

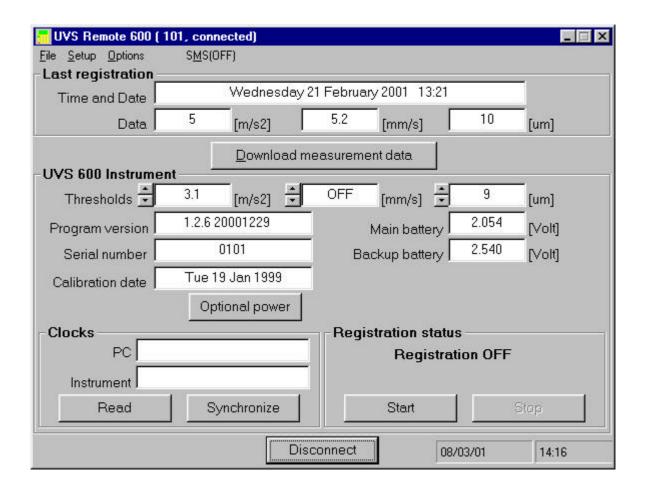
UVS Remote 600

Software for remote communication between UVS 600 and PC

User's Manual

Ver 2.0.0 and later

For Windows 95/98 and NT4



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Contents

	ontents	
1	What is UVS Remote 600?	
	1.1 Hardware requirements for using UVS Remote 600	2
	1.1.1 Remote connection	2
	1.1.2 Direct cable connection	2
2	Installation of UVS Remote 600	3
3	Setting up your UVS 600 instrument for remote communication	4
	3.1 Null Modem	4
	3.2 GSM Modem	4
	3.3 Tele Modem	4
4	Running UVS Remote 600 (Standard mode)	5
	4.1 Start the program	5
	4.2 Main window (not connected)	
	4.3 The instrument database	7
	4.3.1 Buttons	
	4.3.2 Database fields	7
	4.3.4 Calling an instrument	8
	4.4 Main window (connected)	
	4.4.1 The main window frames	9
	4.4.2 Download measurement data	
5	Running UVS Remote 600 (Light mode)	12
	5.1 Start the program	
	5.2 Main window	12
	5.2.1 Download measurement data	12
	5.2.1 Loading new software into instrument	13
6	The menu bar	
	6.1 File	14
	6.1.1 Download measurement data	14
	6.1.2 Load new software into instrument	
	6.1.3 Exit	
	6.2 Setup	
	6.2.1 PC Setup	17
	6.2.2 Language	18
	6.3 Options.	
	6.3.1 Refresh	19
	6.3.2 About	
	6.4 SMS	20
	6.4.1 SMS messages	
	6.4.2 SMS Setup window	22

UVS Remote 600

Α

1 What is UVS Remote 600?

UVS Remote 600 is your Windows-based PC tool for remote control of one or several UVS 600 Vibration Monitors.

The program is also used for down- & uploading of files (measurement data, program updates) from and to UVS 600 instruments and your PC.

All functions are available via regular telephone line, mobile GSM communication, as well as through direct cable connection (RS232).

The UVS Remote 600 program file (called UVS06R.exe) contains two versions of the program:

- Standard, with all remote control functions included
- Light, for file transfer only.

Both versions will be installed on your PC, and you can select which version to use from time to time.

The UVS Remote 600 program comes on a CD-ROM delivered with your UVS 600 instrument(s). Future updates will be available on ABEM's website www.abem.com. Please contact ABEM for the current password.

1.1 Hardware requirements for using UVS Remote 600

1.1.1 Remote connection

At the place of the operator:

- A PC with Microsoft Windows[®] 95/98 or NT4, and a VGA screen.
- A modem connected to the regular telephone network

or

GSM telephone capable of data communication installed as modem in Windows.

At the measurement location:

- At least one UVS 600 Vibration Monitor.
- A GSM System for UVS 600 (ABEM Part No. 20 3906 00) installed in each instrument

or

• A modem, including power supply, connected to the regular telephone network.

1.1.2 Direct cable connection

- A PC with Microsoft Windows[®] 95/98 or NT4, and a VGA screen.
- One UVS 600 Vibration Monitor.
- A modular cabel set, as included in the instrument package.

UVS Remote 600

2 Installation of UVS Remote 600

• If the program is installed from disk, place the first UVS Remote 600 disk in drive A or B and run SETUP.EXE from the disk.

- If the software is loaded from the Internet, use the Windows Explorer to run UVSR600.EXE to unpack the installation files. Then run SETUP.EXE to install the software.
- If the program is installed from CD, place the CD in the drive and run SETUP.EXE from the CD.

Once the screen shows the UVS Remote 600 Setup window, installation is self-explanatory.



Figure 1 - UVS Remote 600 Setup window

- During the installation of the program, files are copied to the directory chosen by the program. System files for Visual Basic and Microsoft Access will be copied to the Windows system directory.
- When installation is complete, a shortcut named "UVS Remote 600" will appear in the "UVS" group under "Programs" in the Windows Start menu.

3 Setting up your UVS 600 instrument for remote communication

3.1 Null Modem

The Null Modem is the easiest way to use UVS Remote 600.

- 1. Connect the UVS 600 to the PC using the modular cable set, which was included in the shipping of our UVS 600.
- 2. Start the UVS 600 by pressing the **LCD** key on the instrument.
- 3. Open the **Modem** menu on the UVS 600 by pressing the **MENU** button repeatedly.
- 4. If the modem parameter is set to **ON**, press the **F1** button and alter the modem parameter to **OFF** by pressing the + button.
- 5. Press **F2** to save the new settings.
- 6. Exit the UVS 600 by pressing the **LCD** key twice.

The UVS 600 is now ready for use. UVS 600 will start automatically when it receives commands from the PC.

3.2 GSM Modem

If your UVS 600 is equipped with a GSM System, it can be contacted via GSM.

- 1. Set the mode switch of the UVS 3901 GSM Communication Unit to 2-WAY COMM.
- 2. Start the UVS 600 by pressing the LCD key on the instrument.
- 3. Open the **Modem** menu on the UVS 600 by pressing the **MENU** button repeatedly.
- 4. If the modem parameter is set to **OFF**, press the **F1** button and alter the modem parameter to **ON** by pressing the + button.
- 5. Press **F2** to save the new settings.
- 6. Wait while the UVS 600 initiates the modem.
- 7. If the initiation is successful, exit the UVS 600 by pressing the **LCD** key twice.(If the initiation fails please contact ABEM for support.)

The UVS 600 is now ready for use. UVS 600 will start automatically when it receives a call from the PC.

3.3 Tele Modem

The use of tele modem is currently not supported by UVS 600.

UVS Remote 600

4 Running UVS Remote 600 (Standard mode)

4.1 Start the program

UVS Remote 600 can be run in Standard mode or in Light mode. The Light mode is a minimum version of UVS Remote 600 for transfer of datafiles only. The Light mode is described in chapter 4.

If you do not want to communicate with your instrument(s) via modem you may skip this chapter and go directly to chapter 4.

To run UVS Remote 600 in Standard mode:

- 1. Select the **UVS Remote 600** shortcut from the UVS group under windows in the Windows Start menu.
- 2. Click the **Standard mode** button of the start-up window.

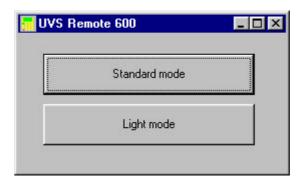


Figure 2 -UVS Remote 600 start-up window

UVS Remote 600

4.2 Main window (not connected)

The main window of UVS Remote 600 will appear after starting the program (see Figure 3).

The menu bar at the top of the main window is described in chapter 6. The first time you run UVS Remote 600 you may want to set up your environment. To do this you enter the setup menu of the menu bar (see chapter 6.2).

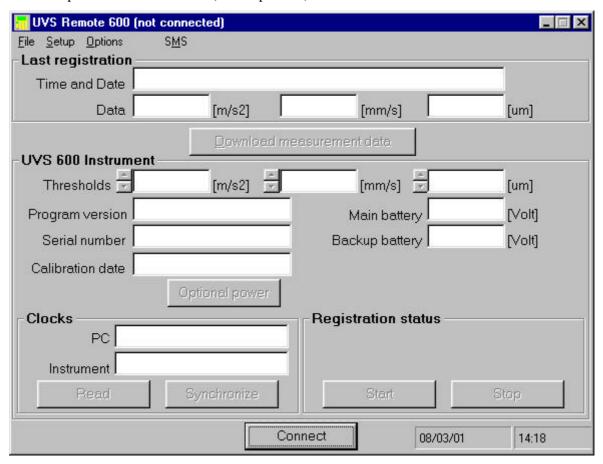


Figure 3 - UVS Remote 600 main window (not connected)

There are several textboxes and buttons on the main window. When UVS Remote 600 is not connected to an instrument, only the **Connect** button on the last row is enabled.

UVS Remote 600

4.3 The instrument database

All instruments to be used must be entered into the instrument database. The database is opened by clicking the **Connect** button.

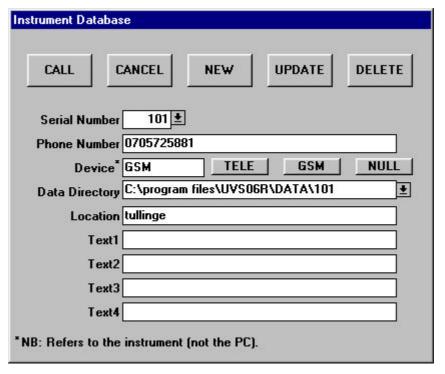


Figure 4 - Instrument database setup window

4.3.1 Buttons

CALL Initiates the modem and calls the instrument chosen.

CANCEL Exits the database window without calling an instrument.

NEW Provides a blank record, with Serial Number as the active field.

Information on a new instrument can now be entered.

UPDATE Updates the database with the new entries.

DELETE Removes the record shown.

4.3.2 Database fields

Serial Number

Instrument serial number, must always be filled in. It is used in the communication between your PC and the instrument. To select an instrument from the database, click on the list button, then double click on the instrument you want to choose. You can also type the serial number in the box. The serial number must be the "short form" (3- or 4-digit) number that appears on the LCD (not the full 6-digit number on the S/N panel).

Phone Number

Telephone number to the instrument. For direct connection with the modular (RS232) cable, leave this field blank. If UVS Remote 600 is used with a mixture of GSM-connected



instruments and normal modem-connected instruments, it is recommended that the full area codes are always entered for all instruments.

Device

The type of communication device <u>of the instrument</u>. If a direct cable is used, select **NULL**. Selecting the wrong device will make it impossible to communicate with the instrument. Information from this field will be used to select whether the PC will use the communication port selected in the **NullModem** frame or the modem selected in the **Modem** frame. The NullModem and the Modem frames are found on the PC-Setup window as described in chapter 6.2.1.

Data Directory

The path to the directory in which your measurement data will be stored. This field must be filled in before you can transfer data. UVS Remote 600 proposes the following path:

C:\(Program directory)\DATA\ (Instrument S/N).

You can also select a path by clicking the list button to the right and choosing existing drives and directories.

Location

Text field (e.g. for project identification).

Text 1-4

Text field for optional use.

4.3.4 Calling an instrument

After you have chosen an instrument, click on the **CALL** button with the mouse. A new "dialing window" comes up. The window shows information about the dialing process.

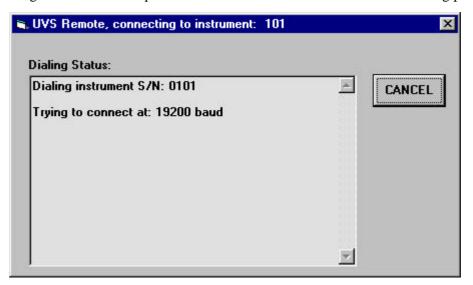


Figure 5 - Dialing window

If a GSM modem is used at the UVS 600 end, UVS Remote 600 will make several retries before stop calling. If the line is busy, the modem will hang up after 3 seconds. A **CANCEL** button is available if you want to hang up manually.



UVS Remote 600

4.4 Main window (connected)

The title bar (above the menu bar) gives you the UVS Remote 600 program name along with the status of the modem connection.

UVS Remote 600 is open, but no instrument has been [not connected]

called.

[101, connected] Contact has been established and the instrument (number

101) is ready for communication with the PC.

[101, connected, busy] Instrument number 101 has been called, but there is

no contact with the instrument. The instrument might be

busy (recording an event), or the instrument at this telephone number is not number 101.

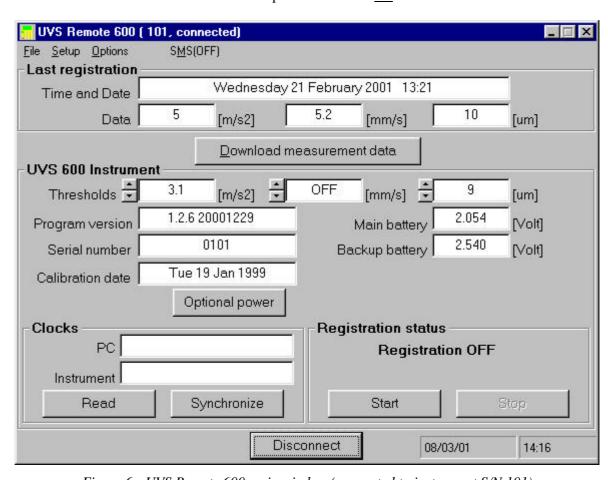


Figure 6 - UVS Remote 600 main window (connected to instrument S/N 101)

4.4.1 The main window frames

The main window is divided into four framed sections.

Last registration:

In the upper part of this frame the time, date, and corresponding data is shown for the last registered event that exceeded any of the thresholds at the time of the registration.



UVS 600 Instrument:

On the first row of this frame, one can see and modify the threshold settings of the connected UVS 600.

This frame shows information about program version, serial number, calibration date, and battery status of the connected UVS 600.

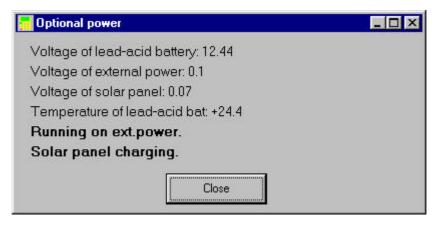


Figure 7 - Optional power window

Clicking the **Optional Power** button opens a window with information about optional power units.

If the instrument connected to UVS Remote 600 is using a GSM modem, clicking the **RSSI** (Radio Signal Strength Indicator) button will show information about the GSM signal strength at the instrument.

Clocks:

By clicking the **Read**-button, the clock times of the PC and the instrument are entered into the boxes. Please note that this information is not automatically updated.

When registration is OFF, the clock of the instrument can be set to the time of the PC-clock by clicking the **Synchronize**-button

Registration status:

When connected to an instrument, the text "**Registration is ON**" or the text "**Registration is OFF**" becomes visible to reflect the registration status of the connected instrument.

In case the sensor connection is broken an **Input Error** message will appear here.



Figure 8 - RSSI window

4.4.2 Download measurement data

Clicking the **Download measurement data** button will start the downloading of measurement data from the connected UVS 600 to the PC. UVS Remote 600 will ask were to save the file with measurement data, suggesting a filename in the **data directory** specified in the instrument database.

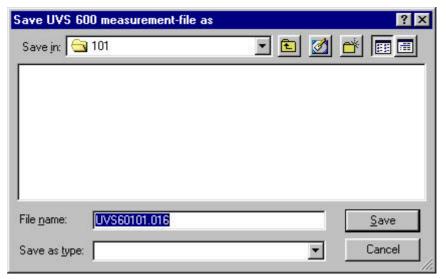


Figure 9 - Save as dialog

A window will show the progress of the file transfer.

A successful downloading is completed by a confirmation dialog.

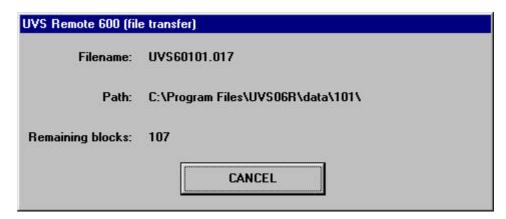


Figure 10 – File transfer window

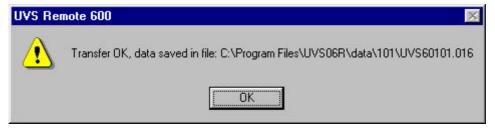


Figure 11 – Transfer confirmation window

UVS Remote 600

5 Running UVS Remote 600 (Light mode)

5.1 Start the program

UVS Remote 600 can be run in Standard mode or in Light mode. The Light mode is a minimum version of UVS Remote 600 for file transfer via RS 232 cable only (it does not include remote control of instruments). The Standard mode is described in chapter 4.

To run UVS Remote 600 in Light mode:

- 1. Select the **UVS Remote 600** shortcut from the UVS group under windows in the Windows Start menu.
- 2. Click the **Light mode** button of the start-up window.

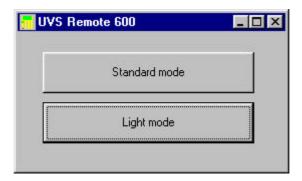


Figure 12 -UVS Remote 600 start-up window

5.2 Main window

In light mode the main window of UVS Remote 600 contains two buttons.

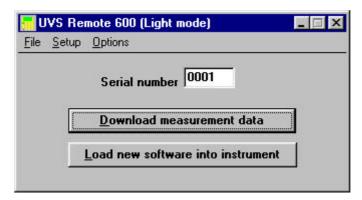


Figure 13 – Light mode main window

5.2.1 Download measurement data

- 1. Enter the UVS 600 serial number in the **Serial number** text field on the first row of the main window.
- 2. When the **Download measurement data** button is clicked UVS Remote 600 will try to contact the UVS 600 instrument.

If UVS Remote 600 succeeds in contacting the UVS 600, the measurement download operation will continue as described in 4.4.2.



5.2.1 Loading new software into instrument

1. Enter the UVS 600 serial number in the **Serial number** text field on the first row of the main window.

2. When the **Load new software into instrument** button is clicked UVS Remote 600 will try to contact the UVS 600 instrument.

If UVS Remote 600 succeeds in contacting the UVS 600, the software upload process will continue as described in 6.1.2.

When trying to connect to a UVS 600, the PC will use the communication port selected in the **NullModem** frame of the PC-Setup window as described in 6.2.1.

Please note that the serial number entered in the **Serial number** text field is used in the communication between the PC and the instrument, and must agree with the serial number of the instrument.

ABEM UVS Remote 600

6 The menu bar

6.1 File

The **File** menu has three possible choices:

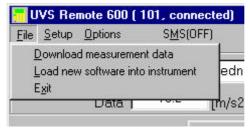


Figure 14 – The File menu

6.1.1 Download measurement data

Download measurement data has the same function as the **Download measurement data** button of the main window. If the program is connected to a UVS 600 instrument, the measurement database will be downloaded to the PC and saved to file as described in 4.4.2.

6.1.2 Load new software into instrument

If the program is connected to an instrument, and if the instrument registration is OFF, you can select **Load new software into instrument.** This enables you to upload new software from the PC to the connected UVS 600. Before the uploading process starts it must be confirmed through a dialog.

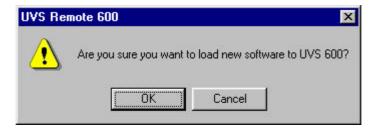


Figure 15 – Software upload dialog



If the uploading process is continued, the file containing the new UVS 600 program must be selected.

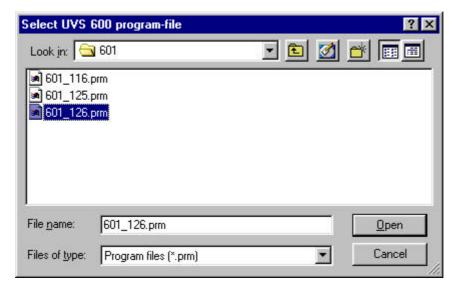


Figure 16 – Selecting UVS 600 program file



Figure 17 – Program information window

If a valid program file is selected an information window shows version number and compilation date of the selected file.

If the selected program file is accepted the uploading process starts. A window that shows the progress of the process appears. First a memory area in the instrument must be cleared for the new software to be loaded into.



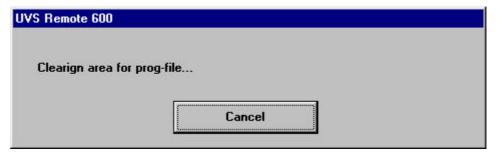


Figure 18 – Clearing memory area in UVS 600

When a memory area in the UVS 600 has been cleared the actual uploading starts.

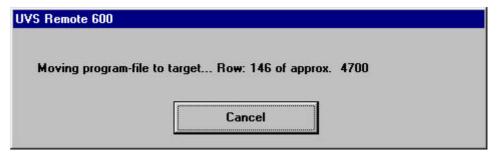


Figure 19 – Software uploading

When the new program file has been transferred to the UVS 600, the program is checked for errors which might have come up during the transfer.

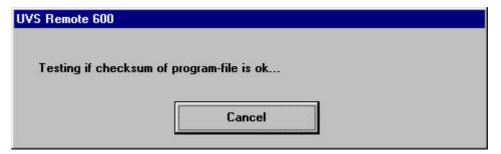


Figure 20 – Testing program file checksum

If the new program file has been properly transferred, the reprogramming must be confirmed once more before the actual reprogramming starts.

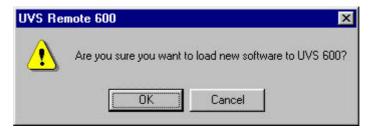


Figure 21 – Reprogramming confirmation

If the reprogramming is confirmed, the instrument starts switching to the new program.





Figure 22 – Reprogramming instrument

6.1.3 Exit

You can select Exit to leave the UVS Remote 600 program.

6.2 Setup

The **Setup** menu has two possible choices:



Figure 23 – The Setup menu

6.2.1 PC Setup

The PC Setup opens a window used to setup the PC for UVS Remote 600 communication.

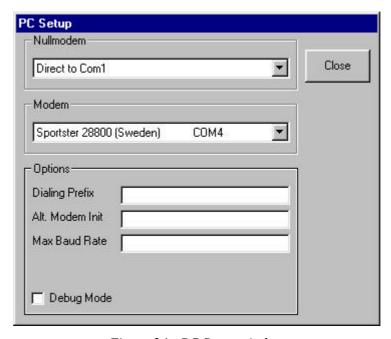


Figure 24 - PC Setup window



Nullmodem frame:

Selects communication port for the direct cable connection.

Modem frame:

This frame is enabled only when UVS Remote 600 is run in Standard mode. From the Modem frame one of the installed modems can be selected. UVS Remote 600 retrieves all necessary information about the modem (com port, setup strings etc.) from the Windows registry. If no modem is installed in the PC, the text "No modem found" will appear.

Options frame:

This frame is enabled only when UVS Remote 600 is run in Standard mode.

Dialing Prefix:

This information will be added prior to all telephone numbers (e.g. "0W" to call out via an office switchboard).

Alt. Init-string:

To set an alternative initiation string to the modem, this string must begin with "AT&F.". To add parameters to the initiation string, this string must begin with "+". The modem strings retrieved from the Windows registry is normally enough and does not need to be changed.

Max BaudRate:

To limit the baud rate used for communication with the modem or via the Null modem cable, the maximum allowable baud rate can be entered here.

Debug Mode:

The debug mode is intended for problem tracing and should be used by support personnel only.

6.2.2 Language

The language menu opens a dialog box used to choose among installed language files.

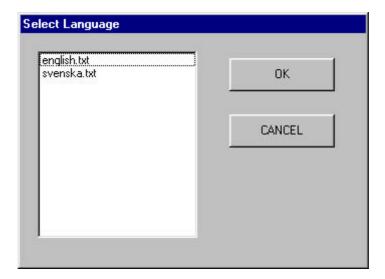


Figure 25 - Language setup window



You can create your own language files. To do this just copy an existing file from the "languages" directory in the directory were UVS Remote 600 was installed. Name the new language file "newLanguageName.txt" and open it with a text editor (e.g. Notepad). The language files consists of two columns separated by "=". In the left column there are English words and expressions framed with dollar signs (\$). In the right column there are translations of the words and expressions. The translations are also framed with dollar signs. A line in a German language file (deutsch.txt) could look like:

\$word or sentence \$=\$Wort oder Sats\$

When creating your own language files, please be careful not to use the same shortcut letter more than once in the same menu or panel. A shortcut letter is any letter in the language file preceded with an ampersand (&-character).

If the new language file is placed in the "languages" directory, you can select it from the language setup window the next time UVS Remote 600 is run.

6.3 Options

The **Options** menu has two possible choices:

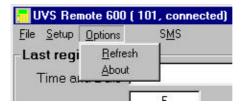


Figure 26 – The Options menu

6.3.1 Refresh

The **Refresh** menu updates all information from the connected UVS 600. This is useful if some information failed to be read from the UVS 600 as contact was established (e.g. due to poor connection).



6.3.2 About

Choosing About will show information of the program version and copyright.

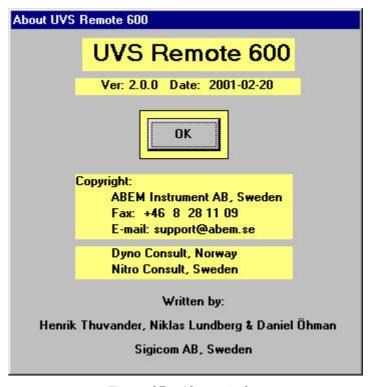


Figure 27 – About window

6.4 SMS



Figure 28 – The SMS menu

6.4.1 SMS messages

The SMS menu is only available when UVS Remote 600 is run in Standard mode. It is used for setting up the SMS function of the UVS 600.

When a measured value of the UVS 600 has exceeded a threshold value (and the SMS function is ON, see below), an SMS message will be sent to all active receivers.



The SMS message consists of nine text lines. Figure 29 shows an example of how an SMS message could look.

```
LOCATION A
UVS601-0164
Sa 16 Dec 2000
13:09
3.7 mm/s
3.1 m/s2
16 um
Bat: 12.68 VS
<!MDS;0;D0;UVS601;0164!>
```

Figure 29 – Example of SMS message

"LOCATION A" The location string of the UVS 600 SMS setup.
"UVS601-0164" Instrument type and serial number.
"Sa 16 Dec 2000" Date of the event.
"13:09" Time of the event.
"3.7 mm/s", "3.1 m/s2", "16 um" Measured magnitudes in the three different units.
"Bat: 12.68 VS" Battery status of the instrument.
"<!MDS;0;D0;UVS601;0164!>" Event identity string to be used by a measurement data server.

Most GSM operators will deliver an SMS message within 30 seconds.



6.4.2 SMS Setup window

By clicking the SMS menu, the SMS Setup window is opened.

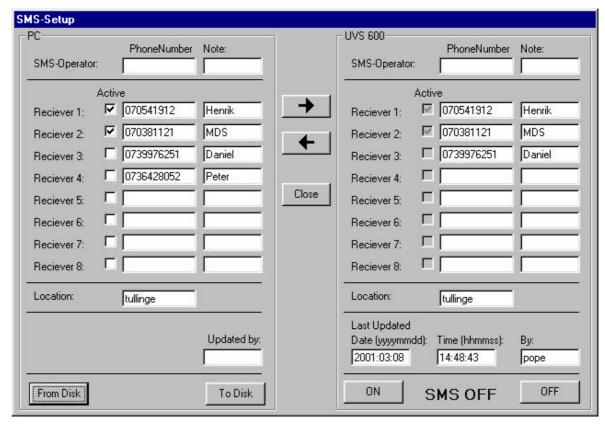


Figure 30 - SMS Setup window

The PC frame to the left in the window is used for editing the SMS setup of the instrument. After editing the setup must be transferred to the UVS 600. This is made by clicking the **right arrow**. If it is the first time the instrument receives SMS parameters, it will take a while.

Default information to the PC frame can be copied from the remote UVS 600 by using the **left arrow**, or from the PC by clicking the **From Disk** button.

To save the PC frame for later use, click the **To Disk** button. The PC can only save one set of SMS parameters.

SMS Operator:

The protocol used by tele modems to send SMS messages is called UCP.

If your UVS 600 is using a tele modem (please refer to chapter 3.3), you need to enter the phone number of the UCP gateway in this field. Your tele network administrator will provide you with the number.

Receiver 1-8:

Up to 8 receivers can be listed, but only those with the **Active** button enabled will receive SMS messages.

For both operator and receivers, a note of maximum six characters can be entered.

Location:

This field is automatically copied from the Location field of the instrument database, but can be changed if needed.



Updated By:

Before sending the SMS setup to the UVS 600, a signature must be entered. The signature must consist of min two and max four characters.

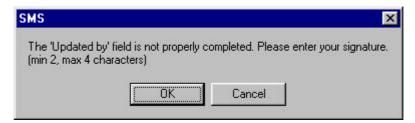


Figure 31 – Uncompleted setup

The UVS 600 frame displays the current SMS setup of the remote UVS 600, including date and time for the last updating of the setup.

ON, OFF:

Use these buttons as a master activate/deactivate of the UVS 600 SMS function. The text between the buttons will display the current status.

Many of the SMS parameter actions must be confirmed by clicking **OK** in message boxes like this.



Figure 32 - SMS dialog window