



User's Manual



A4000BDL

Application:

- ☞ A simple program enabling transmission of route measurement files from the DDS 2000 program to the Adash 4100/4200 instruments.
- ☞ A simple program enabling transmission of measured data from the Adash 4100/4200 instruments to a file for further use in the DDS 2000 program.

Characteristics:

- ☞ Hardware requirements: Intel® Pentium® or compatible, CD ROM, 64 MB RAM, 1 MB free HDD space, SVGA or a higher resolution monitor (min. 800x600, 256 colours)
- ☞ The program is intended for the Microsoft® Windows® 95, 98, NT, 2000, XP operating programs.

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Preface

The A4000BDL program brings new possibilities of measured data processing and working with the empty route structure. It is not necessary any more to physically connect the DDS2000 program with the A4100 (A4200) instruments. The DDS2000 program can export any route into a file and the file can be sent by e-mail to the place of measurement at any distance. The user that performs measurements uses the A4000BDL program and downloads the route file in the instrument. Once measurements are completed, the user transmits the measured data to the PC by means of the A4000BDL program and saves them in a file. The file is then sent back to the site where the DDS2000 program is installed and the data file is imported (downloaded) to the DDS2000 database. The A4000BDL program thus enables to separate the site where the DDS2000 database is installed from measuring instruments. The use of this program is advisable, for instance, in assistance organisations where there are several measuring instruments. Their users can send currently measured data do the central database. The A4000BDL program enables a remote collection of measured data.

This manual does not include information on the Adash 4100/4200 instruments, such as technical parameters, instructions manual etc. For such information see the user's manual of a particular instrument.

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 the F2 key in their main menu 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 save them in a file on PC and to import them to the DDS2000 program using the A4000BDL program.
- Instruments with a memory for route and off-route measurements storing (F2 – Route). Such instruments enable, if used with the A4000BDL program, to import routes and to export data into a file.

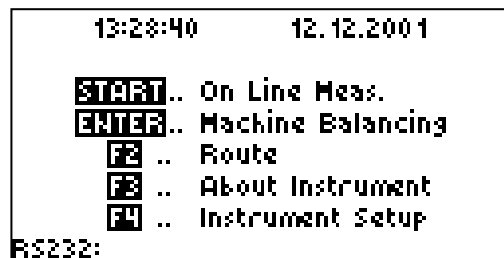


Fig. Main menu of the instrument with a route memory

Program Installation

If your PC allows auto run from the CD-ROM drive (the viewer starts automatically from the CD-ROM after it is inserted), you can launch the installation from the menu that appears on the monitor screen after inserting the installation CD-ROM into the drive. Click on **Software installation**, in the next bookmark called **Product installation** click on **A4000BDL installation**. Complete the installation following instructions of the installation program.

If the installation menu does not appear automatically after inserting the installation CD-ROM into the drive, start the **start.exe** file, which is in the main directory on the installation CD-ROM (for instance, by clicking on This Computer and then on the CD icon where you find the start.exe file.).

Installation of the HASP Key

The A4000BDL program is protected against unauthorised use by the HASP key. To be able to use the A4000BDL program, first install the key on your PC. Proceed according to the following instructions:

- Connect the HASP key, which is part of the delivery, to the parallel port (a wide connector often used to connect printers) on your computer.
- In the installation CD-ROM menu click on **Software of third parties**, in the next bookmark click on **Installation of HASP driver**.
- The installation of the HASP key driver starts; once it is completed successfully, a message appears: **This operation was completed successfully**. ATTENTION: this operation may take several minutes!

Program Uninstallation

Uninstall the A4000BDL program from your PC in the following way:

- 1) If you run the A4000BDL application, close it;
- 2) Double click on **Add or remove programs** in **Control panels** (Control panels are located in the **Start** menu, folder **Setting**);
- 3) In the open window find and select (by clicking) the A4000 application;
- 4) Click on **Change or remove** – uninstallation is launched;
- 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-described procedure exactly corresponds to the manner of uninstallation in the Windows 2000 operating system. The procedure in the Windows NT/98/95 operating systems 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.

The A4000BDL program can also be uninstalled by re-launching the installation program. The installation program auto-detects the installed version and offers its uninstallation.

Uninstallation of the HASP Key

The uninstallation of the HASP key is very similar to its installation. Please, proceed according to the following instructions:

- In the installation CD-ROM menu click on **Software of third parties**, in the next bookmark click on **Uninstallation of HASP driver**.
- The uninstallation of the HASP driver starts; once it is completed successfully, a message appears: **This operation was completed successfully**. ATTENTION: this operation may take several minutes!

Prior to the Program Initialisation

Prior to starting communication of the A4000BDL program with the instrument, 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 A4000BDL program will not run correctly.

The user software establishes serial communication with the analyser only if the **main menu** is present on the display of the instrument. If the analyser is set in any other mode, any attempt to establish communication will fail.

Program Control

Program Initialisation

Launch the A4000BDL program by unpacking the **Start** menu and by clicking on **A4000BDL**. The default location of this item is **Start/Programs/Adash/A4000BDL**; otherwise you find it by the specification you selected upon the program installation.

Description of the User Interface

After launching the program, the program user interface window appears.



Fig. User interface of the A4000BDL program

The user interface is made up three communication buttons, a field for serial port selection and information fields for data viewing.

Starting Communication with the Instrument

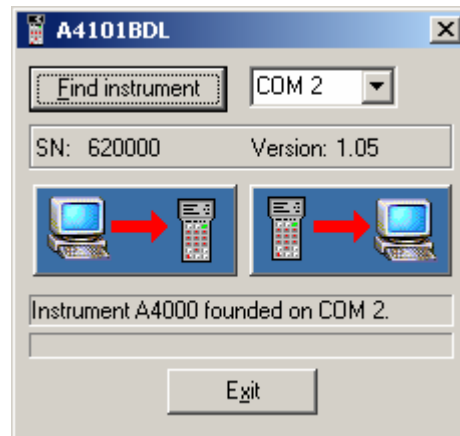
For communication between the instrument and the computer, the following conditions must be respected:

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

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

If these conditions are respected, click on **Search instrument**. If **AUTO** is set in the serial port selection field, the A4000BDL program **automatically searches through all available serial ports** and detects the connected instrument. If you select a particular port in the serial port selection field, the program only detects the instrument on that particular port.

If the program finds the instrument, it displays information on the serial port where the instrument is found and enables buttons for data transmission between the PC and the instrument:



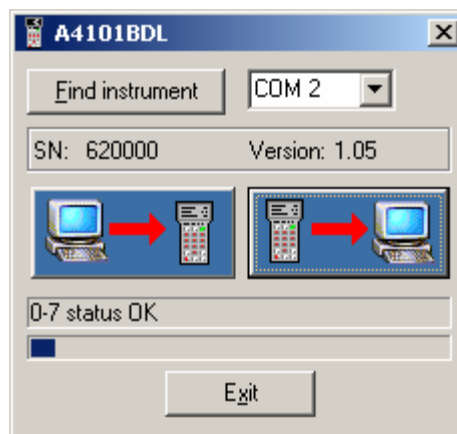
Route Loading from the File to the Instrument

Click on the button representing data transmission from the PC to the instrument. In the next dialogue box select the route file (extension .a4r – this file is created by the DDS 2000 program). By confirming your selection in the dialogue box, the route transmission to the instrument starts.

The route transmission to the instrument is completed once the following information is displayed:
The xxx.a4r files was successfully loaded.

Data Downloading from the Instrument to the File

Click on the button representing data transmission from the PC to the instrument. In the next dialogue box select the location and name of the file to which data will be stored (file extension .a4r). By inserting the information and confirming in the dialogue box, data transmission from the instrument to the file starts.



CAUTION – This operation may take several minutes. Information on the progress of the transmission and its status is displayed in the bottom part of the program window.

Data transmission is completed once the following information is displayed:

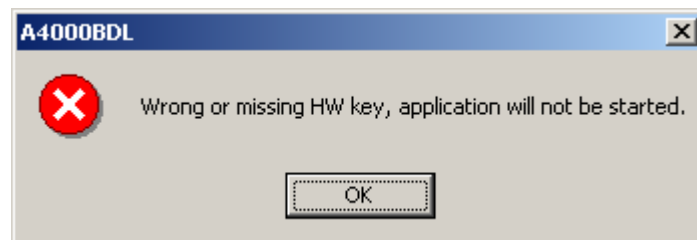
The xxx.a4x file was successfully stored.

Finishing Work in the Program

To finish work in the program, click on button **Exit**.

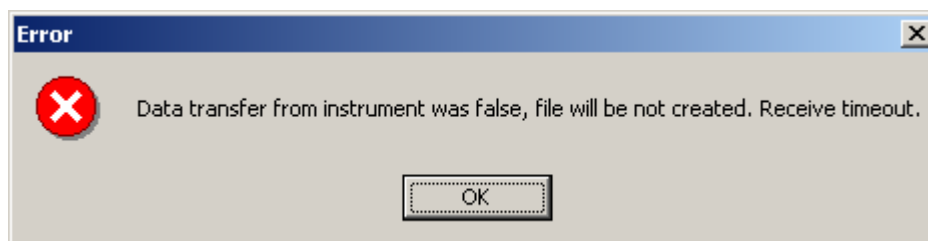
Error Conditions of the Program

If the HASP key is not connected or is connected incorrectly, the program displays the following warning:



Make sure that the correct HASP key is connected to the PC parallel port, or that the HASP key driver is installed correctly (see chapter **HASP Key Installation**).

If data downloading from the instrument to the file fails, the program displays the following warning:



This error may be caused by the failure of communication with the instrument, e.g. by communication cable interruption or if the instrument was off during communication or was not in the main menu (the instrument communicates on serial interface only if it is in the main menu).