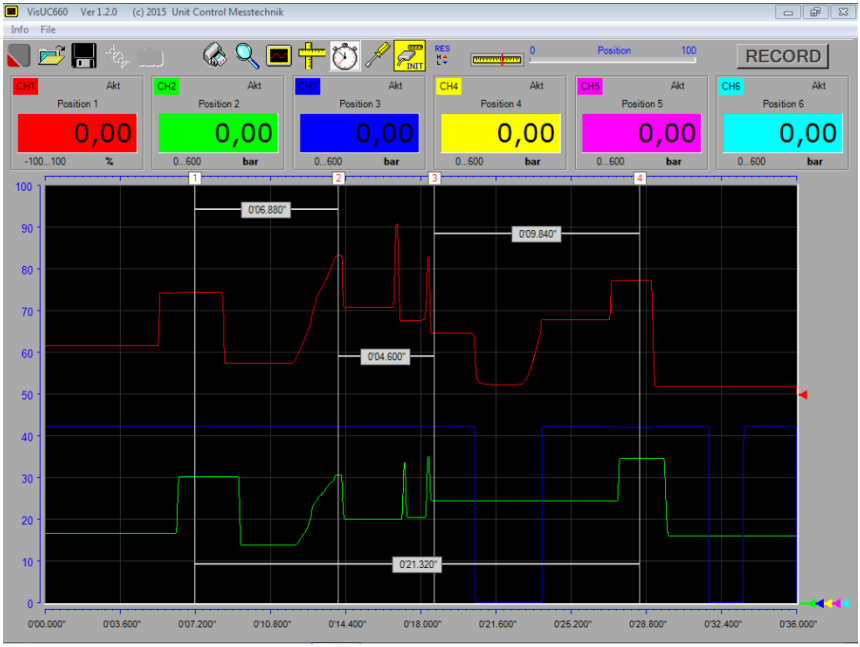
Instruction manual



Analysis software for the measuring instrument

UC 660 mobil

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2. Installation

In the following the installation for Windows 7 is described.
Other Windows versions are rather similar.
Attention: For the installation you need admin rights!

2.1 Installation of PC program

Insert the CD, navigate with the explorer to CD/DVD drive and start the installation with double click on “Setup”. The installer guides you through the installation.
A folder “Local Disk(C:) > Program Files(x86) > Unit Control Messtechnik” will be created, in case that you did not choose another folder during installation.
Attention: For getting the program run correctly, you need to change the security settings for this folder! For that, navigate with the explorer to that folder and click on it with the RIGHT mouse key. Select “Properties” and within the slider “Security”. Click “Edit”. Select “Users” and check “Allow full control”. Then click “OK” two times. Now close all windows.

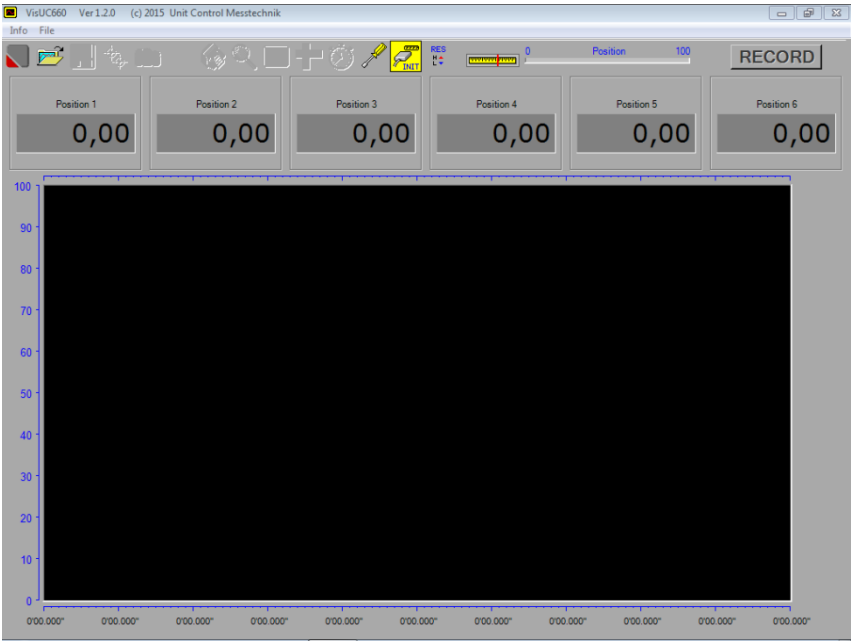
2.2 Installation of driver

Attention: From Windows 7 64 Bit and higher no driver needs to be installed, the UC660 uses self installing!

Otherwise:
Switch on the measuring device and connect it with the USB cable to the PC.
With speaker on, you will hear the corresponding noise. Wait for the message “Device driver software was not successfully installed”. Then click on “Start” and on “Devices and Printers”. You find the “UC660 mobil” under “Unspecified”. Double click on it and a window opens. In this window select “Hardware” and click “Properties”.
Within the slider “General” click “Change settings”, another window opens. Within the slider “Driver” click “Update Driver”. Select “Browse my computer for driver software”, check “Include subfolders” and click “Browse”. Navigate to the CD/DVD drive, click “OK” and then “Next”. The driver software will now be installed. Within a possible security warning select “Install this driver software anyway”. After the installation close all windows.

3. Start VisUC660

Start the program from the desktop icon or Start -> All Programs -> VisUC660.



4. Establish USB connection to UC660

Switch on the UC660 and connect it with the USB cable to the PC.
With speaker on, you will hear the corresponding noise.

Click with the left mouse key on

, to establish the connection.

When done, the symbol will change to

.

For transferring memory pages within the settings page, the USB connection must be established.

5. Transfer live data to the PC

5.1 Show measuring data

After another click with the left mouse key on the current measuring data are transferred and displayed on the PC.

The symbol now shows . The measurement will not be recorded, any settings can be changed in the UC660.

5.1 Record measuring data

For recording, the following requirements at the UC660 are needed:

- It is not recording or in recording standby
- A measuring display is shown
- The HOLD key is not pressed

A click with the left mouse key on

starts the recording in case the reqirements are met, otherwise a warning appears.
While recording, no settings can be made at the UC660.

A trigger advance up to 10% from the selected maximum recording time will always be recorded, so a part BEFORE the recording is started.

The green bar shows the progress of the recording.

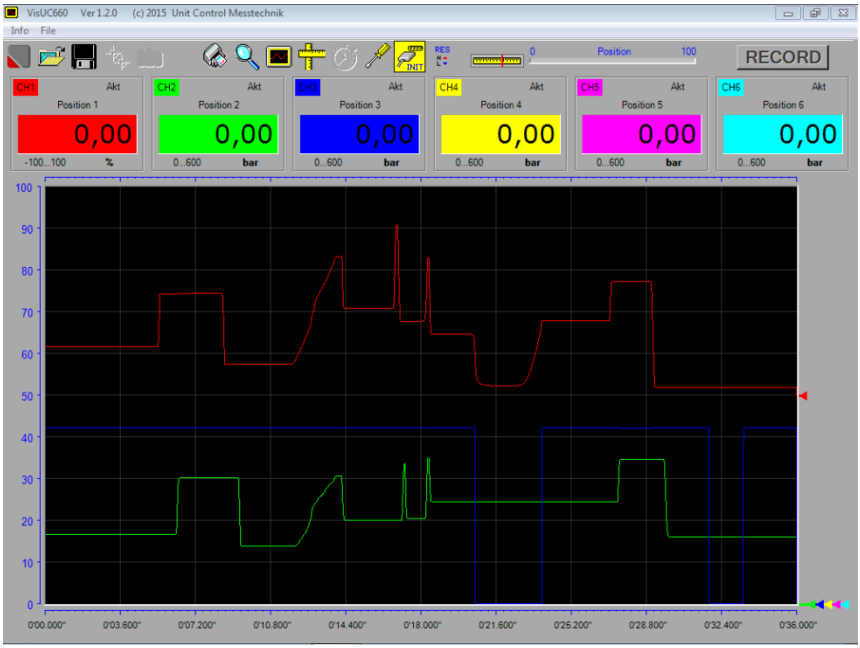
The maximum recording time can be set with the "measuring speed" in the **system settings of the UC660**.
It is calculated [measuring speed x 15 seconds] and is shown in the Time display as soon as the data transfer is started.

The recording ends with

- another click on
- expire of the maximum recording time
- switching off the UC660
- disconnect the USB connection

The total measurement is now displayed. This graphic can be stored, zoomed, measured, and printed.

Example:


VisUC660 Ver 1.2.0 (c) 2015 Unit Control Messtechnik
Info File
RECORD
CH1 Akt Position 1 0,00 -100...100 %
CH2 Akt Position 2 0,00 0...600 bar
CH3 Akt Position 3 0,00 0...600 bar
CH4 Akt Position 4 0,00 0...600 bar
CH5 Akt Position 5 0,00 0...600 bar
CH6 Akt Position 6 0,00 0...600 bar
100
90
80
70
60
50
40
30
20
10
0
0'00.000"
0'03.600"
0'07.200"
0'10.800"
0'14.400"
0'18.000"
0'21.600"
0'25.200"
0'28.800"
0'32.400"
0'36.000"

6. Edit measuring data

- 6.1 Magnify area

Click with the left mouse key on , move the mouse pointer to any point of the graphic, click the left mouse key again an HOLD it, while selecting an area.
Release the mouse key and this area will be magnified.

- 6.2 Total view

Click with the left mouse key on , to display the 100% total view.

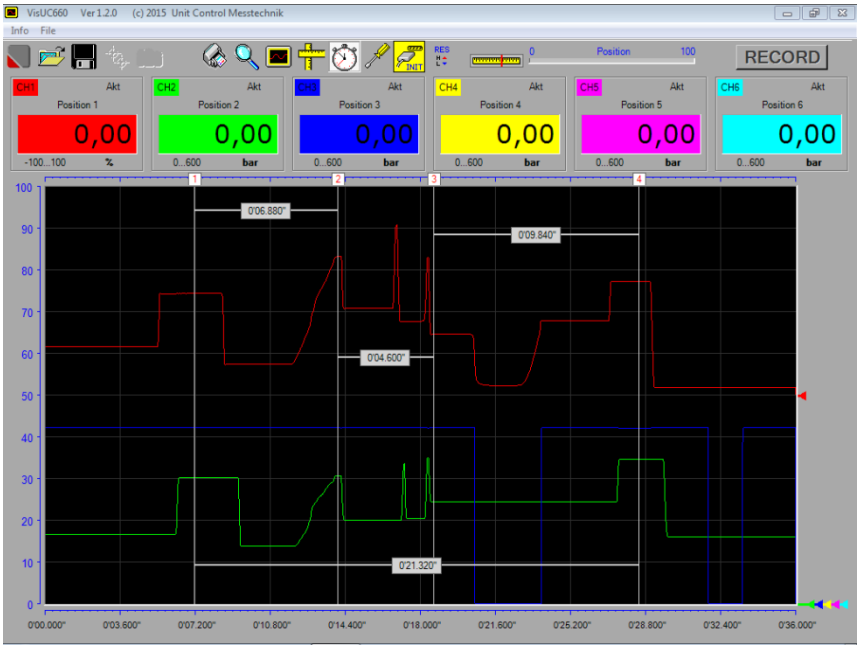
- 6.3 Set and clear measuring lines

A click on initiates the measuring function. Move the cursor to that point of the measurement curve whose value you want to determine. A white vertical line shows the exact position, the numeric displays show the measured values and
the time display shows the time at this position.
This point can be set with the left and be cleared with the right mouse key.
Up to 9 measuring lines can be set. They will be determined in the analysis document.

- 6.4 Show time differences

When more measuring lines are set, the exact time difference
between them can be shown.
Click on . The cursor changes fom the arrow to a hand. Set the cursor on the first measuring line and click the left mouse key. The line flag becomes red.
Select another measuring line and click again. The vertical position of the hand cursor on the second line sets the hight for the time difference label.
Up to five time difference labels can be set.
With a click on the right mouse key, the last difference label will be cleared.

Example:



- 6.5 Fade in and out measurement curves

With a mouse click on the numerical display the appropriate measurement curve will be faded out. With another click on the now empty numerical display the curve will be faded in again. Unused positions that are not configured in the UC660 or that are not configured at the time of a recording cannot be faded in.

- 6.6 Change the position identifier

Click on the position identifier to enter a text. Confirm your input with ENTER.

7. Additional details to a measurement

7.1 Textboxes

Switch to the settings page with . Enter additional details which are stored with the measurement and which are printed in the protocol.

There is a headline, two title lines as well as eight textboxes, whose contents and labels can be free defined. Click on the desired box or label to enter a text. Confirm every input with ENTER.

For saving your inputs for the next program start, check

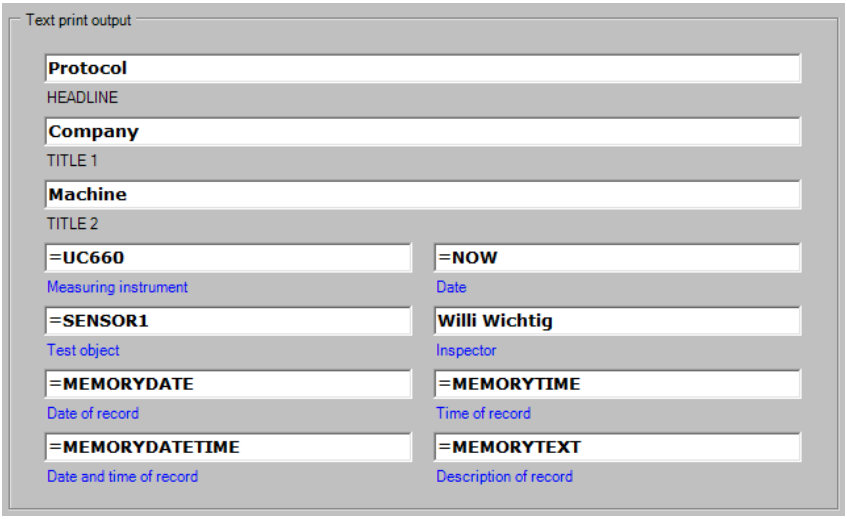
.
When all inputs are done, close this page with click on “Close”.

7.2 Wildcard functions

Wildcard can be put into the textboxes, for automatic inserting special data. These wildcards start with a “=” symbol and consist from capital letters only. There are thwe following wildcards:

=NOW	inserts the current date and the current time
=UC660	inserts the term UC660 with serial number and software version of the measuring device
=SENSOR1 To =SENSOR 2	inserts the paramter of the appropriate sensor with serial number in case the sensor is provided with an identification chip and its values were taken over
=MEMORYDATE	inserts the date of the recording
=MEMORYTIME	inserts the time of the recording
=MEMORYDATETIME	inserts the date and the time of the recording
=MEMORYTEXT	inserts the short description that was entered with a recording in the UC660. Requires the transfer of a memory page from the UC660.

Example:


Text print output
Protocol
HEADLINE
Company
TITLE 1
Machine
TITLE 2
=UC660
Measuring instrument
=NOW
Date
=SENSOR1
Test object
Willi Wichtig
Inspector
=MEMORYDATE
Date of record
=MEMORYTIME
Time of record
=MEMORYDATETIME
Date and time of record
=MEMORYTEXT
Description of record

8. Save and load measurement curves

- 8.1 Save measurement curves

Click on oder File -> Save to save the current measurement, the dialog opens. Navigate to the folder where you want to save the measuring, choose a name for this file and select the file type:

The *.660 type
Files with the extension .660 save the complete data set and can be opened any time with the VisUC software.

The *.csv type
Files with the extension .csv can only be read with editors and Excel. They cannot be opened with the VisUC software. Please consider this and store the data additionally as .660 type.

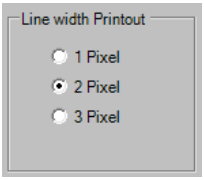
- 8.2 Load measurement curves

Click on or File -> Open, to load a measurement, the dialog opens.Navigate to the appropriate folder and double click the .660 file that you want to open.

9. Print the measurement protocol

- 9.1 Change the line width for the print out

Switch to the settings page with and select the desired pixel size.



Selecting the pixel size for the
Measurement curves in the print out.

Close this page with click on “Close”.

- 9.2 Print as PDF

For printing click on or File -> Print, the PDF reader opens with the document.
With the features of the PDF reader, this document can be edited.

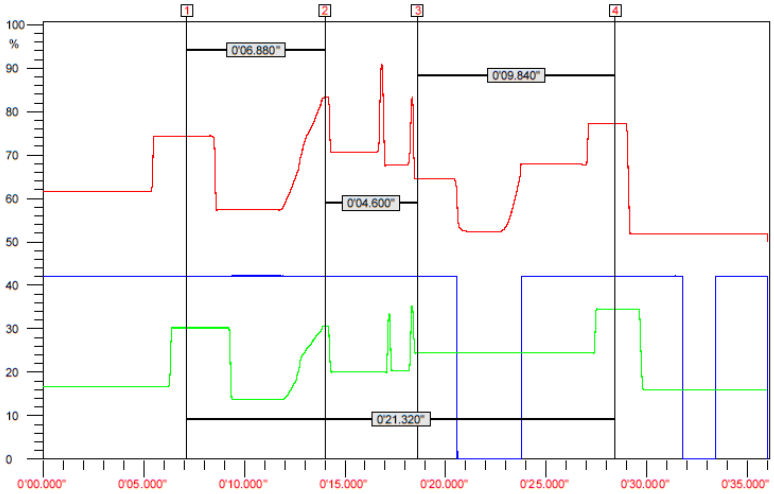
Example:

Protocol

Company

Machine

UC 660 Mobil, Serial number: 490660011, Version: 2.-4.1 Measuring instrument	24.04.2017 10:36:31 Date
-100...100 %, Serial number: 000049003439 Test object	Willi Wichtig Inspector
24.04.2017 Date of record	09:53:25 Time of record
24.04.2017 09:53:25 Date and time of record	 Description of record



Position	Time	CH1 Akt Position 1 -100...100 %	CH2 Akt Position 2 0...600 bar	CH3 Akt Position 3 0...600 bar	CH4 Akt Position 4 0...600 bar	CH5 Akt Position 5 0...600 bar	CH6 Akt Position 6 0...600 bar
1	0'07.120"	48,61	181,33	252,72	-149,85	-150,06	-149,99
2	0'14.000"	66,49	183,83	252,58	-149,85	-150,06	-149,96
3	0'18.600"	29,08	146,44	252,91	-149,85	-150,06	-149,99
4	0'28.440"	54,54	207,39	252,54	-149,85	-150,06	-149,96

10. Transfer memory pages from the UC660 to the PC

With established USB connection click on to enter the settings page.
Click on to retrieve the memory content of the UC660.

Select a memory page and click on to transfer the data. When finished, close this page and the measurement will be shown.

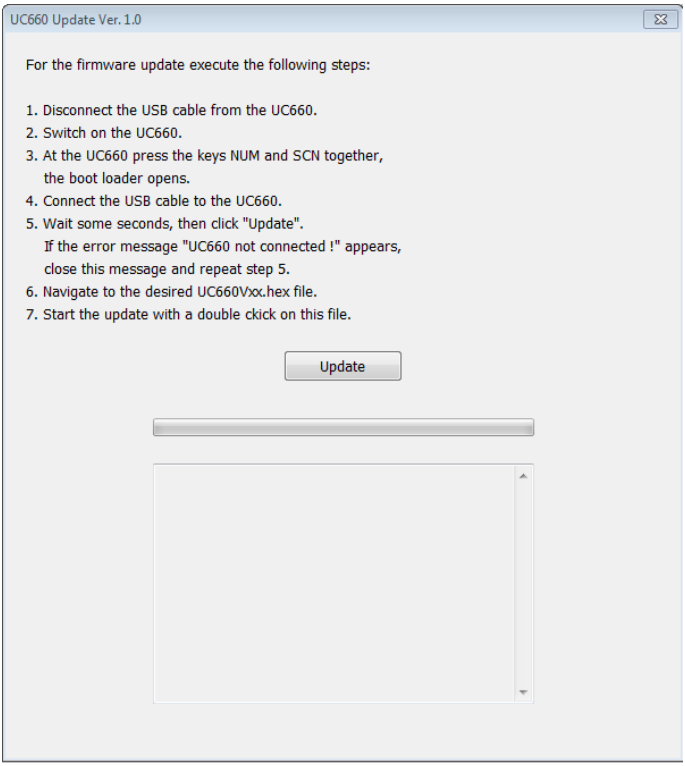
- ## 11. Other settingsungen

- 11.1 Change the menu language

Click on to enter the settings page and select the menu language.

12. Firmware update for the UC660

Click on to enter the settings page.

Click here to invoke the Update program

A page opens, follow the instructions for the update.