the Adash A4000 Download program or comfortably by the DDS2000 program.
- Instrument with a memory for route and off-route measurements storing (F2 – Route). Such instruments enable, if used with the DDS2000 program, to create routes and to process measured data using this program. Off-route measurements performed using this instrument can also be processed by the A4000 Download program.

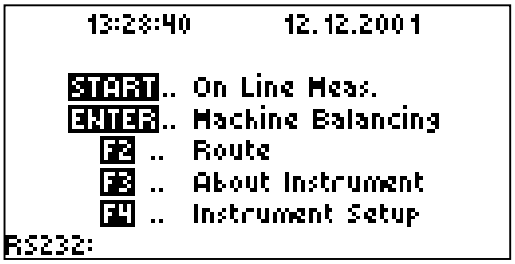

Fig. Main menu of the route memory instrument

Program Installation

Start **A4000.exe**, which is located in the **A4000 Download** directory on the installation CD-ROM. If your PC allows autorun from CD-ROM, you can start the program by selecting **A4000 Download Installation** from the menu that appears on the screen after inserting the installation CD-ROM.

Program Uninstallation

Uninstall the A4000 Download program from your PC in the following way:

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1) if you run the A4000 Download application, close it;
2) double click on **Add or remove programs** in **Control panels** (Control panels are located in the menu **Start,** folder **Setting**),
3) in the open window find and select (by clicking) the A4000 Download application,
4) click on **Change or remove –** the preparation of uninstallation is started,
5) after being asked whether to remove the selected application and all its components completely, click on **Yes** – the application will be uninstalled,
6) close the **Add or remove programs** window**.**

The above procedure exactly corresponds to the manner of uninstallation in the Windows 2000 operating system. The procedure in operating systems Windows NT/98/95 is similar; however, there are differences in the description of some keys or in the names of windows, or in the graphic display of information.

Another possible uninstallation of the A4000 Download program consists in the autorun of the A4000.exe installation program – see chapter ***Program Installation***. The installation program auto-detects the installed version and offers its uninstallation.

Prior to the Program Initialization

Prior to the transfer of measured data from the instrument using the A4000 Download program, it is necessary to connect the serial interface of the computer on which the program is running to the A4100/4200 instrument. To connect them, use the cable supplied with the instrument. Insert one connector of the connection cable to any serial port of the computer (for instance, COM1) and connect the other connector to the A4100/4200 instrument at the point marked RS-232.

CAUTION! Without a correct connection between the computer and the instrument, the A4000 Download program will not run correctly.

The user software starts a serial communication with the analyser only if the ***main menu*** is displayed on the screen. If the analyser is set in any other mode, any commucation attempts will fail.

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Program Control

Program Initialization

Start the A4000 Download program by unpacking the **Start** menu and by clicking on **A4000 Download**. The default location of this item is **Start / Programs / Adash / A4000 Download**, otherwise you will find it by specification you selected upon the program installation.

Description of the User Interface

After starting the program, the screen of the program user interface appears.

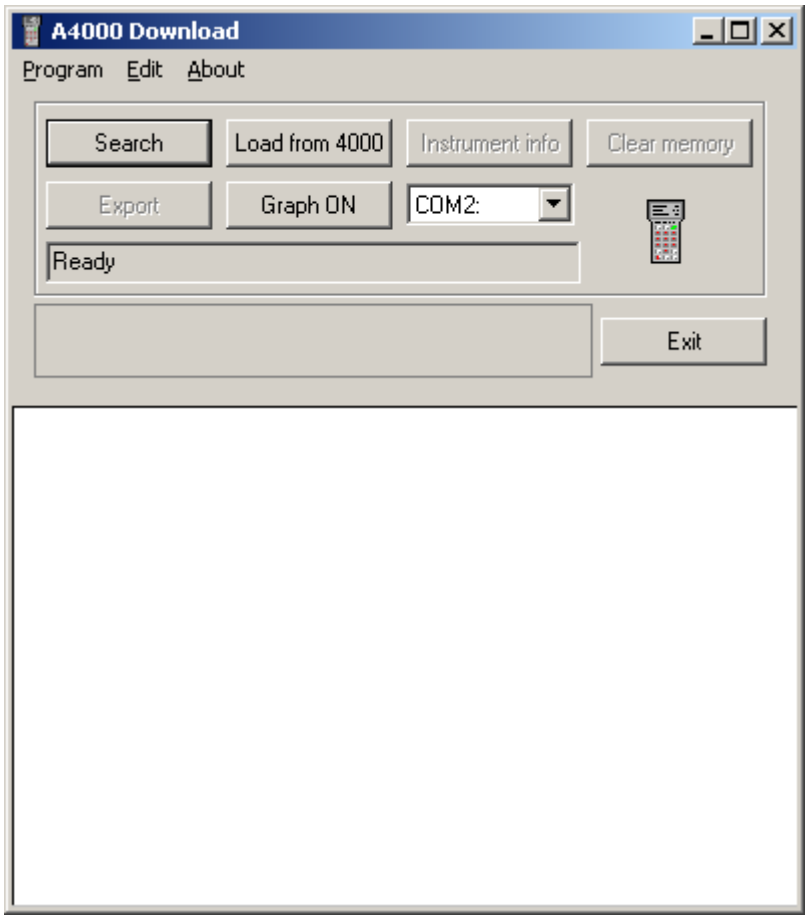

Fig. User interface of the A4000 Download program

The user interface consists of a menu, a functional keys section (upper part of the window) and a section for the display of information on the measured data (lower part of the window). A section for the graphic display of the measured data can be added as an option.

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Starting Communication with the Instrument

For communication between the instrument and the computer, the following conditions must be respected:

- the instrument and the computer are connected via a serial cable (see chapter Prior to the Program Initialization),
- the connected instrument is ON,
- the instrument waits in the ***main menu***.

CAUTION! Without fulfilling all the above conditions, the computer is not able to communicate with the instrument.

If the above conditions are respected, you can request, by selecting Search, the connected A4100/4200 instrument detection. The A4000 Download program ***automatically searches through all available serial ports*** and detects the connected instrument. If the instrument is found by the program, the program indicates the number of the serial port (see COM2: fig.) to which the instrument is connected in the upper part of the application window and **Connection found** message appears.

After the instrument is successfully found, the upper part of the application window will be as follows:

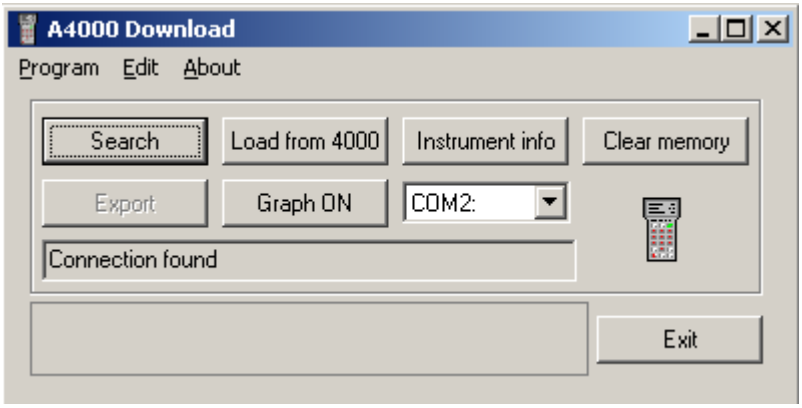

Fig. Connected instrument found by the program on COM2:

Data Loading from the Instrument

If the program detected the instrument (see chapter Starting Communication with the Instrument), data transfer can began. Start data loading from the instrument by clicking on Load from 4000. The course of the transfer is indicated via the increasing bar graph of transferred data (0 - 100%). After terminating the transfer, the list of transferred data appears in the bottom part of the window.

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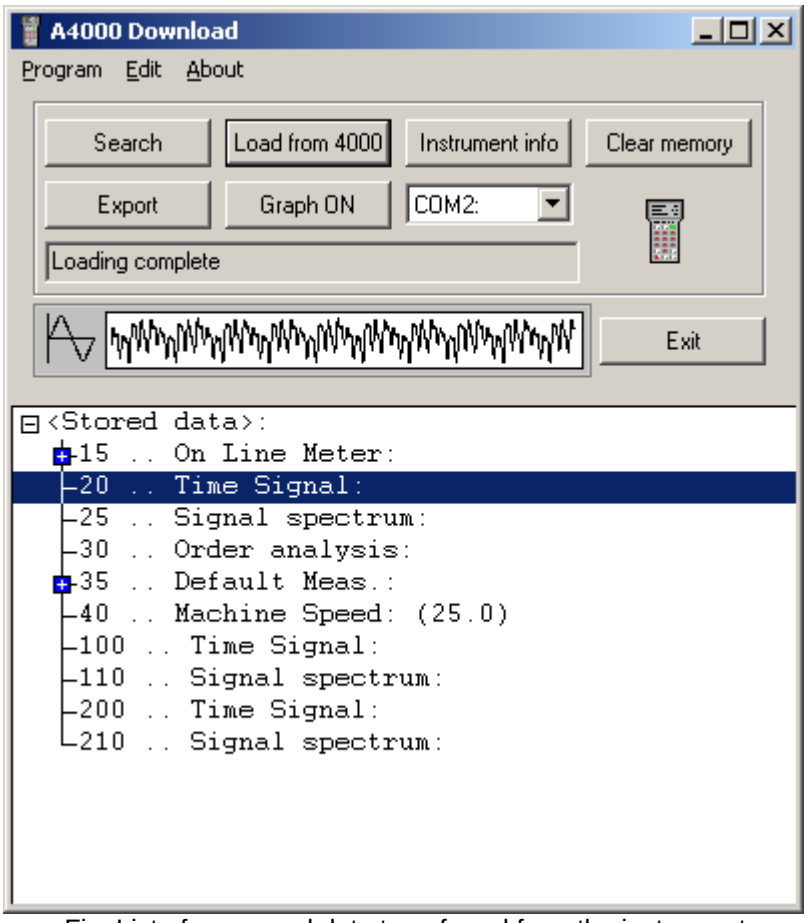

Fig. List of measured data transferred from the instrument

A view of the currently selected measured data is displayed above the list. If „+“ is in front of a list item, then you can unpack it by clicking on such item ("-" enables to pack the item).

The A4000 Download program is related to the configuration data of the instrument with which it was supplied. If you attempt to load measured data from another instrument, an error message will appear:

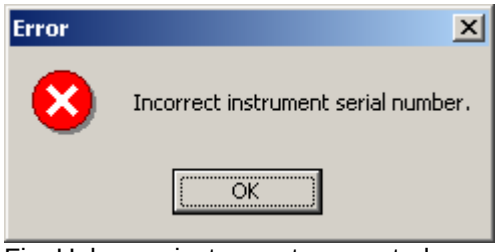

Fig. Unknown instrument connected

More Detailed Information on Individual Measurements

If you need more detailed information on individual measurements, select the relative measurement item in the list of measurements and right-click. An appropriate dialog box will appear for any type of measurement, displaying additional information.

For static data measurement the following information may be found:

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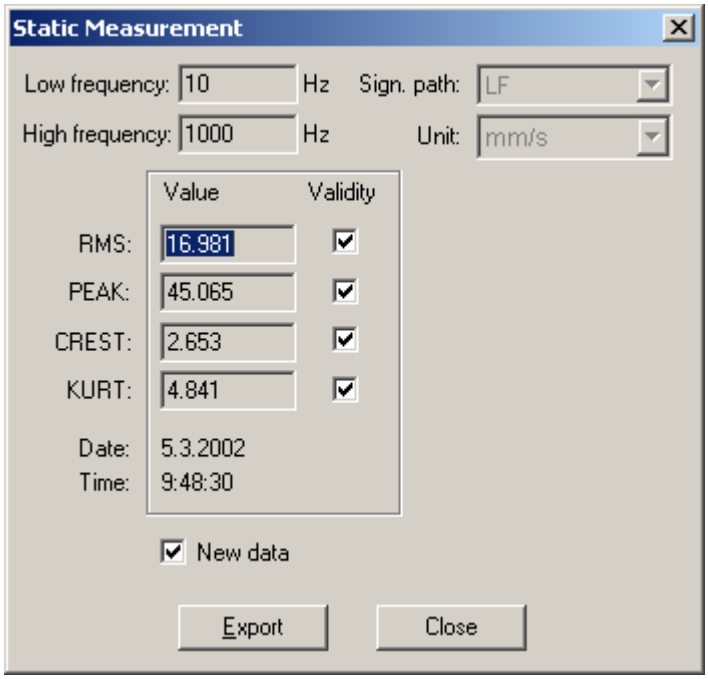

Fig. Information on static measurement

For dynamic values measurement (for instance, time signal):

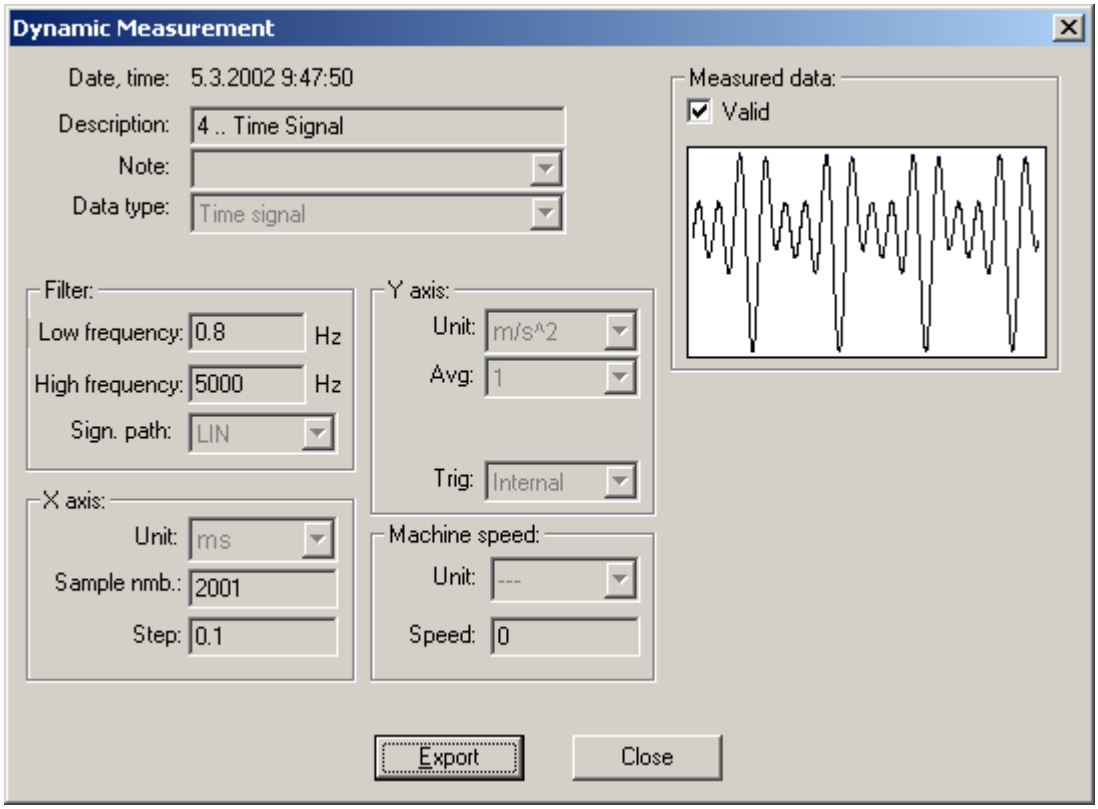

Fig. Information on time signal measurement

For other values measurement (for instance, Machine Speed):

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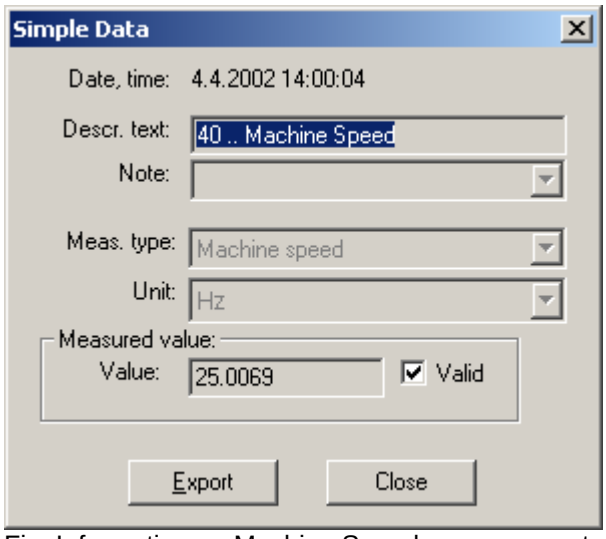

Fig. Information on Machine Speed measurement

Graphic Display of Measured Data

For the graphic display of measured data click on 

and select the appropriate measurement in the list of measurements.

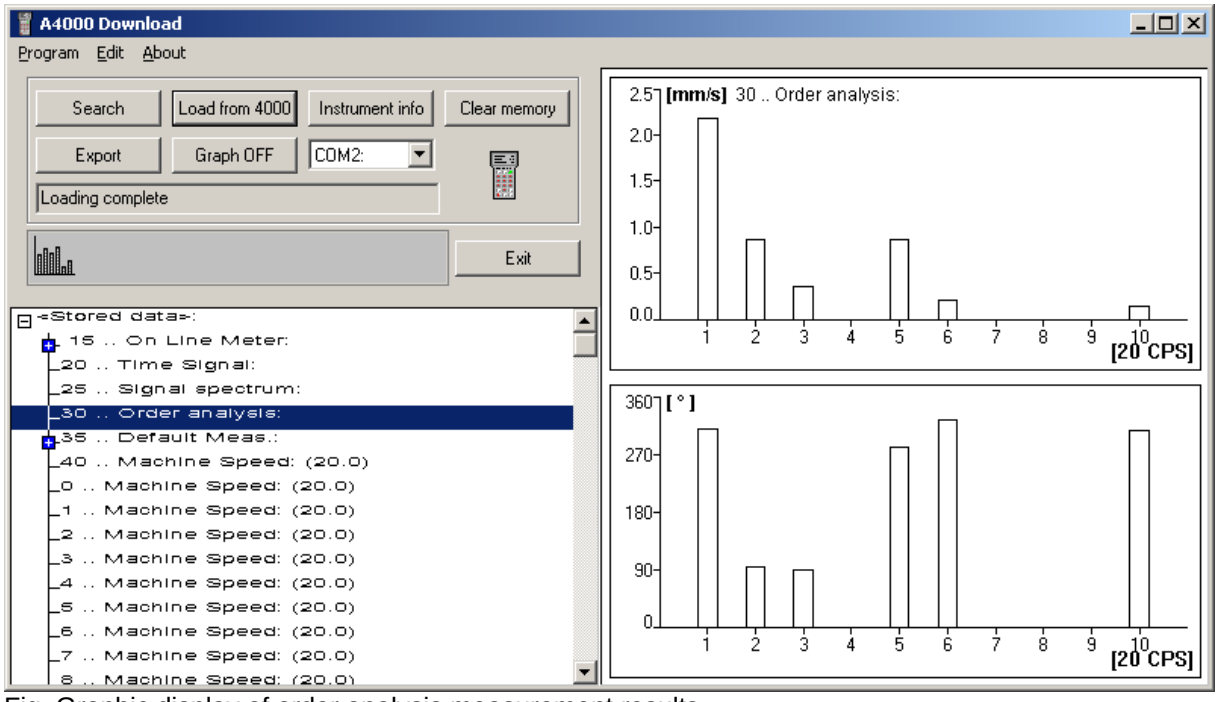

Fig. Graphic display of order analysis measurement results

If a measurement without the possibility of graph display is selected, a report on the relative measurement appears instead of the graph.

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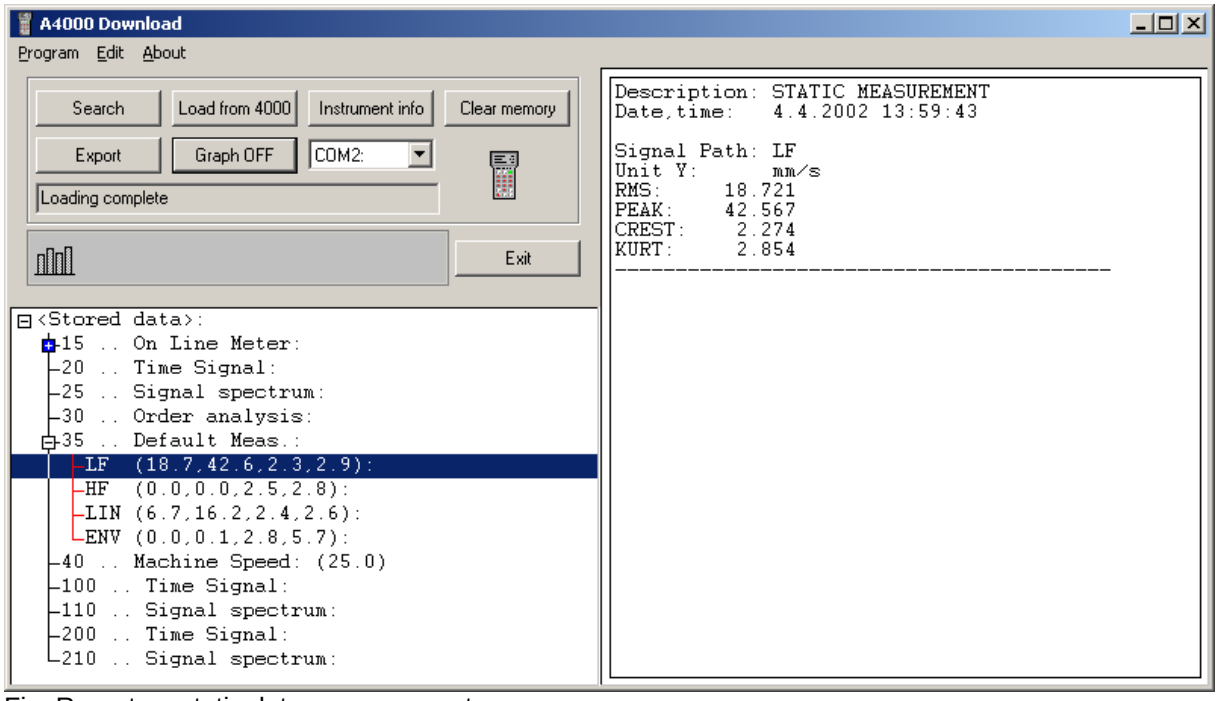

Fig. Report on static data measurement

All information displayed in the right part of the application window (graphs, reports) can be easily transferred as images to the clipboard and then pasted to any application. To transfer the graph to the clipboard, right-click over the graph, or press **Ctrl + Ins** from the keyboard, or select in the program menu **Edit / Copy graph to clipboard**.

Notice
You can display result of any measurement which your instrument saves into its data memory. This means you can display balancing report (from A4101 or A4201 instruments) or run-up (from A4201 instrument only).

Report of Balancing Data

For the display of balancing data click on 

and select the appropriate measurement in the list of measurements. A balancing report is displayed instead of a graph. This operation is very similar to Graphic Display of Measured Data – see previous chapter.

Click on 

to open this balancing report in Notepad program – see ***Export of Measured Data*** below.

Notice
Only balancing data saved into **instrument data memory** can be displayed via A4000 Download. Don't forget to copy balancing data from the instrument balancing memory into the instrument data memory first. In main instrument menu press Enter button and select Single plane balancing or Two

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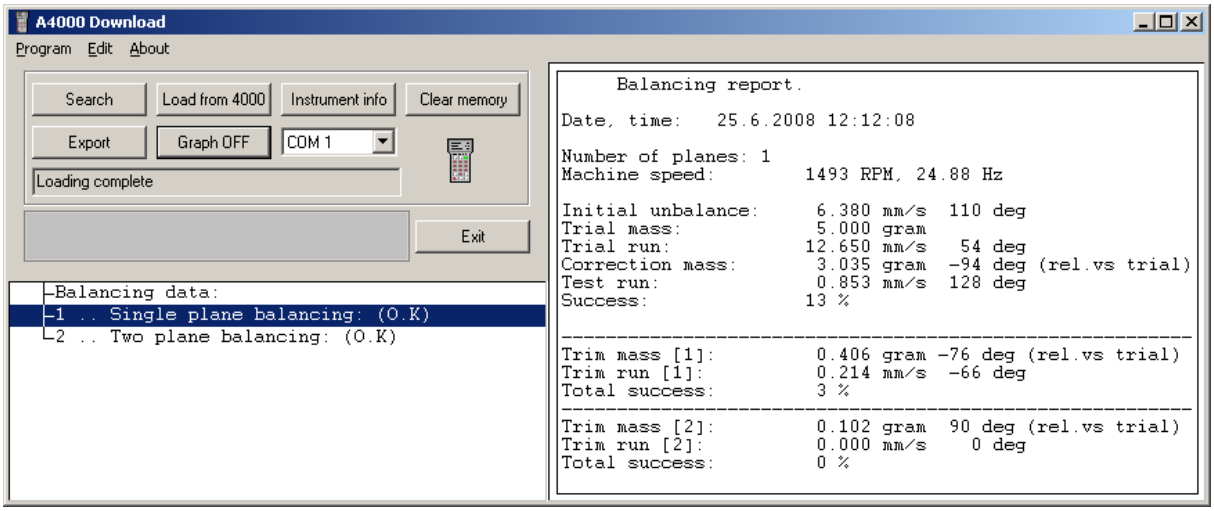
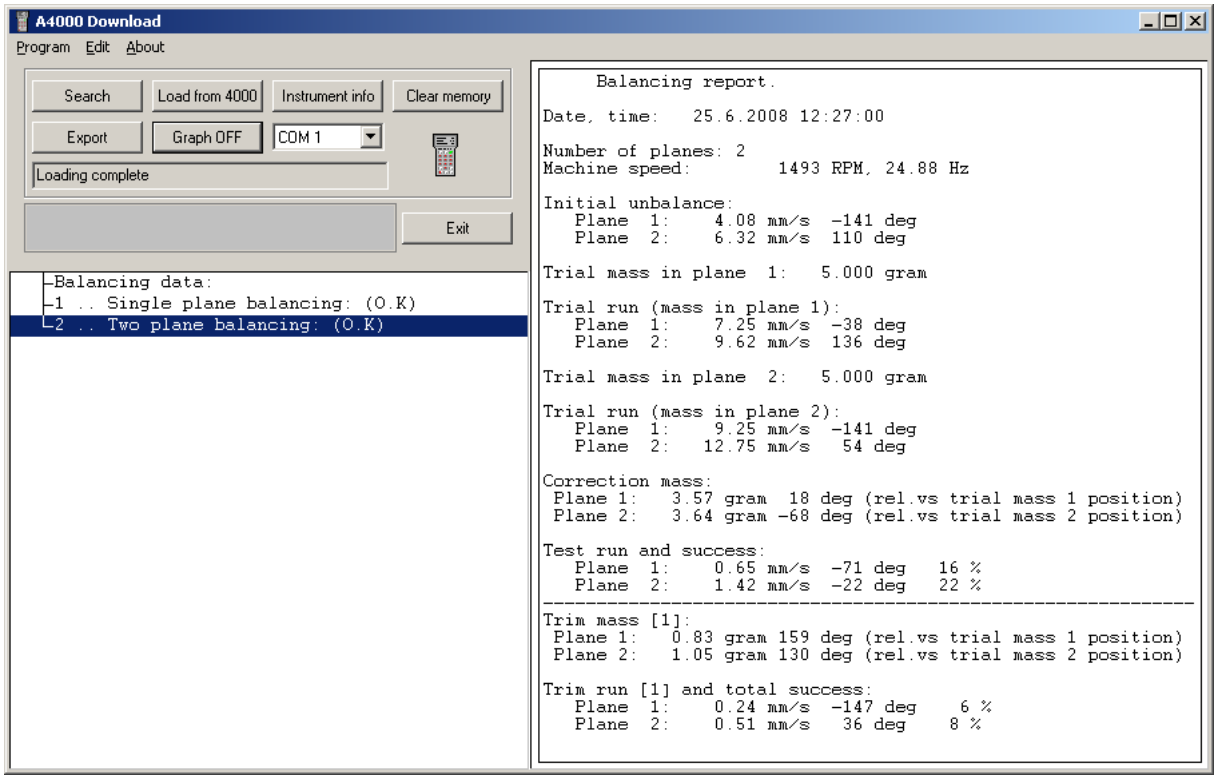
plane balancing item. Press Enter button to display appropriate balancing data from the instrument balancing memory. Press F2 button to save the data into the instrument data memory. Now you can display balancing report via A4000 Download.





Export of Measured Data

If the text output of measured data is required (graphic output is not sufficient – see previous chapter) and if the measured data are requested to be processed in other programs, or in case of measured data archiving, click on 

. You will find the key with all the other ones in the upper part of the main application window. Prior to the export (prior to activating the Export key), select desired item

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in the list of measurements. By clicking on the Export key, open a word processor (usually Notepad) and the selected measured data will appear in this program. Using **File / Save as …,** save the measured data file in the text format on your PC disk.

Export is also possible from the dialog box displaying detailed information on the measurement, again by clicking on the Export key, which is situated in the bottom part of this dialog box. In this case, data of a single measurement are exported for which the dialog box with detailed information is currently opened.

The measured data export file has the following structure (an example for amplitude spectrum):

```
Description:      25 .. Signal spectrum
Meas type:        Amplitude Spectrum
Date,time:        4.4.2002 13:56:19
Lines:            401
Signal Path:      LIN
Unit X:           Hz
Step X:            40.000
M. speed [CPS]:     0.000

Data:
Freq.       Ampl.
[Hz]        [m/s^2]
   0.000      0.000
  40.000      0.000
  80.000      0.000
 120.000      1.279
...

 400.000      0.025
 440.000      0.686
 480.000      1.245
 520.0        0.559...
```

Information on the Instrument

To obtain information on the instrument, use Instrument info. After clicking on this key, you can obtain the following information on the currently connected instrument:

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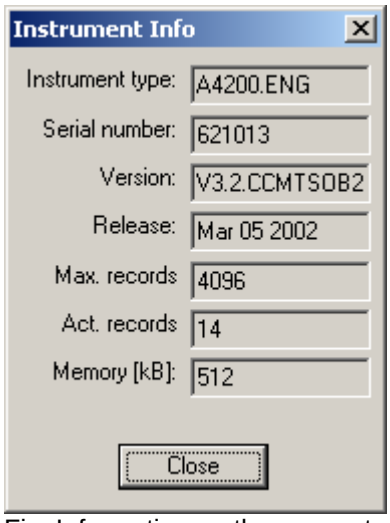

Fig. Information on the connected instrument

Measured Data Memory Clearing

To clear measured data from the instrument memory, use Clear memory. Prior to clearing data from the instrument memory, the user is prompted to confirm this step.
CAUTION! This operation is irreversible.

User Notes

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