Functional description

Synchronisation as per DCF-77

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Comments on the manual

We welcome your comments. In the event that anything in this manual seems unclear, please let us know and send an EMAIL to: info@janitza.de

Follow the instructions in the operating manual when installation and operating the device!

Meaning of the symbols

The following pictograms are used in the operating manual at hand:

Dangerous voltage!
Danger to life or risk of serious injury. Disconnect system and device from power supply before beginning work on them.

Caution!
Please follow the documentation. This symbol warns of possible dangers that can arise during installation, commissioning and use.

Note

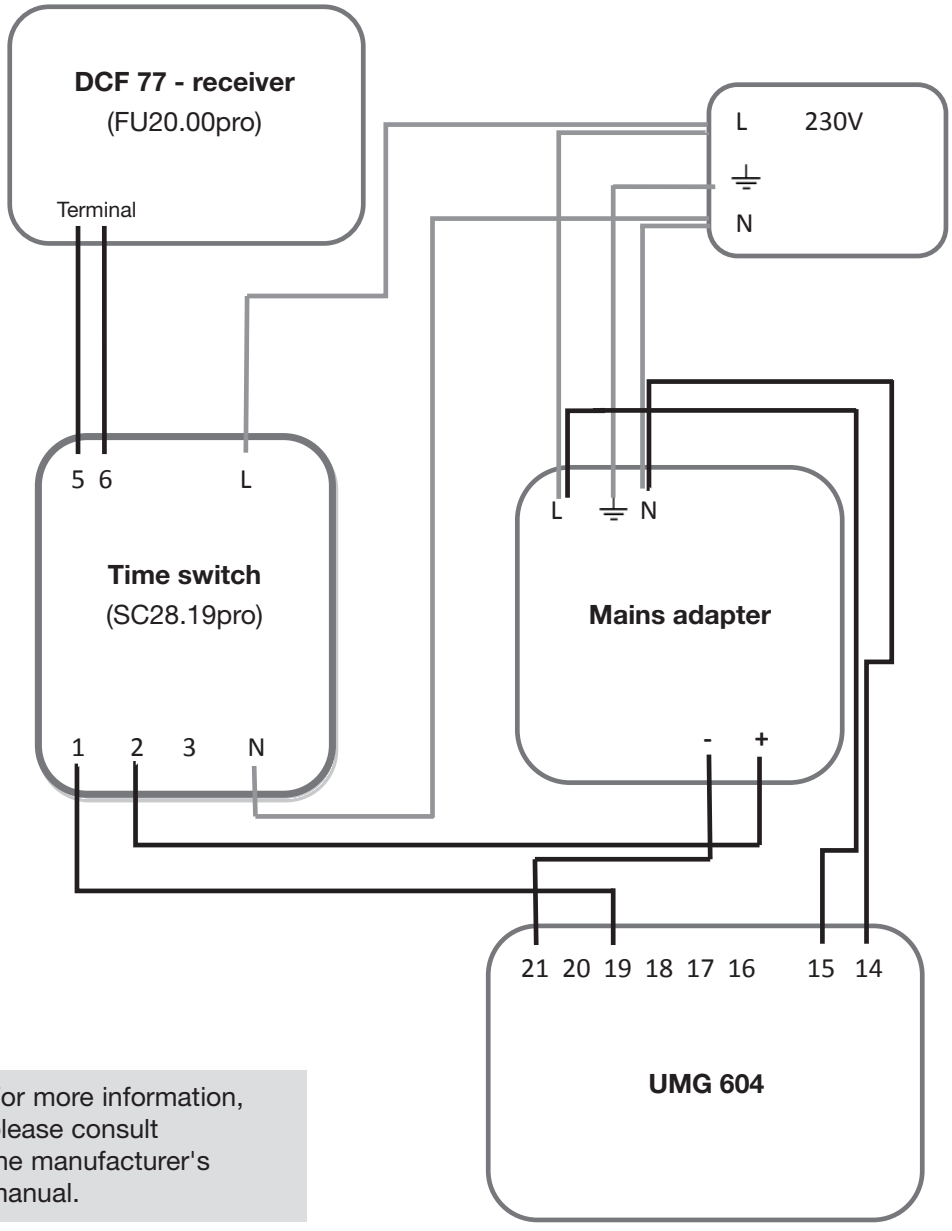
Mode of operation

- The DCF-77 receiver is connected to the pulse transducer. For each freely programmable full hour, the pulse transducer transmits a signal to the UMG, which thereupon resets its internal clock to the last or next full hour.

Note
The prerequisite for correct functioning is that the current date is not preset with the current time.

Putting into service

- Wiring



For more information, please consult the manufacturer's manual.

Installing the app

- To install the app, start the GridVis software. Click "Extras / Install app" and select the app via the button "... ". Then select the device for installation and choose a program location.

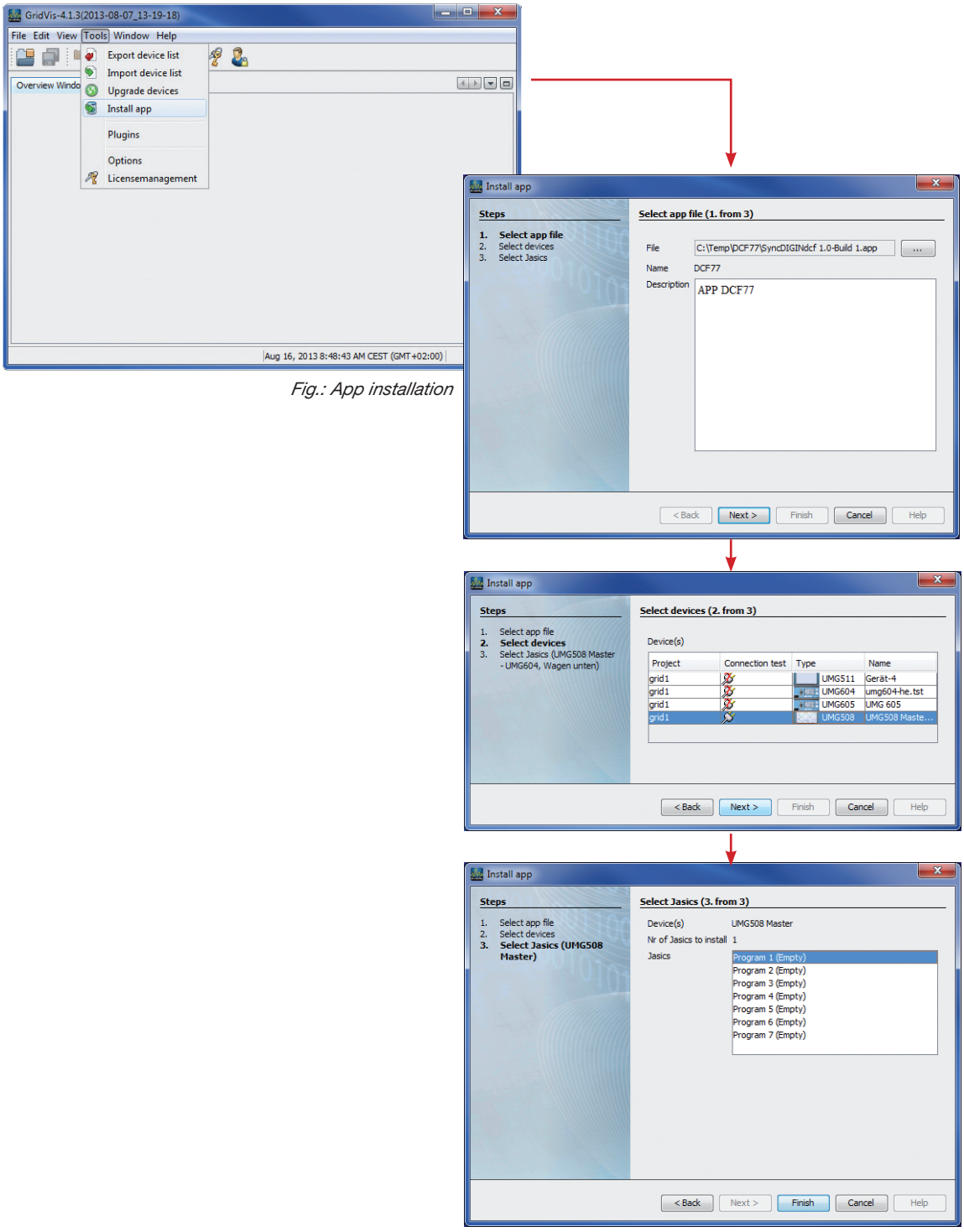


Fig.: App installation

Checking the clock

In order to ensure smooth synchronisation, the time must be checked before the pulse transducer is programmed.

- Select the respective device in the GridVis projects window and then start the configuration via the "Configure" button in the navigation window (*Fig. Device overview*). If the projects and/or navigation window is closed, then the required window can be opened via the menu item "Window/Projects" and/or "Window/Overview!"

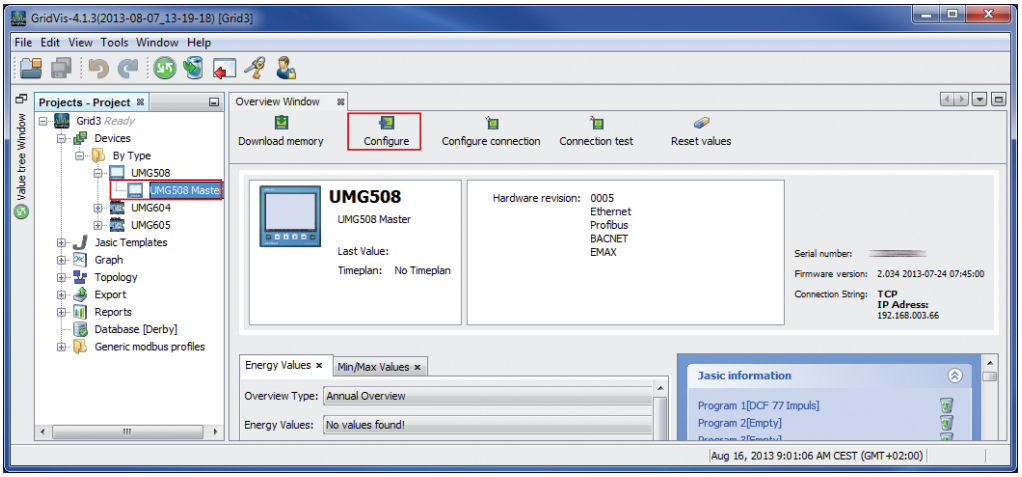


Fig.: Device overview

- You will find the deviation of the time between the UMG and the PC in seconds under the menu item "Time" for the device configuration. The deviation may not be greater than +- 1700 seconds.
- Also check that your PC's time display is correct. You can find out the precise time from the display of the timer. If this approximately coincides with your PC's clock time, you can synchronise the UMG time with that of the PC time (this step is mandatory is the deviation is greater than 1700 seconds). To do this check the "Enable time setting" checkbox and then click "Transmit".

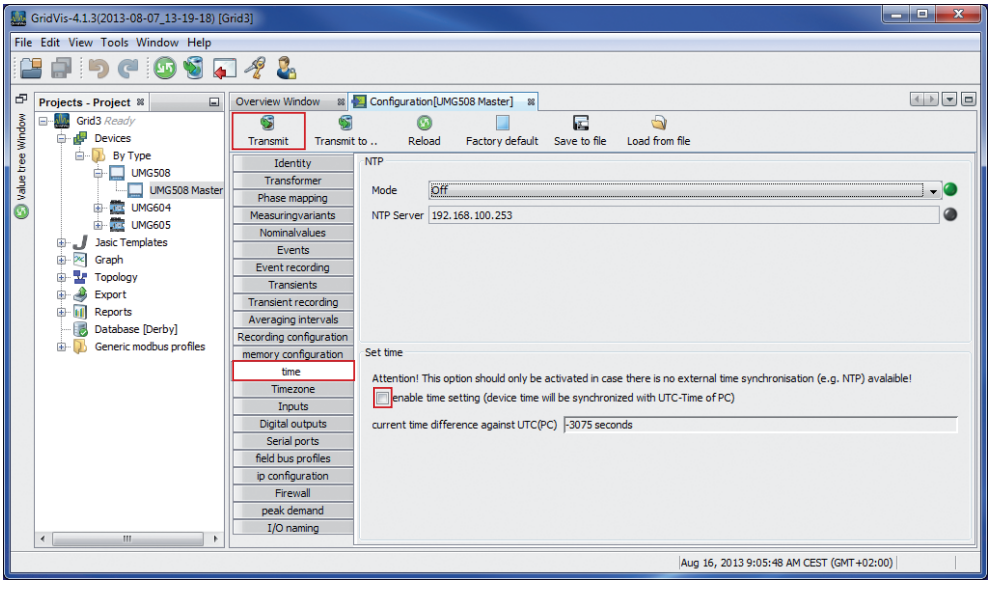


Fig.: Device Configuration

Programming the pulse transducer

- Fold up the red bar on the SC28.19 time pro and press the "M" button to open the menu.
  1. Select the menu time "Program". Press "OK"
  2. Go to the "New switch time". Press "OK"
  3. Select a channel (default "A"). Press "OK"
  4. Select the menu time "Pulse". Keep pressing "+" until the decimal appears. Then press "OK"
  5. Press "OK" (default)
  6. In this menu item, you enter the duration of the pulse.
     Leave the minutes set to 0. Press "OK" Set the seconds to 1.
     Press "OK"
  7. Select the desired dates on which updates should be performed. For each day press "OK".
  8. Now enter the time, with which the UMG is to be synchronised. Only enter **full hours**. Otherwise, the UMG will be **incorrectly** synchronised. Press "OK"
  9. Press "OK"
  10. Repeat points 1-9, until all desired synchronisation points have been set.

Test run

- Select the respective device in GridVis in the projects window.
  If the projects and/or navigation window is closed, then the required window can be opened via the menu item "Window/Projects" and/or "Window/Overview!"
- Click the navigation window of the corresponding device on the program DCF-77 in the area "Jasic information".

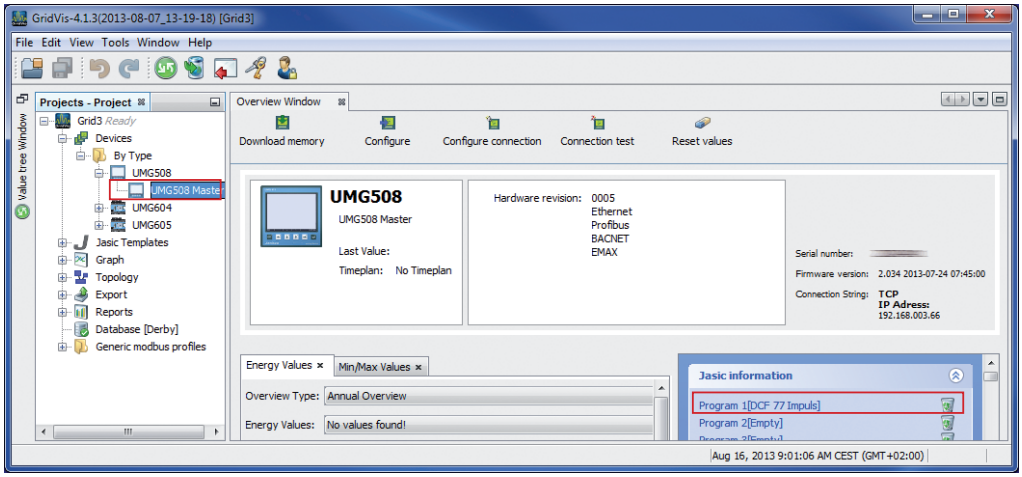


Fig.: Device Overview

- Activate the debug mode via the "Debug Log" button and check the checkbox under "Enable Debug Log" with a mouseclick.

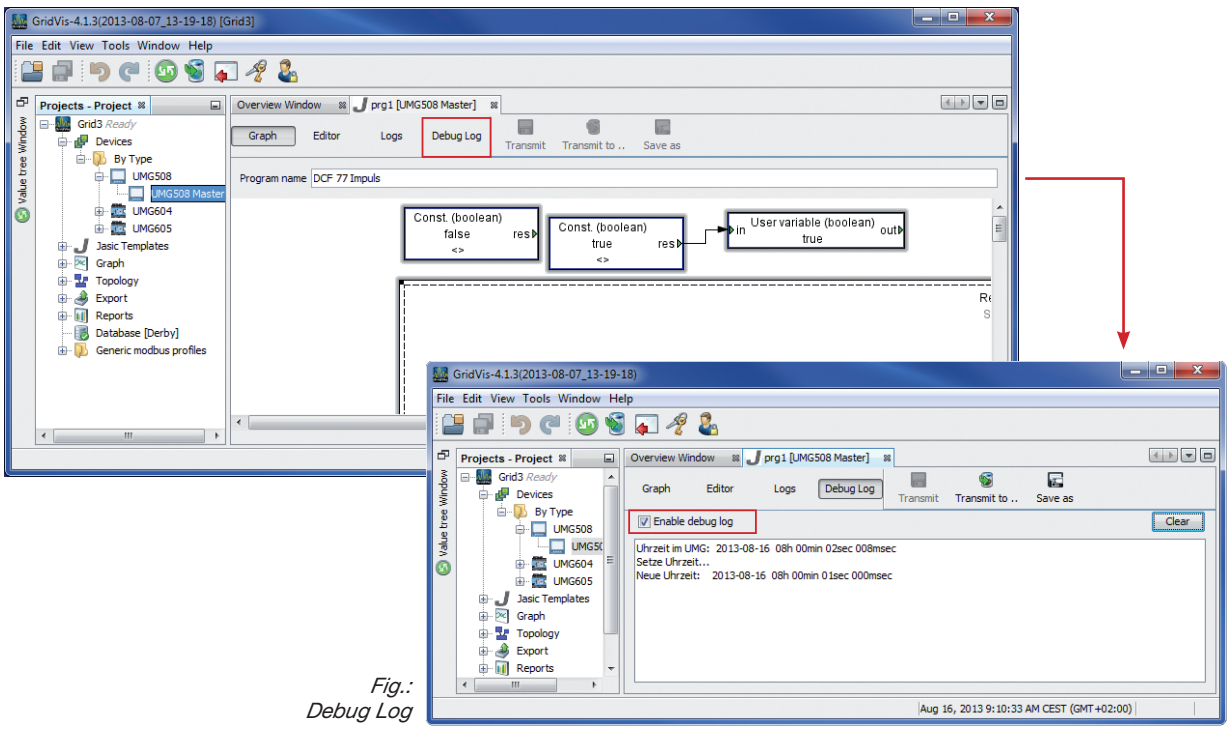


Fig.: Debug Log

- The Debug output should take place in similar form:

```
Time in UMG:  2013-08-16 08h 08min 02sec 008msec
Set time...
New time:  2013-08-16 08h 00min 01sec 000msec
```