



# User's guide



## Application A4300-Loader

### Application:

- 📁 Firmware upload into A4300 instrument
- 📁 Diagnostic functions

### Characteristics:

- 📁 RS232 interface communication

*Ref: 09032007 KM*

## **Contents**

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## Connection of the A4300 instrument to A4300-Loader application

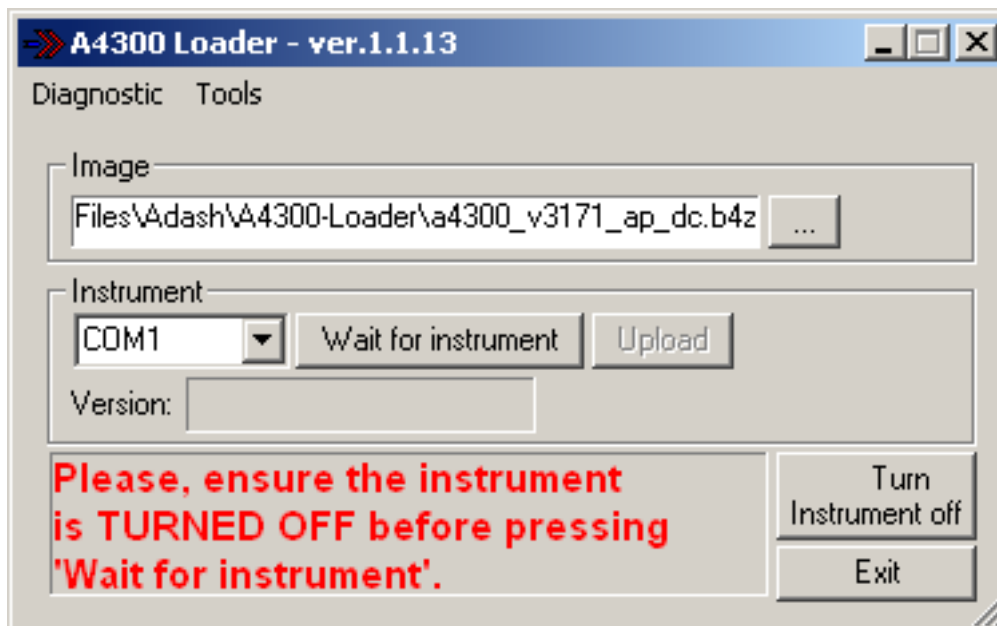
### **Physical connection of the instrument to PC**

Connect the instrument via serial cable, which you receive with instrument. On the instrument use the connector RS232 on the bottom. On the computer use any free serial port.

### **Application setup, firmware file selection**

In application A4300-Loader please select from list placed in section **Instrument** correct serial com port number (COM1, COM2, etc.).

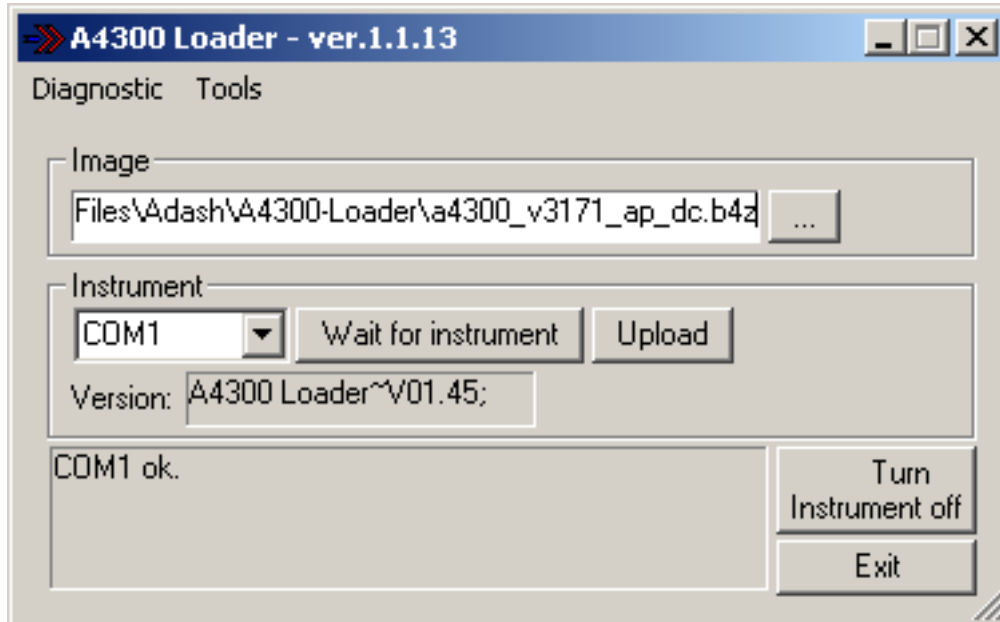
In section **Image** enter full path to firmware file or you can browse for and select firmware file from standard Open file dialog via "..." button. Firmware files have always **b4z** extension.



### **Firmware upload**

1. turn off the instrument.
2. in the application A4300-Loader press button **Wait for instrument**, application will wait for 2 minutes to establish communication with instrument.

3. turn on the instrument. If the connection is established, a loader logo will appear on the instrument display and instrument version is echoed in the application. If connection is not established, check the instrument connection and cabling and try again.
4. if connection is established button **Upload** in section **Instrument** will be enabled and by pressing it upload will start.
5. if an error occur during firmware upload, application will prompt error message and it is needed to restart whole process.

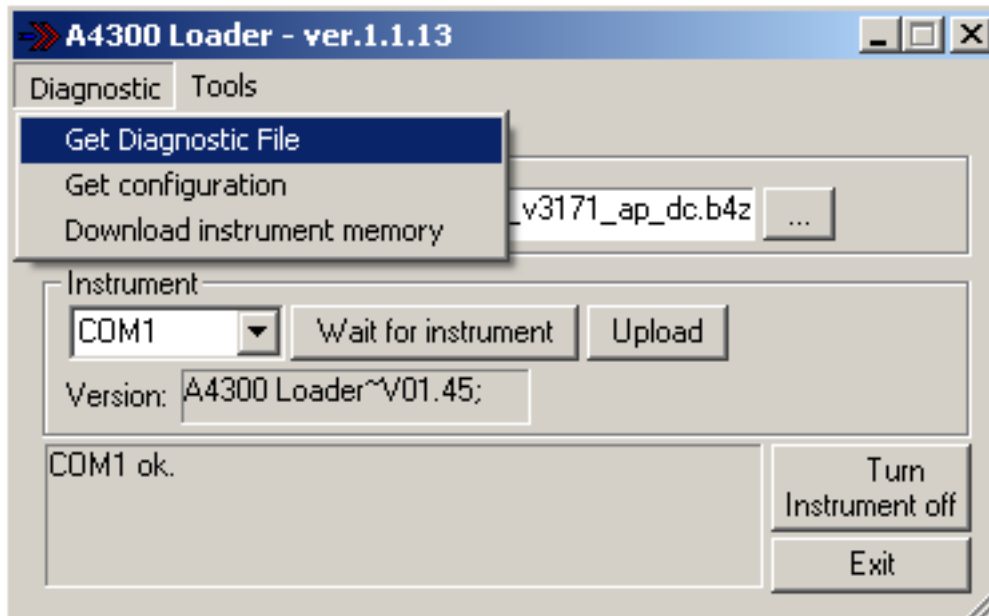


For detailed information see  
**Vibration Analyser Adash 4300 – VA3, Multi FW Upload.**

## **Diagnostic data download**

Application A4300-Loader enables user to download diagnostic data from instrument and send the data to Adash in case of any problems with measurement.

Every diagnostic function is invoked from menu **Diagnostic**.



### **Diagnostic file**

Diagnostic file contains configuration data of measurement setup and instrument setup (measurement settings, version, calibration data etc.). Its main intend is to help identify problems with incorrectly set measurements (missing ICP setting, bad filter definition etc.)

To download diagnostic file the instrument must be turned on and in main menu.

Then selecting **Diagnostic / Get diagnostic file** it's possible to download and store diagnostic file **a43info.b4d**, which is always stored in folder where A4300/Loader is installed (and run from). This file can be after downloading send by e-mail to Adash.

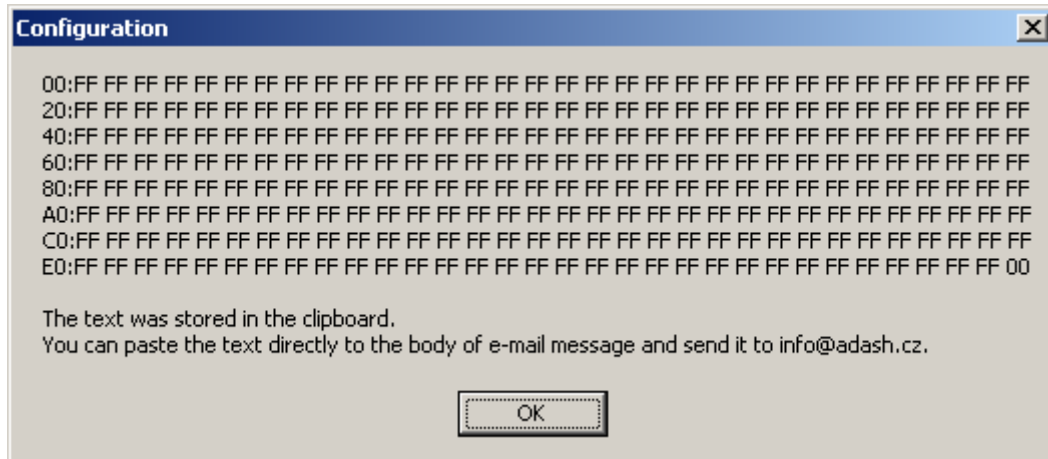
### **Configuration data**

Configuration data contains information on enabled modules of the instrument (data collector, balancer etc.). If any problem occurs during upgrade of firmware when a new module was purchased (e.g. customer upgrades his instrument to balancer), configuration data can enable to identify and solve the problem.

Steps to download configuration data:

1. turn off the instrument,
2. in the application A4300-Loader press the button **Wait for instrument**,
3. turn on the instrument, instrument display should show a loader logo,
4. in menu **Diagnostic** select menu item **Get configuration**,
5. if configuration data were transferred successfully message box will appear and textual form of the data will be stored in clipboard.

It is then possible to store result e.g. into e-mail body and send it to Adash.



## Memory contents

To download memory contents follow these steps:

1. turn on the instrument and leave it in the main menu,
2. in menu **Diagnostic** select menu item **Download instrument memory**,

**If transfer is in progress, please DON'T run any other applications and leave A4300-Loader application in forward of the desktop and active.**

**Memory download will last up to 20 minutes.**

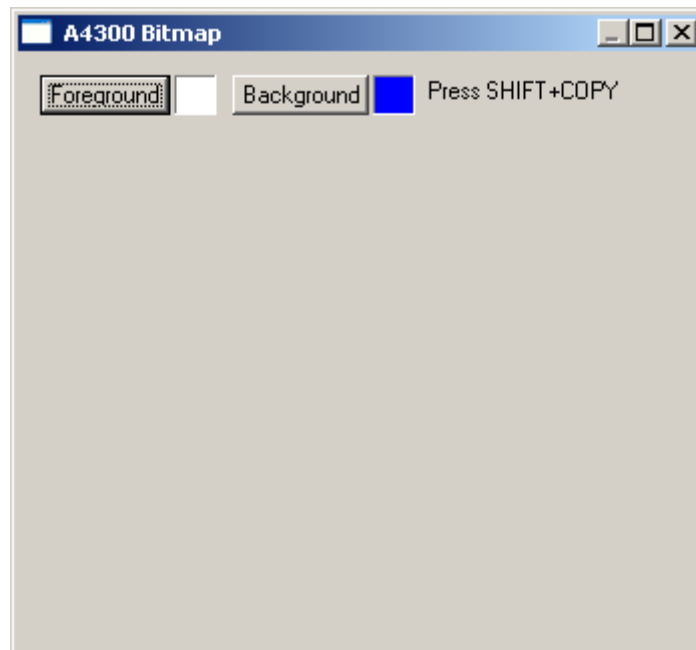
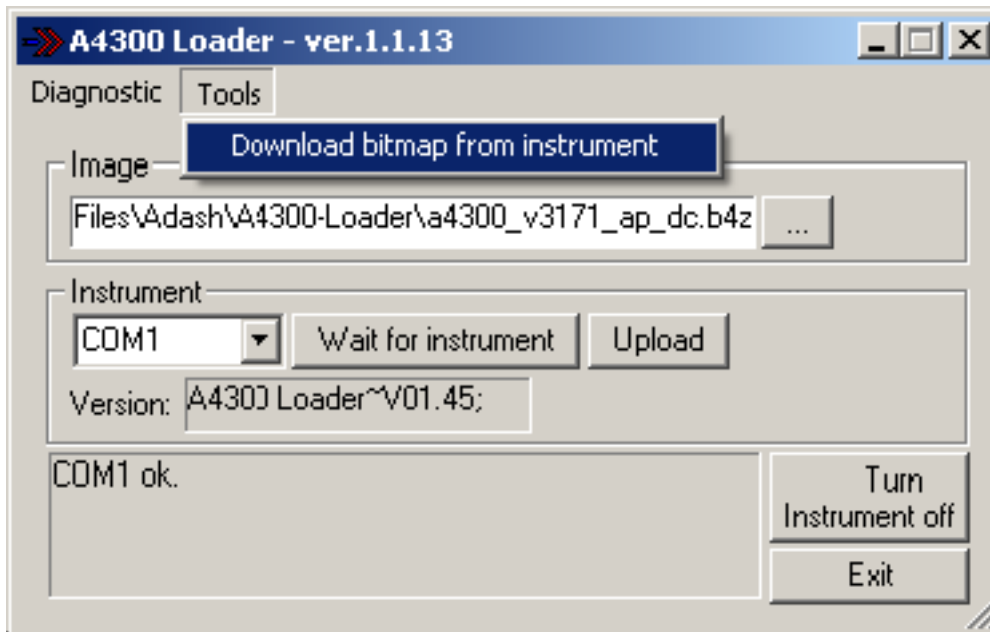
3. When memory download finishes, file **flashdump.bin** is created in folder where the A4300-Loader is installed.

It's then possible to send the file **flashdump.bin** to Adash. To save file size it's recommended to compress the file with any public compress utility (ZIP, RAR, ARJ, GZIP etc.).

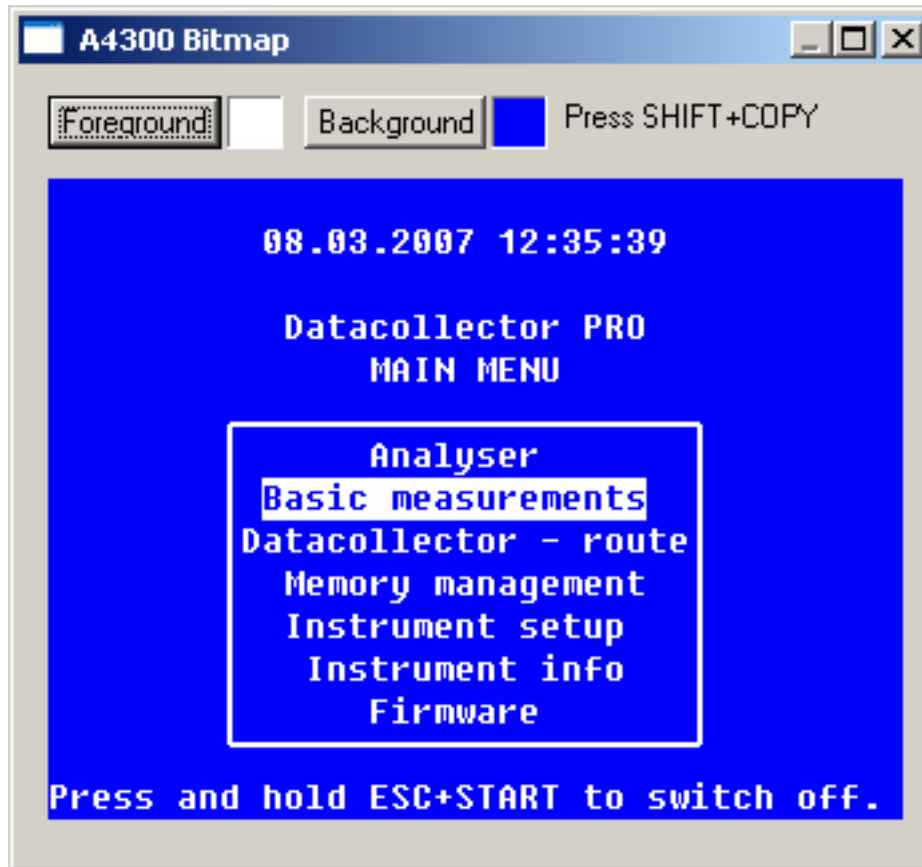
# Tools

## Picture of A4300 Display

In menu **Tools** select menu item **Download bitmap from instrument** to launch a utility for bitmap transfer from A4300 instrument to PC via RS232 interface.



At the same time press Shift and Copy keys on the instrument keypad to transfer bitmap from the instrument to your PC. The bitmap is displayed on the PC monitor and it is stored in the clipboard. You can paste the bitmap from clipboard to any application and save on PC disk as a BMP file.



### CAUTION!

If you take advantage of the feature to demonstrate measurements via A4300 – VA3 instrument, it is impossible to measure machine speed and use an external trigger while the instrument is connected to your PC via RS232 interface.

**Necessary modification: Cut off connection to pin #1 on the both sides of standard Adash RS232 cable.**