

## Service Instruction for Firmware Update to Version 2.06

This document describes the procedure for updating the UNIDOS *webline* (T10021, T10022, and T10023) firmware from versions  $\geq 2.0$  to version 2.06.

### Safety Information

#### CAUTION

Improper execution of service tasks.

#### Equipment Damage!

Ensure that the service instruction described below is only carried out by service personnel.

Please observe the safety information provided in the UNIDOS *webline* user manual.

Should nevertheless the equipment be damaged or the update not properly be completed, please contact PTW Technical Service.

### Information Concerning the Update

- The update program (**UNIDOSweblineUpdater.exe**) is only intended for units with firmware versions  $\geq 2.0$ .
- The update can only be performed via the RS232 interface of the device.
- Service personnel are able to complete the update in approx. 30 minutes.

### Requirements

#### Hardware

- **UNIDOS *webline*** (T10021, T10022 and T10023) with firmware version  $\geq 2.0$  (CPU Board)
- power cord
- RS232 cable (sub-D, 9/9-pole, f/m)
- **PC** with Windows XP / Vista / 7 / 8 operating system
  - free RS232 interface

If the PC does not have an RS232 interface, a USB-RS232 interface converter (LINDY "USB Serial RS232 Converter 9pin" Part No. 42811) can be used. This interface converter can also be obtained from PTW-Freiburg. PTW No. L242064.

#### Software

- File **UNIDOSweblineUpdater.zip**
- PC user with administrator rights
- **No** spaces are allowed in the name of the working directory.

#### CAUTION

Influences by other software.

#### Malfunction!

If software programs other than **UNIDOSweblineUpdate.exe** or programs approved by PTW-Freiburg are installed on the PC, PTW-Freiburg cannot be held liable for computer malfunctions resulting from this fact. Furthermore, PTW-Freiburg cannot guarantee the proper functioning if third-party software programs were previously installed on the PC and were not entirely removed.

**NOTE**

While the firmware is being updated, the UNIDOS *webline* must not be switched off or disconnected from the power line. The connection with the PC must not be interrupted.

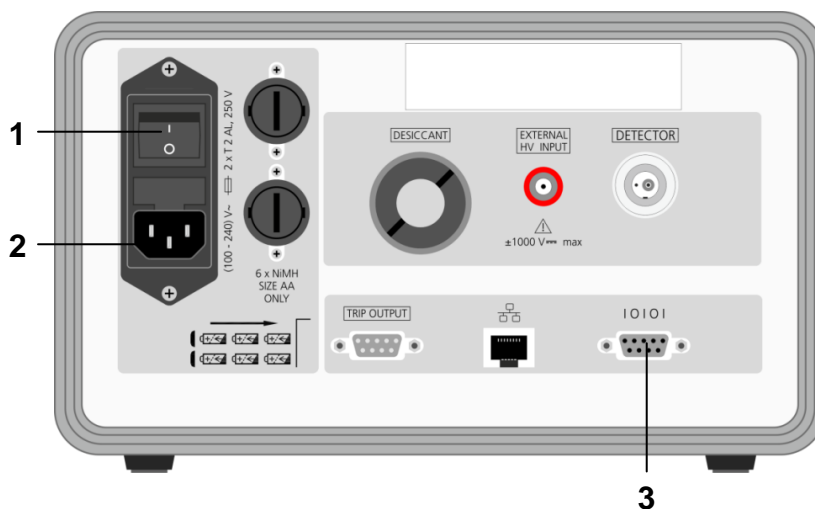
Only operations requested by the program or this instructions may be executed.

All messages on the display of the UNIDOS *webline* must be ignored.

Switch off antivirus software, energy saving modes, and screen savers in order to avoid problems during the update.

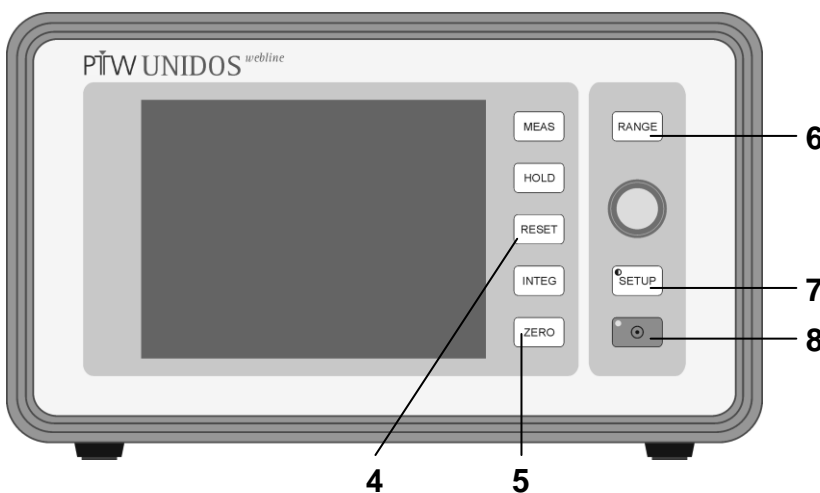
## Performing the Update

1. Disconnect any detectors from the UNIDOS *webline*.
  2. Connect a power cord to socket (2) and connect the UNIDOS *webline* to the power line. The UNIDOS *webline* must be connected to the power line during the update.
  3. Switch on the UNIDOS *webline* by means of the on-off switch (1) on the rear panel.
- The UNIDOS *webline* is starting in shutdown mode.



1	On-off switch	I 0
2	Mains voltage supply	(100 - 240) V~
3	RS232 interface	10101

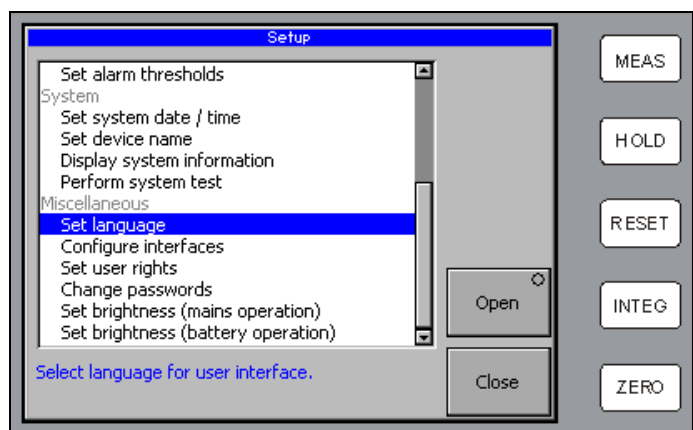
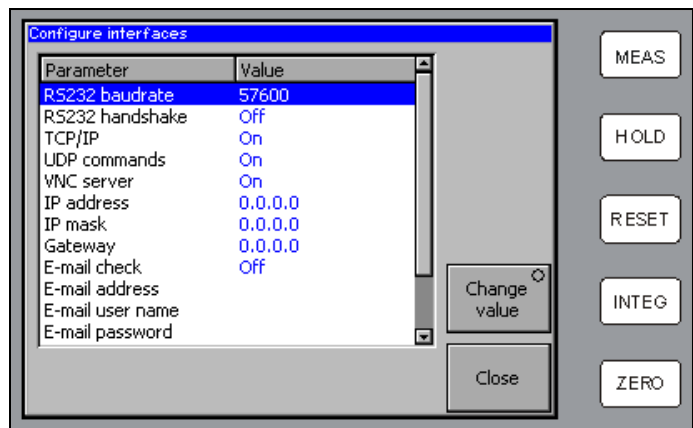
4. Press the Power key (8) to switch the UNIDOS *webline* to the normal operation mode. Watch the displayed information: the firmware version number must be  $\geq 2.0$ .
- The PTW logo and the firmware version number will be displayed for a few seconds. Eventually, the measured value display will be shown.
5. Use an RS232 cable to connect socket (3) of the UNIDOS *webline* and the PC.



4	Device control key	RESET
5	Device control key	ZERO
6	Measuring range key	RANGE
7	Key to display the setup menu	SETUP
8	Power key with LED	⊙

## 6. Verify the following device settings:

- RS232 baud rate "57600"  
RS232 handshake "Off"  
For adjustment of the RS232 baud rate and the RS232 handshake, refer to the "Interfaces" section in the UNIDOS *webline* user manual.
- Menu language "English"  
For selection of the menu language, refer to the "Language" section in the UNIDOS *webline* user manual.



## 7. Start Windows on your PC.

## 8. Log on as PC administrator.

## 9. Close all active applications.

10. Copy the **UNIDOSweblineUpdater.zip** file to a local working directory on your PC. Unzip the file in this directory.

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11. Start the update with the file:  
**UnidosWeblne\_Updater.exe.**

12. Select the COM port (e. g., **COM1**)  
where the UNIDOS<sup>weblne</sup> is connected.

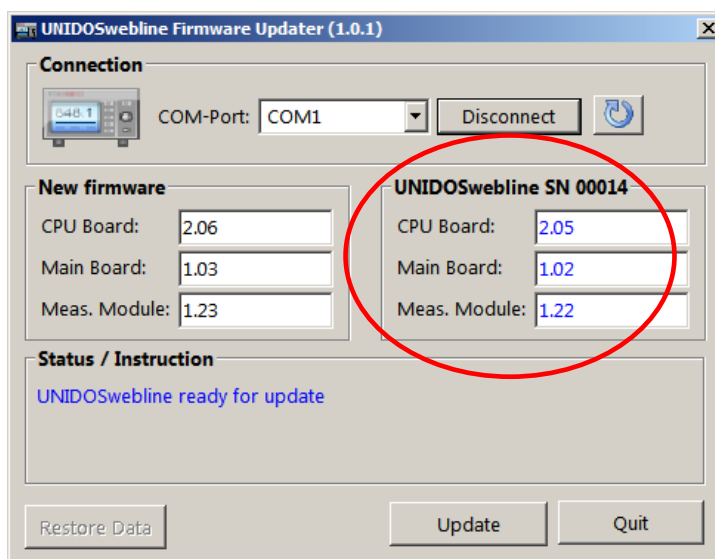
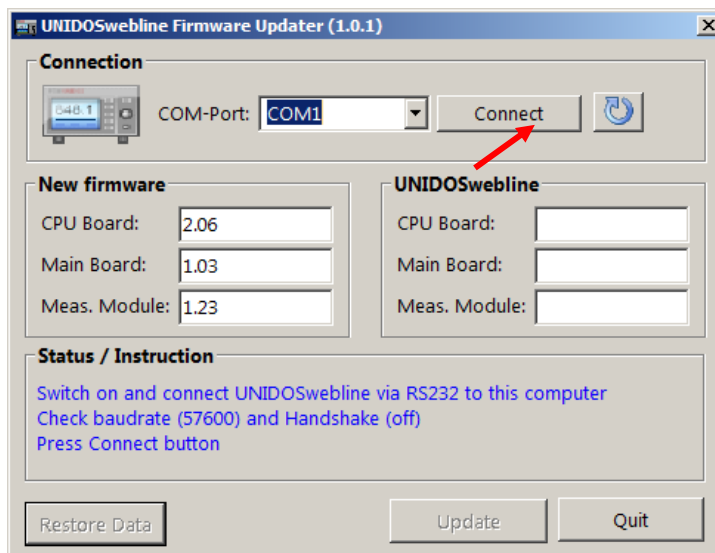
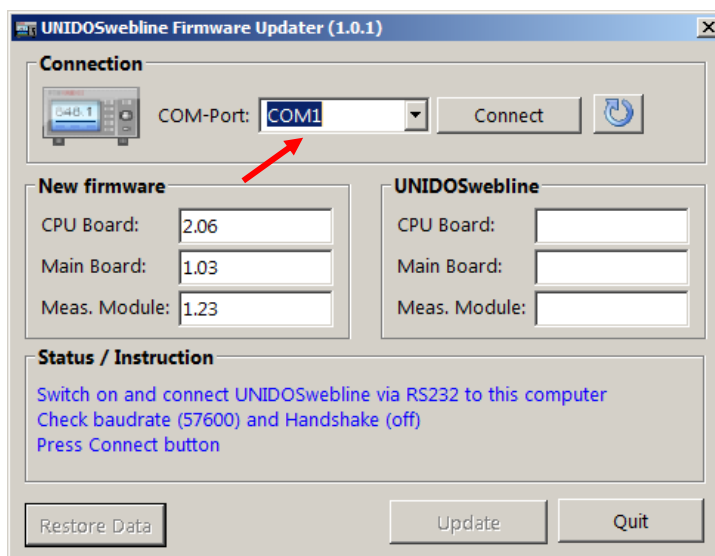
13. In the program, click the *Connect* button.

→ The program will establish the connection, read the serial number and the version number of the firmware installed in the device and display the data in the *UNIDOSweblne* area. Only firmware versions identified as obsolete (version number displayed in blue) will be updated; this means that you may skip some of the operating steps described below.

→ The UNIDOS<sup>weblne</sup> keyboard will be locked. Individual keys will have to be pressed during the update, and the keyboard will be briefly unlocked for this purpose.

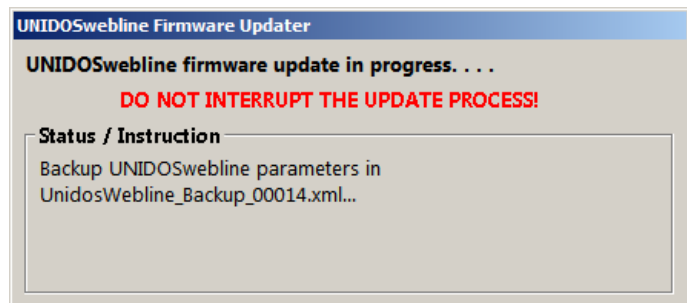
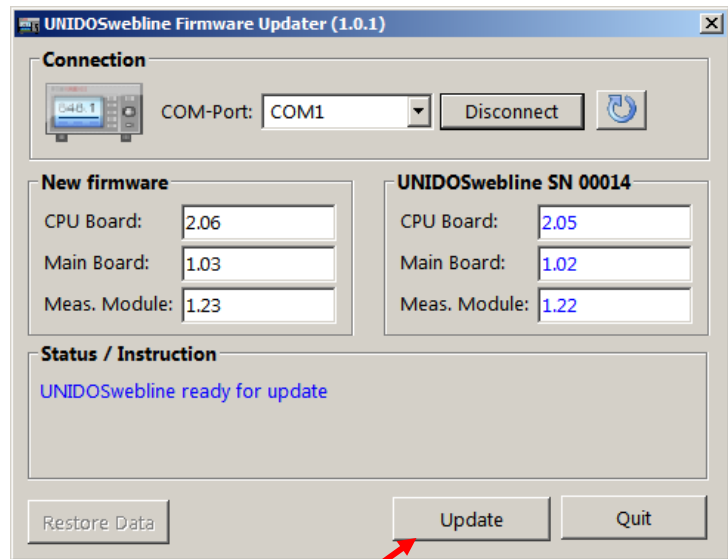
Once the program has been closed or the PC disconnected from UNIDOS<sup>weblne</sup> by means of the *Disconnect* button, the keyboard will be re-enabled.

→ The Status / Instruction area indicates that the UNIDOS<sup>weblne</sup> is ready for the update and the *Update* button is activated.



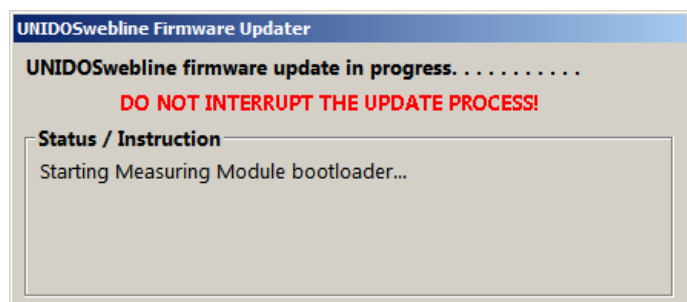
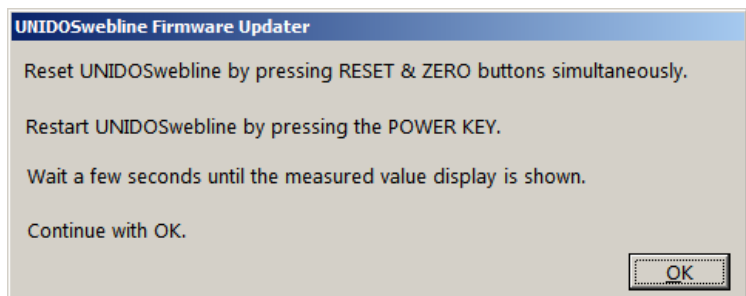
14. In the program, click the *Update* button.

- Each step of the update takes a few minutes. The update routine must not be disturbed or interrupted.
- First of all, a backup file with all important parameters is created (file name includes serial number of the device). At the end of the update, these parameters will be written back to the device.
- **All messages on the display of the UNIDOS<sup>weblne</sup> must be ignored.**



15. Follow the prompts on the PC monitor:

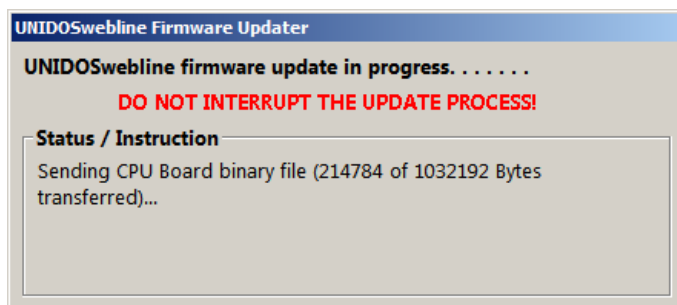
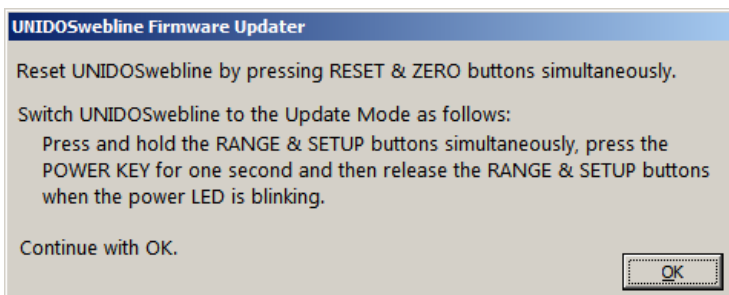
- Simultaneously press the RESET (4) and the ZERO (5) keys to perform a reset at the UNIDOS<sup>weblne</sup>.
- The display of the UNIDOS<sup>weblne</sup> goes dark.
- Press the Power key to start the UNIDOS<sup>weblne</sup>.
- Wait a few seconds until the measured value display is shown.
- Press *OK* to continue the update.
- The program will display the update progress.
- If wrong keys are pressed, repeat the reset and carry out the steps indicated in the dialog.



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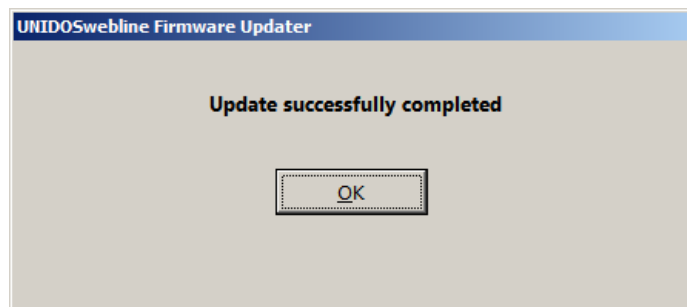
16. Follow the prompts on the PC monitor:

- Simultaneously press the RESET (4) and the ZERO (5) keys to perform a reset at the UNIDOS *webline*.
  - Switch the UNIDOS *webline* to the update mode as follows:  
Simultaneously press the RANGE (6) and SETUP (7) keys and hold them down. Press the Power key for one second.  
Wait for the Power LED to start blinking before you release the RANGE and SETUP keys.
  - Press OK to continue the update.
- When the UNIDOS *webline* display remains dark and the Power LED blinks, the switchover to the update mode was successful.
- When the measured value display is shown, the switchover was not successful. Again, perform a reset and carry out the steps indicated in the dialog.
- The program will display the update progress.

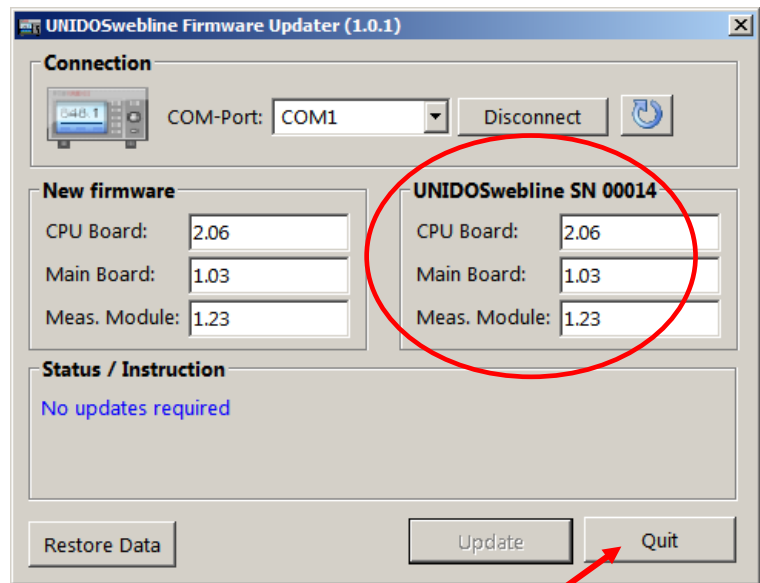


→ The program will indicate the successful completion of the update.

17. Click OK to confirm the message.



→ The program will indicate the new firmware versions of the UNIDOS<sup>weblne</sup>.



18. Terminate the program with the *Quit* key.

→ The program window will be closed.

→ The UNIDOS<sup>weblne</sup> keyboard will be unlocked.

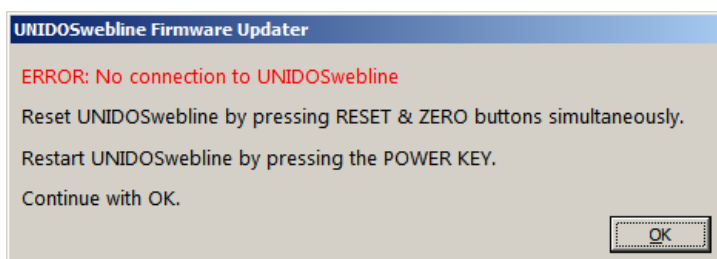
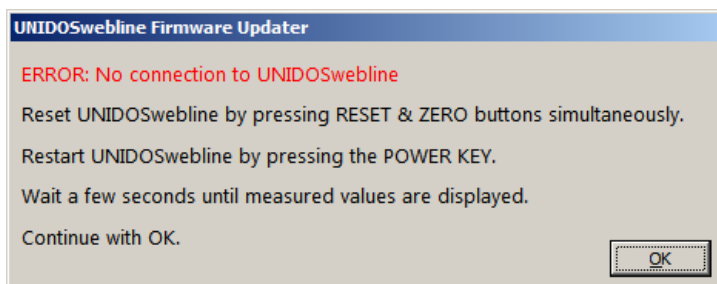
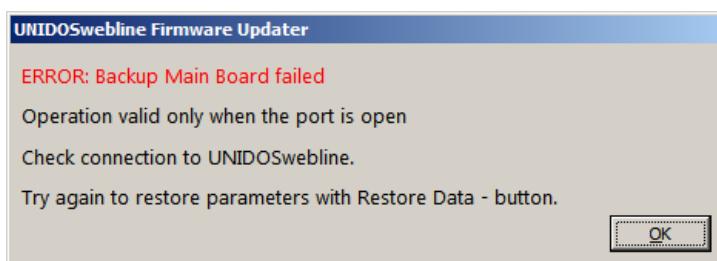
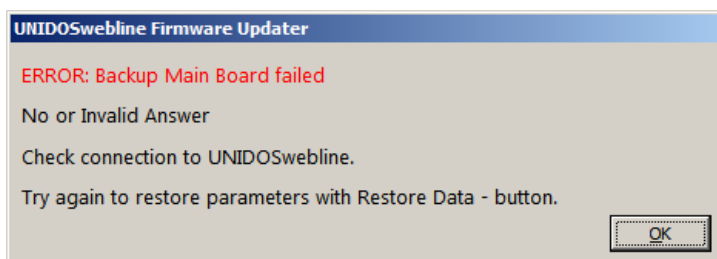
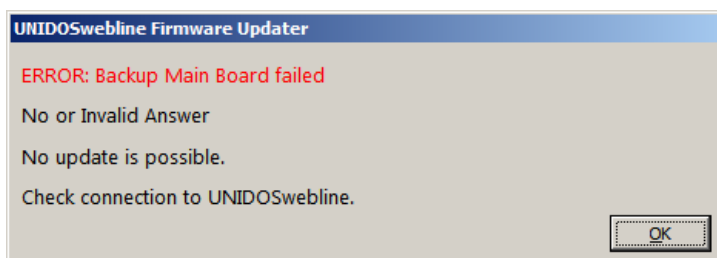
19. Switch the UNIDOS<sup>weblne</sup> off.

20. Remove the RS232 cable from the UNIDOS<sup>weblne</sup> and from the PC.



## Error Messages

- If the program detects communication errors during the update, e. g. because UNIDOS *webline* is switched off with the on-off switch, because the power supply is interrupted, or because the RS232 connection between the PC and the UNIDOS *webline* is disconnected, different error messages will be displayed, which depend on the program status (refer to the illustrations at right).
  - Check whether the UNIDOS *webline* is switched on.
  - Check whether the UNIDOS *webline* is supplied with line power.
  - Check whether the RS232 connection between the PC and the UNIDOS *webline* exists (connectors of the RS232 cable are plugged in).
- With some of the communication errors, the program will restart as soon as the connection is re-established. Therefore, please wait approx. 15 seconds.
- If the program is not resumed, follow the instructions given in the error message.



<ul style="list-style-type: none"> <li>– If the PC is switched off or the program is aborted via the Task Manager, the update will not be successful either. The update <b>must</b> be terminated to ensure that the UNIDOS <i>webline</i> can be started correctly.</li> <li>• Switch the UNIDOS <i>webline</i> on.</li> <li>• Restart the PC and the program.</li> <li>• Connect the PC and the UNIDOS <i>webline</i> by pressing the <i>Connect</i> switch.</li> </ul> <p>→ Start the update. The program detects the aborted update attempt and automatically resumes the update routine. The program will indicate the successful completion of the update.</p>	
<ul style="list-style-type: none"> <li>– If the UNIDOS <i>webline</i> displays an error message when restarted or if the display remains dark after activation of the Power key, please contact PTW Technical Service.</li> </ul>	

Update performed by (name): \_\_\_\_\_ date: \_\_\_\_\_ signature: \_\_\_\_\_

#### NOTE

Store this service instruction with the UNIDOS *webline* documentation as proof of the update.



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