



User's guide



A3600 Download

Application :

- ☞ This is a simple program for transferring data from on-line monitoring system A3600.
- ☞ Export measured static 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 colour)
- ☞ Microsoft® Windows® 95, 98, NT, 2000, XP

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Preface

This manual includes the user description of the A3600 Download program, which enables the download measured static data from the Compact Flash memory card to the user's PC and further process such data. The Compact Flash card is used as a memory medium in the **Adash 3600-MEM** module of the on-line monitoring system Adash 3600. The manual includes, in particular, information on to how to work with the A3600 Download program, on its graphic possibilities of measured data presentation, on their possible export etc.

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

This manual does not include information on the on-line monitoring system Adash 3600, such as technical parameters, instructions how to assemble and connect the system from individual modules, system installation etc. Such information exists in user manuals of individual modules of the Adash 3600 system, for which refer to your dealer or directly to the manufacturer Adash CZ.

Program Installation

Start **A3600Download.exe**, which is located in the **A3600 Download** directory on the installation CD-ROM. If your PC allows autorun from CD-ROM, you can start the program by selecting **A3600 Download Installation** from the menu that appears on the screen after inserting the installation CD-ROM.

Program Uninstallation

Uninstall the A3600 Download program from your PC in the following way:

- 1) if you run the A3600 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 A3600 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 **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 the 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 A3600 Download program consists in the autorun of the A3600Download.exe installation program – see chapter **Program Installation**. The installation program auto-detects the installed version and offers its uninstallation.

Measured Data Archiving

If the Adash 3600 monitoring system is equipped with the Adash 3600-MEM module, measured data are continuously archived to the removable Compact Flash card with a capacity ranging from 16 MB to 128 MB.

Measured data are archived in the **DATA3600.MEM** file, which is stored as the only file in the root directory of the Flash card and occupies all the free space after its formatting.

If you want to back up measured data in the binary form, as they are stored on the Flash card, copy the DATA3600.MEM file from the Flash card to your PC to the data archiving directory. Then zip it and add to the archive. Always **compress** the measured data archive since the measured data file on the Flash card occupies all its free space regardless of the quantity of stored data. Since the end of the file is made by empty records for measured data, the level of compression of the file is usually considerably high.

Always compress the archive of measured data in the binary form on your disk!

Program Control

Program Initialisation

Start the A3600 Download program by unpacking the **Start** menu and by clicking on **A3600 Download**. The default location of this item is **Start / Programs / Adash / A3600 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 user interface program appears.

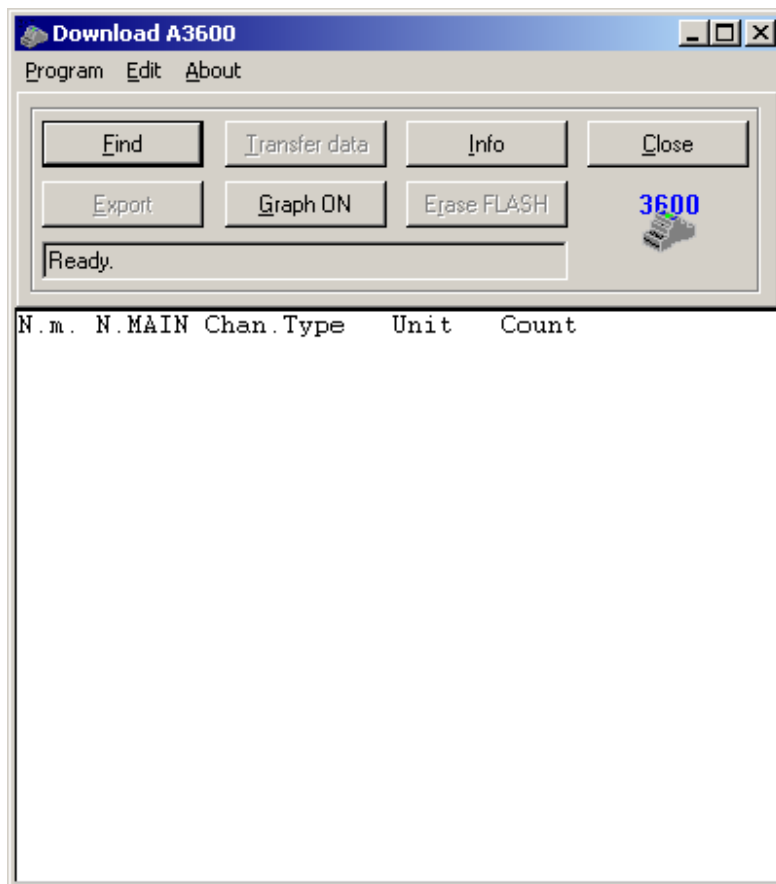


Fig. User interface of A3600 Download

The user interface consists of a menu, function keys and status line 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.

Data Source Selection

Prior to downloading the measured data file and processing such data, the data source to be used must be selected. There are two possible data sources:

- Flash card, removed from the Adash 3600-MEM module
- measured data file on hard disk.

To select the data source, click on . The following dialogue box appears:

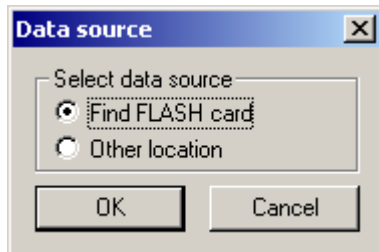


Fig. Data source selection

If the Flash card is to be used as the data source, select **Find FLASH card**; if a file on hard disk is to be used as the data source, select **Other location**.

Data Source – Flash Card

If you want to use the Flash card as the data source, you must connect a device called **Flash card reader** to your PC. This device enables data transfer between PC and the Flash card.

Warning: Prior to the first use of the Flash card reader, connect it to your PC and install drivers. For its connection and installation of the driver to PC (usually on a CD supplied with the device) follow instructions for a particular connected type of device. After a correct installation you will see the reader in your PC as another (removable) disk, or as two disks – see chapter **Compact Flash Card Formatting**.

Make sure that your Flash card reader is connected to PC (usually it is connected via the USB interface) and that the Flash card with measured data is inserted in the reader.

Now click on  and in the dialogue box **Data source** select **Find Flash card**.

If an error occurs during the Flash card search, an error message appears in the status line under the control keys. In such a case check whether:

- the Flash card reader is shown as a PC disk
- the Flash card with the DATA3600.MEM file is inserted in the reader – see chapter **Measured Data Archiving**.

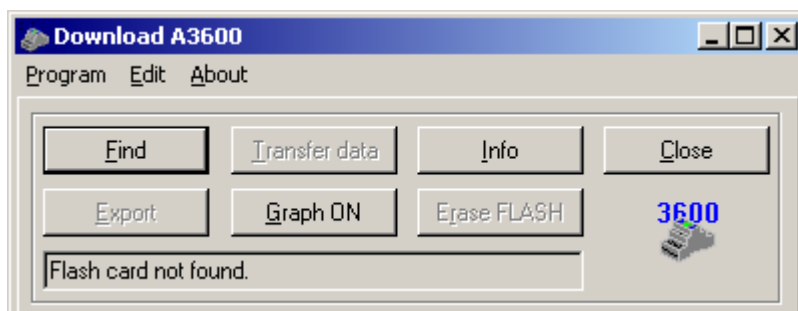


Fig. Error in the Flash card search

The program automatically detects the reader installation, verifies the Flash card presence and checks the name of the stored data file.

After a successful detection of the Flash card, keys , will be activated.
The user interface will be as follows:

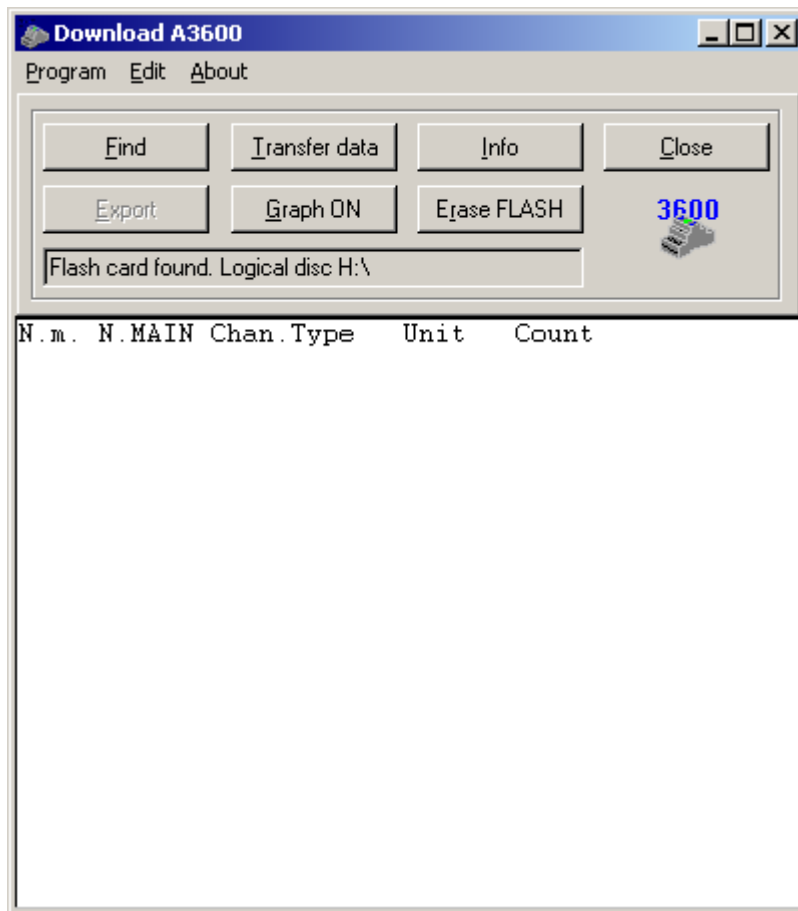


Fig. Flash card with measured data found

Data Source – File on Hard Disk

If you want to use a file on hard disk as the measured data source (this file may be created by copying the data file from the Flash card, by backing up, etc.), click on .
In the dialogue box **Data source** select **Other location**. A standard dialogue box appears for opening the file, where you select the measured data file and confirm by clicking on **Open**.

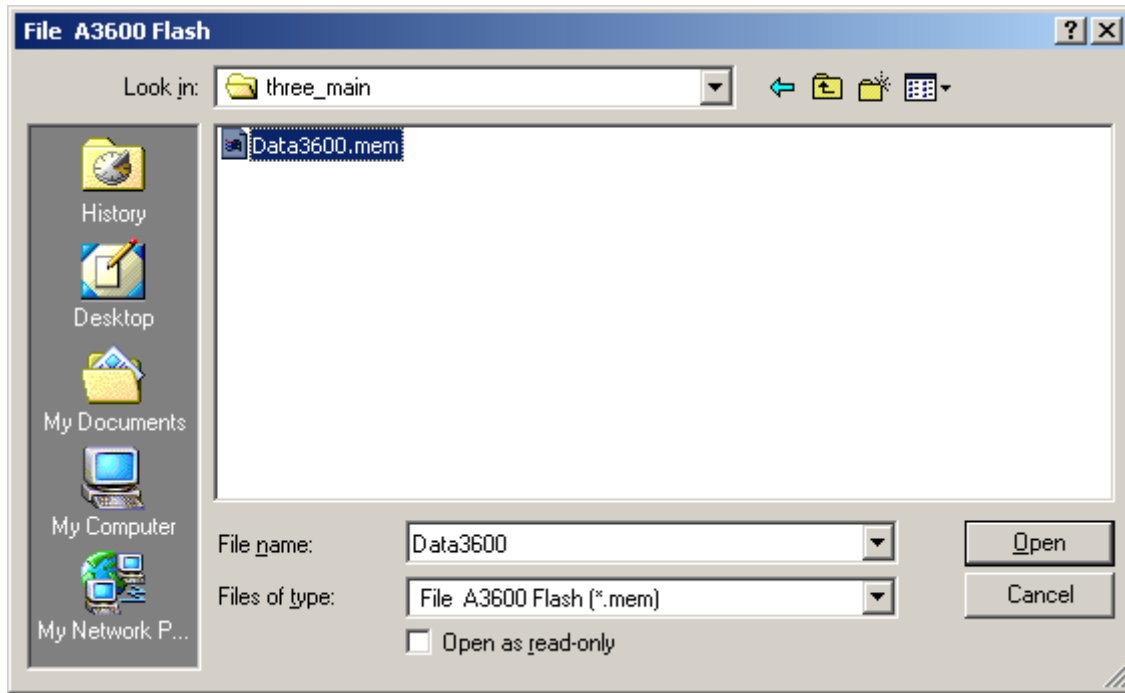


Fig. Selection of measured data file

After a successful verification of existence of the data file, the **Transfer data** key will be activated. The user interface will be as follows:

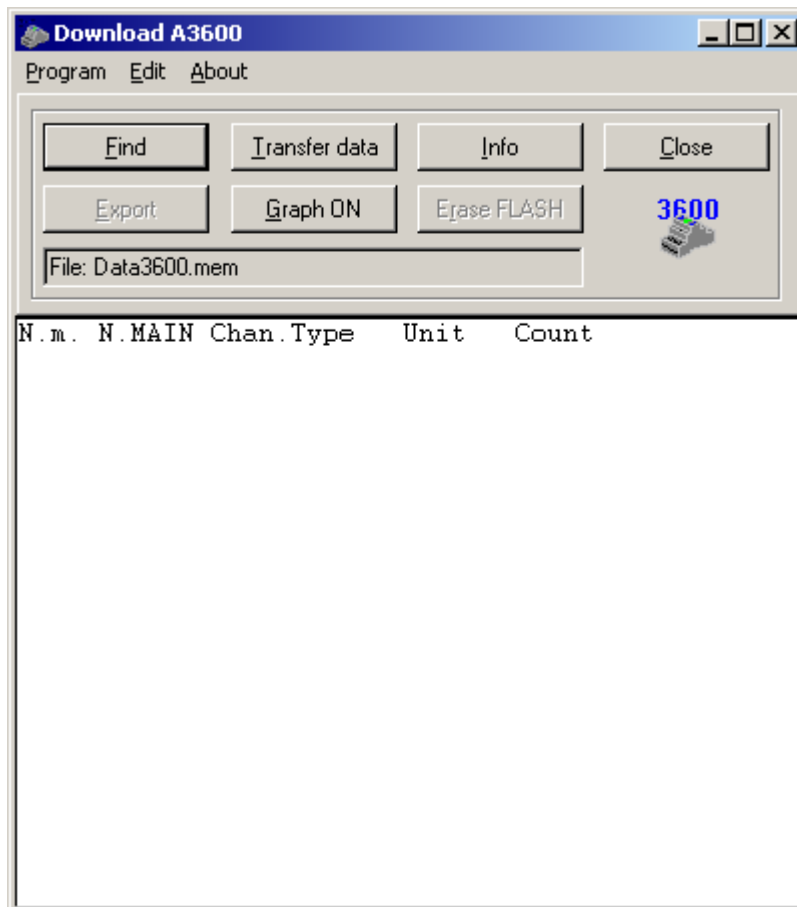


Fig. Selected file with measured data found on hard disk

Downloading Data from the Source

If the key is active (text is not displayed greyed out), you can transfer the measured data from the selected source.

Data transfer is activated by clicking on .

The program verifies the structure of stored data. If the file had not been created by the Adash 3600-MEM module or if the file is damaged, an error message appears in the status line under the keys.

The time of data transfer from the data source depends on the number of stored measurements and also on the memory medium capacity (also Compact Flash of 128MB may be used, which can store approximately 4,000,000 measured values of static data).

After terminating data transfer, data on the transferred measurements appear in the lower part of the user interface. Each data line represents a certain type of measurement on a particular measurement channel, for instance:

```
N.m.  N.MAIN Chan.Type  Unit  Count
  1.  123456  1.  LF      [mm/s] 34
```

Fig. Transferred data line

N. m.	consecutive number of measurement type in the list of the A3600 Download program
N. MAIN	serial No. of the Adash 3600-MAIN module (necessary information if the Flash card is used for data collection in more Adash 3600 systems)
Chan.	number of the measurement channel within a particular Adash 3600 system (values 1 - 64)
Type	type of measurement (LF, HF, LIN, ENV, temperature)
Unit	Unit for a particular type of measurement
Count	Read number of measurements of a particular type on the measurement channel.

The user interface after data transfer may be, for instance, as follows (the number of read data records is shown in the status line under the keys):

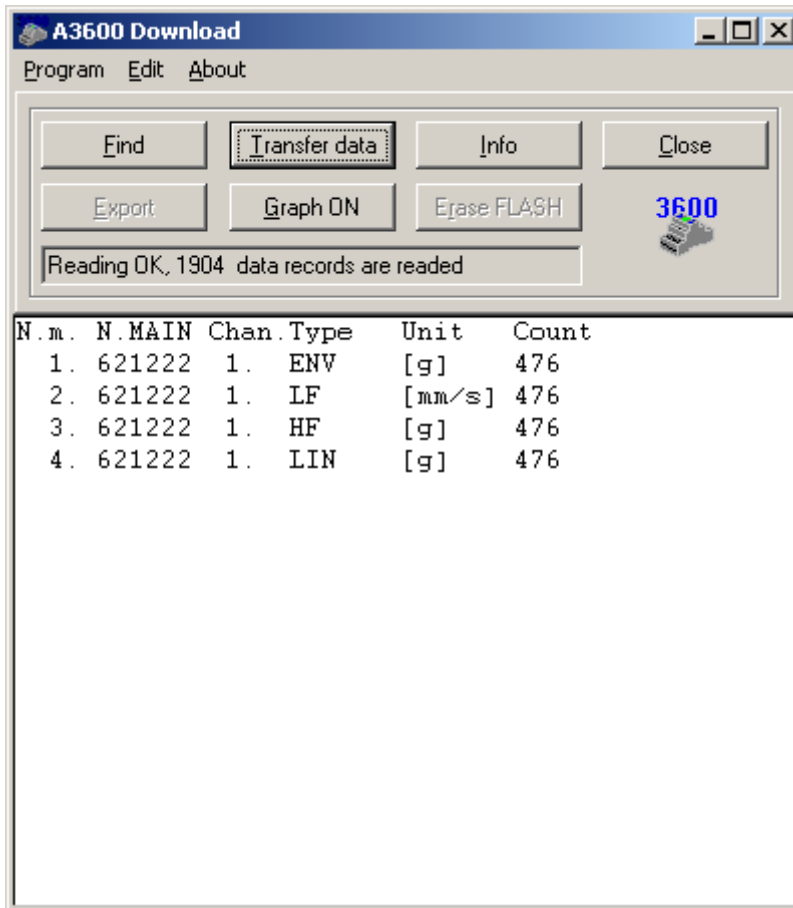


Fig. Information on transferred data

If an error occurs during reading, an error message appears in the status line under the keys. They are mostly the following errors:

- No transferred data are present in the file (reading from the erased Flash card).
- The file head or structure is wrong (you are trying to download a file not created by the Adash 3600-MEM module, or the file is defective).

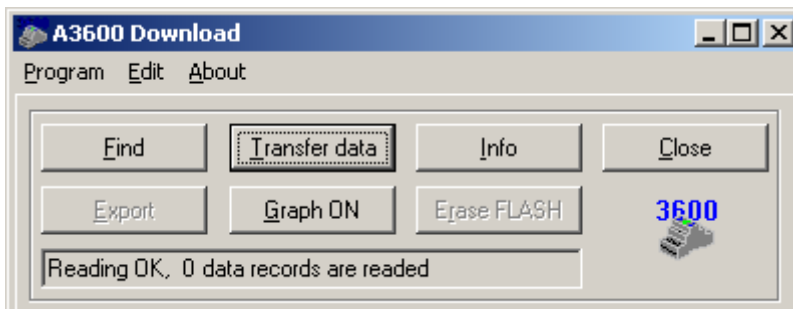


Fig. Erased card, no measured data exist in the file

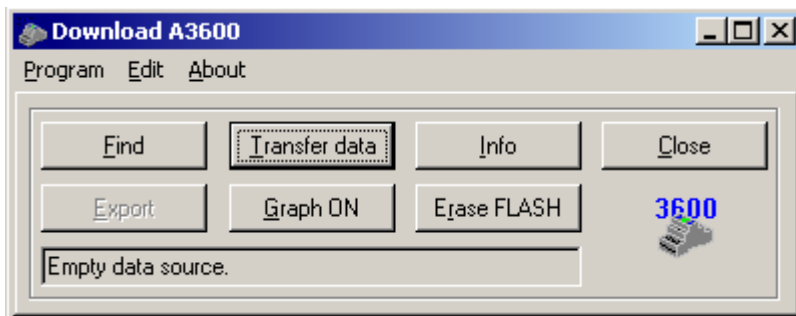


Fig. Newly formatted card, not used in the Adash 3600-MEM module yet

If problems occur with data reading, the Flash card should be re-formatted and checked for any defective blocks – see chapter **Compact Flash Card Erasing**.

Graphic Display of Measured Data

For the graphic display of measured data, first click on **Graph ON**. A selection screen for the graphic display of measured data appears. Now select in the list of the downloaded types of measurements the requested type and the relative measured data will appear.

The measured values are indicated in black in the graph. If the Alert limit and/or the Danger limit are defined for the selected measurement, such limits appear in colour in the graph. The Alert limit appears in yellow, the Danger limit in red.

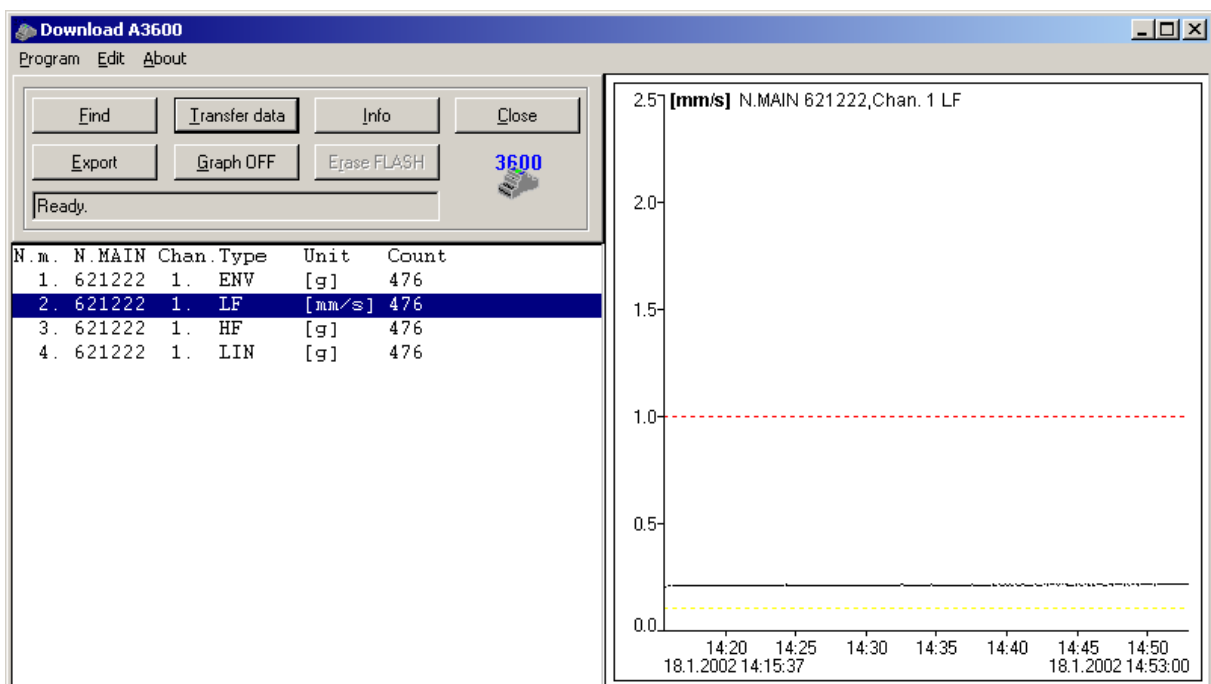


Fig. Graphic display of measured data

All information displayed in the right section of the window (graphs) 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**.

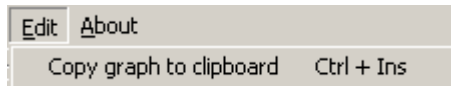



Fig. Copying of the displayed graph to the clipboard

Export of Measured Data

If a 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, use the Export function.

Activate this function by clicking on .

The key can be used after selecting any type of measurement in the list of the transferred measurements. After activating the function, a standard dialogue box appears which enables to save the file. Select the location of the exported text data file, its name and confirm by **Save**.

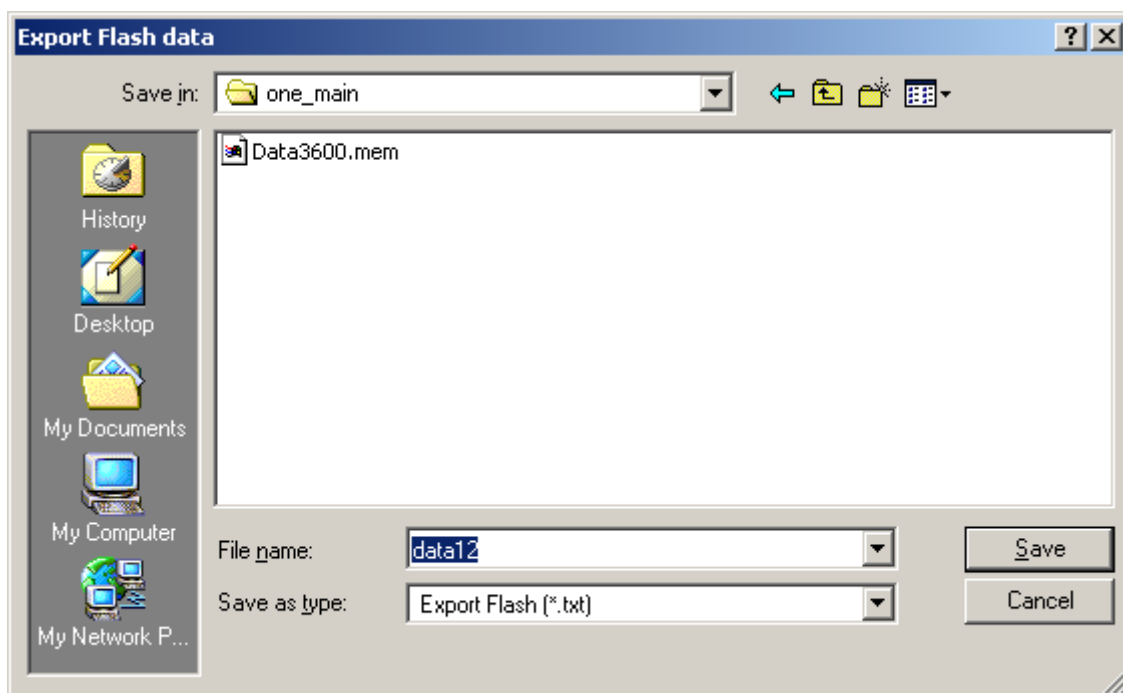


Fig. Data export to DATA 12.TXT

- If a **file on hard disk** is selected as the data source (see chapter **Data Source Selection**), then the path of its location is implicitly offered when saving the exported data, which **usually satisfies** and it is sufficient to enter the name of the exported data file.
- If the **Flash card** is selected as the data source, the current directory will be offered as the path for exported data file saving. In this case, **first select the path** for saving and then enter the name of the exported data file.

Measurement information will be saved in the selected file in the following format:

Measured Data Export - A3600 System

A3600 MAIN: 621222
 Channel no.: 1
 Type of measurement: LF
 Unit: [mm/s]

Date	Time	Value	Alert	Danger	Description
18.1.2002	14:15:37	0.208	0.100	1.000	Alert
18.1.2002	14:15:42	0.204	0.100	1.000	Alert
18.1.2002	14:15:46	0.204	0.100	1.000	Alert
18.1.2002	14:15:51	0.204	0.100	1.000	Alert

Data and time measurement formats exactly correspond to the local user setting of the system. The individual columns of the table are divided by tab.

Value effective measured value
 Alert limit value for Alert status signalisation, set for the particular measurement
 Danger limit value for Danger status signalisation, set for the particular measurement
 Description warning whether the measured valued exceeded the Alert or Danger limits.

Compact Flash Card Erasing

After downloading and processing (or archiving) measured data, it is advisable to erase stored data from the Flash card prior to re-using the card in Adash 3600-MEM memory module.

CAUTION! The operation of Flash card erasing is irreversible.

To remove the stored data from the Flash card, use **Erase FLASH**. After clicking on this key, the following dialogue box appears:



Fig. Erasing/Formatting selection

Select **Format Flash card** if the Flash card is used for the first time or if a data file on the Flash card was damaged. This selection will ensure not only the formatting of the memory medium but will also create an empty data file.

By selecting **Erase stored data**, you erase only such parts in the file where data are stored, which will be replaced by empty records. This manner of data erasing is less harmful to the memory medium.

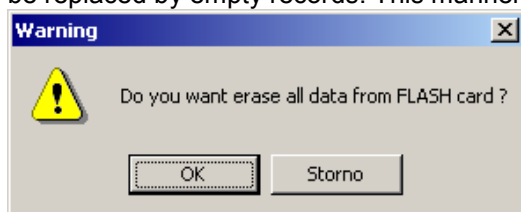


Fig. Warning prior to the erasing of data from the Flash card

CAUTION! Do not remove the Flash card from the reader until it is safe to do so. Use the Windows “eject” function to be safe.

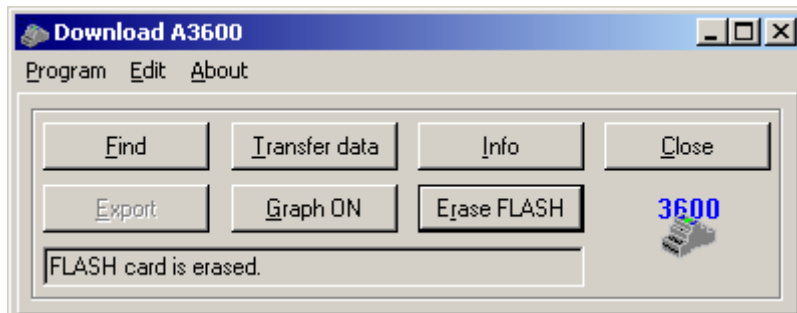


Fig. Card successfully erased.

Compact Flash Card Formatting

The procedures as indicated below correspond to the manner of operation in the Windows ME operating system. The procedure in operating systems Windows NT/2000/98/95 will be similar; however, there are likely to be differences in the description of some keys or names of windows, or in the graphic display of information.

The card is formatted prior to its first use in the Adash 3600-MEM module and if there are problems with measured data downloading from the Flash card to PC, or if the Adash 3600-MEM module signals an error of reading from the Flash card or an error of writing on the Flash card.

CAUTION! When formatting, check the card for any defective blocks (sectors). Do not remove the Flash card from the reader until it is safe to do so. Use the Windows “eject” function to be safe.

1. The Flash card must be formatted prior to its first use in the Adash 3600-MEM module.
2. Flash card that demonstrates one or more defective sectors after being formatted, **cannot be further used in the Adash 3600-MEM module.**

Primary Formatting (System)

After installing the reader, check whether your PC shows the reader as a removable disk (or two disks). The figure shows an example when the reader is indicated as removable disks G: (socket for Smart Media) and H: (socket for Compact Flash).

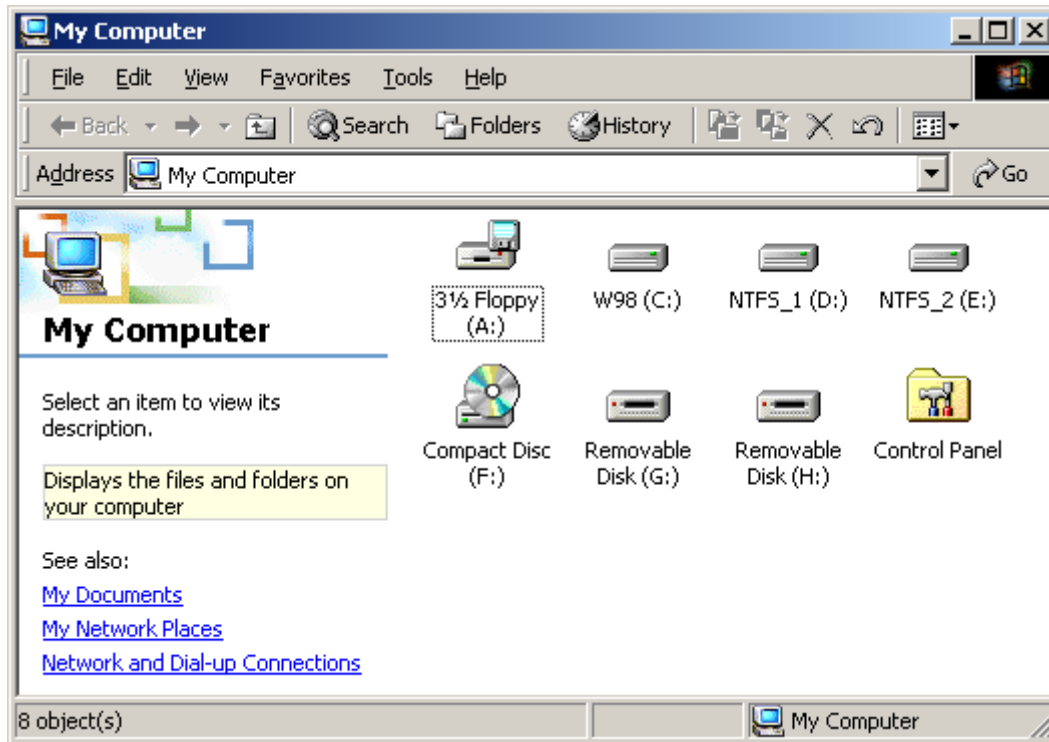


Fig. Installed flash card reader shown as removable disk H:

In case of a newly purchased Flash card, first check with the manufacturer whether the card is formatted. Left-click on the icon of the Flash card removable disk (see fig. above disk H:) and the list of files on the Flash card must appear, in case of a clean Flash card an empty list appears. Such Flash card can be used in the Adash 3600-MEM module after re-formatting – see below. If, instead of the list, an error message appears, the Flash card is not formatted and it must be formatted in the following way:

Right-click on the icon of the Flash card disk (see fig. above disk H:) and select **Format** from the displayed menu, in the dialogue box select **Type of formatting Complete** and enter **ADASH_3600** at volume label. By pressing Start, run the primary formatting.

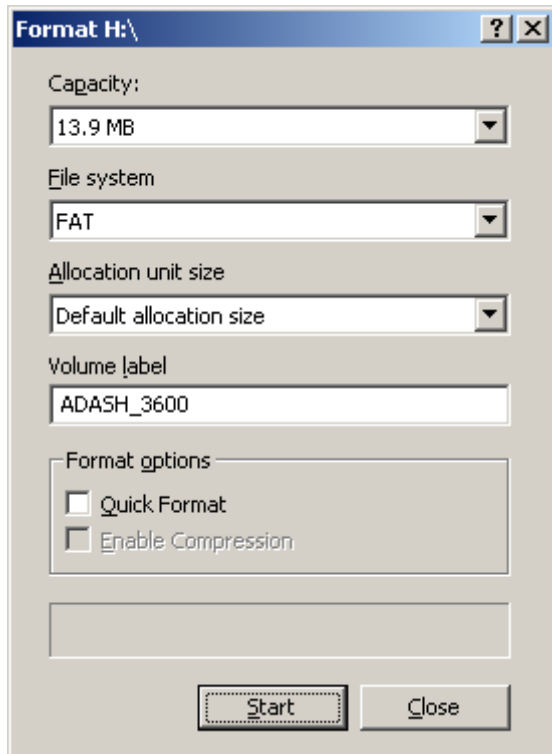


Fig. Formatting dialogue box

Thus, the primary Flash card formatting is completed. Check now whether the Flash card is shown in your PC – see above. At this point, the card must be program formatted to be usable in the Adash 3600-MEM module.

Reformatting (Program)

This card reformatting is done always after the primary formatting of a new card (see above) or in case of problems with card reading. Such reformatting is selected from the A3600 Download program menu – see above description of **Erase FLASH** key. After its activation, select **Format FLASH card**, running the following process:

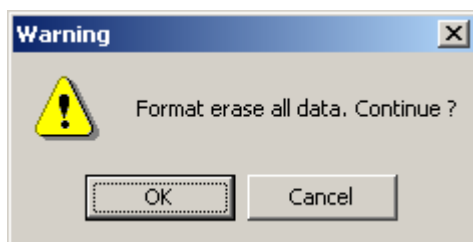
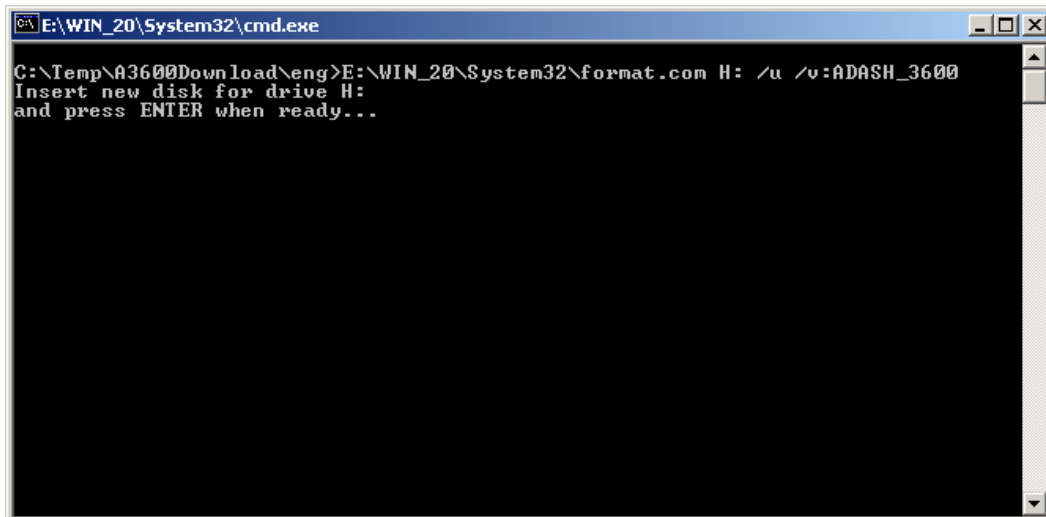


Fig. Warning prior the Flash card formatting

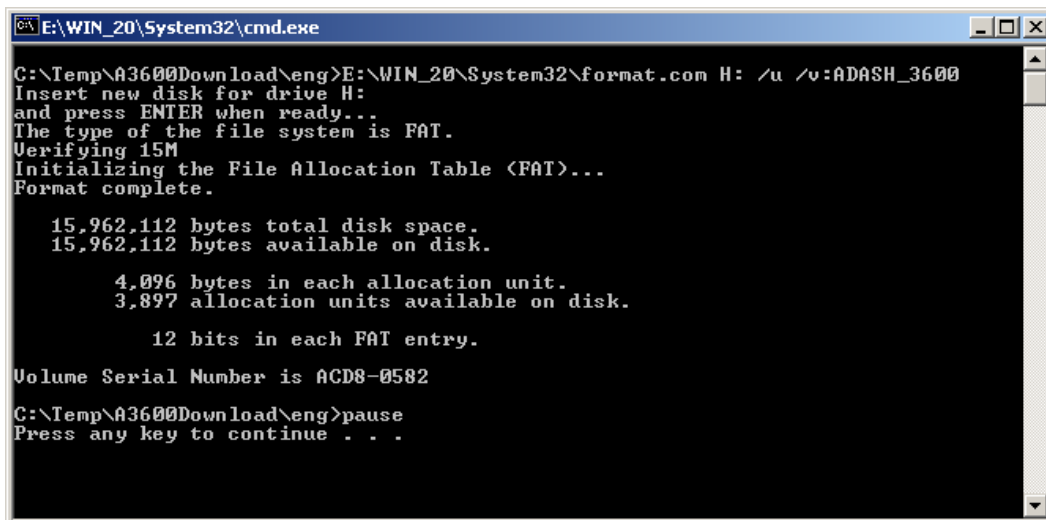


```

E:\WIN_20\System32\cmd.exe
C:\Temp\A3600Download\eng>E:\WIN_20\System32\format.com H: /u /v:ADASH_3600
Insert new disk for drive H:
and press ENTER when ready...

```

Fig. FORMAT command initialisation, to continue confirm by Enter



```

E:\WIN_20\System32\cmd.exe
C:\Temp\A3600Download\eng>E:\WIN_20\System32\format.com H: /u /v:ADASH_3600
Insert new disk for drive H:
and press ENTER when ready...
The type of the file system is FAT.
Verifying 15M
Initializing the File Allocation Table <FAT>...
Format complete.

15,962,112 bytes total disk space.
15,962,112 bytes available on disk.

4,096 bytes in each allocation unit.
3,897 allocation units available on disk.

12 bits in each FAT entry.
Volume Serial Number is ACD8-0582
C:\Temp\A3600Download\eng>pause
Press any key to continue . . .

```

Fig. Card formatting completed

CAUTION! Check from this screen that during the card formatting no defective allocation units (sectors) were found. Otherwise, the card cannot be used in the Adash 3600-MEM module.

The user interface head, after a successful formatting of the Flash card, is the following:

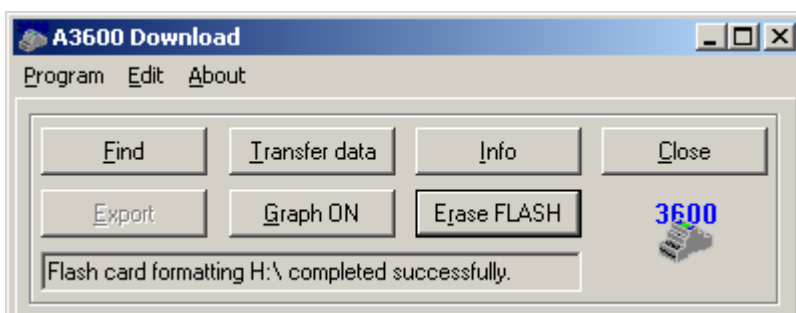


Fig. Flash card formatting successfully completed

Wait until it is safe to remove the card from the reader before installing it to the Adash 3600MEM module.