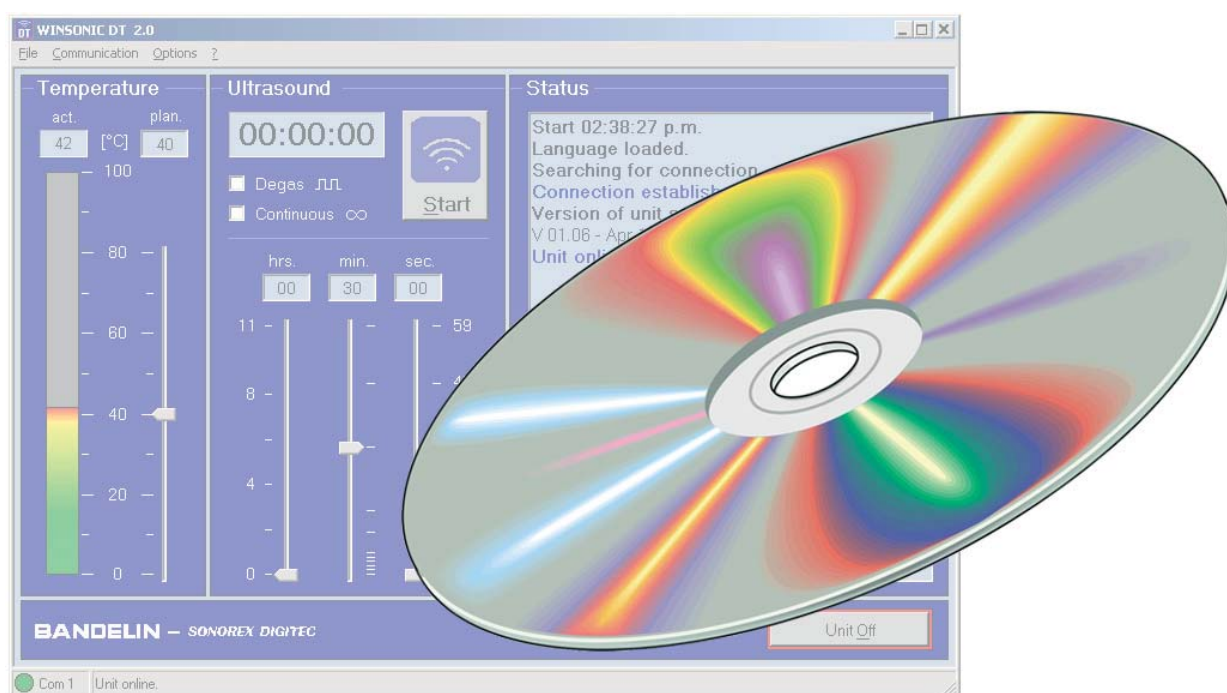


PC Program WINSONIC® DT 2.02



for remote control of
ultrasonic baths
SONOREX DIGITEC - RC

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General

The program and the accessories are to be used in accordance with the user instructions and/or the product information.

Basic knowledge about personal computers (PCs) and the Windows operating system is required for the application and use of this program. Information on operation of the PC and the operating system should be found in the corresponding manuals.

These instructions also assume that the operating system is already installed in the PC and that the configuration is working flawlessly.

The instructions are part of the scope of delivery and should be stored in the vicinity of the program for later reference. This also applies if possession of the program is transferred elsewhere.

Before the program is operated, these instructions should be read carefully and completely in order for the user to become familiarised with all functions.

The warnings and safety precautions (chapter 1.5) should always be heeded during use.

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If Service is required, please contact the specialist dealer in charge or the manufacturer.

Symbols used:




Symbol	Significance	Explanation
	Important	Identifies information that is important for execution.
	Note	Identifies information provided for explanatory purposes.
	Instructions	Identifies instructions that must be followed in the described sequence.

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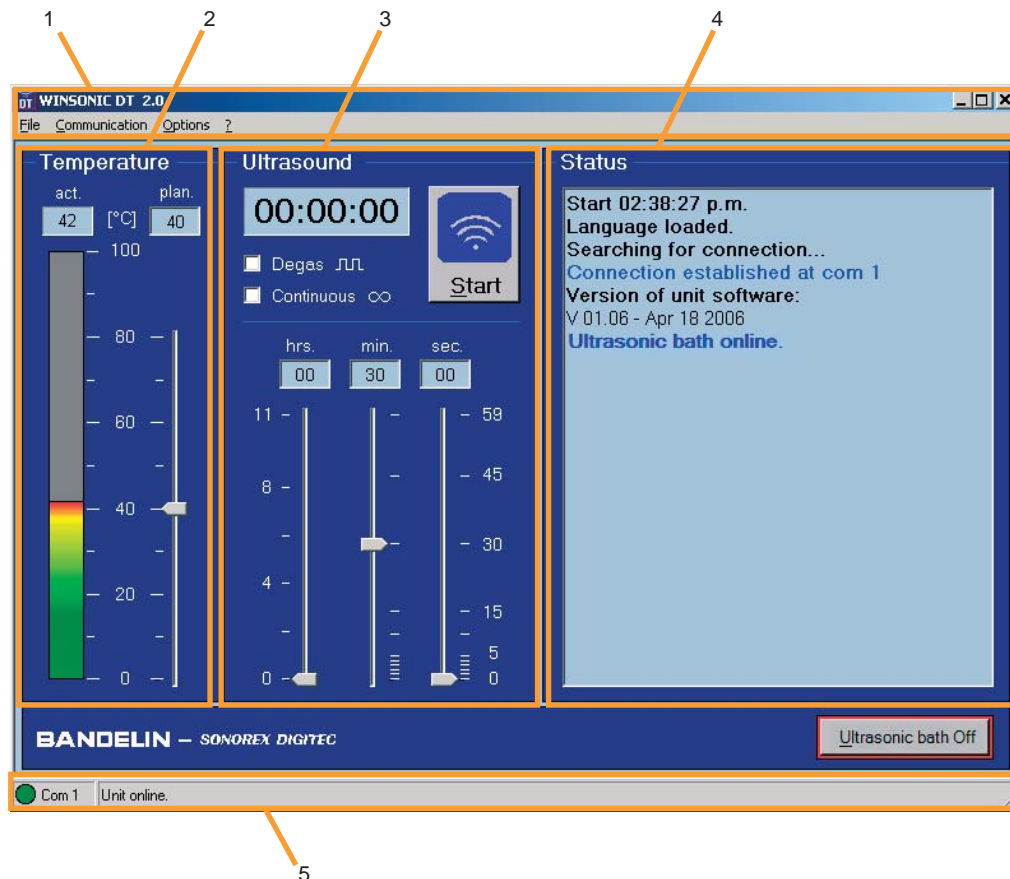
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1 Product description

Program for the remote control of SONOREX DIGITEC RC ultrasonic baths.

Product features:

- Menu bar (1) for easy control and access to additional functions
- Display of current bath temperature and input option for desired bath temperature (2)
- Display of current sonication time and input option for desired sonication time (3)
- Status window (4) and status bar (5) to monitor the ultrasonic bath.



1.1 Mode of operation

The SONOREX DIGITEC RC bath and the program are connected via an infrared interface, through which a reliable potential separation is guaranteed.

The program does not differentiate between remote control and remote monitoring modes, i.e. it is possible to enter the settings similarly on both the ultrasonic bath and in the program:

- Changes made on the ultrasonic bath are transmitted to and accepted by the WINSONIC DT program,
- Changes made through the program are transmitted to and saved by the ultrasonic bath.

1.2 Purpose

The WINSONIC DT remote control program is solely intended for the remote control of SONOREX DIGITEC RC ultrasonic baths.

All operating sequences and settings for the following ultrasonic baths can be comfortably controlled and monitored through a graphic user interface:

- DT 102 H-RC
- DT 255 H-RC
- DT 510 H-RC
- DT 514 BH-RC

The protocol function allows for documentation of the sonication process, e.g. as part of quality assurance.

1.3 CE conformity

Ultrasonic baths are declared as medical products and satisfy the CE marking criteria for European directives.

1.4 System requirements

For the WINSONIC DT program, a PC with the following system requirements is needed:

Operating system:

- Microsoft Windows 2000 (service pack 3 or higher) or
- Microsoft Windows XP (service pack 2 or higher)
- Microsoft Windows 7 (service pack 1 or higher)
- Microsoft Windows 8
- Microsoft Windows 10

Free hard disk space:

- approx. 5 to 100 MB (depending on the required program components)

Hardware:

- Processor with a minimum of 400 MHz, 128 MB RAM
- free RS 232 Standard COM interface (COM 1 ... COM 16)
- CD-ROM drive
- Mouse and keyboard
- Monitor with a resolution of 800 × 600 pixels or higher
- Infrared adapter IR 1



Note:

The infrared adapter IR 1 is required for connection between the PC and the SONOREX DIGITEC RC ultrasonic bath. The IR 1 adapter does not require its own driver since one is already included in the WINSONIC DT program. Installation of the driver offered by the manufacturer of the IR 1 results in conflicts that impede the proper functioning of the WINSONIC DT.

1.4.1 Required software components

The following software components should already be present or should be pre-installed, to be able to run the WINSONIC DT program:

- Microsoft Framework 1.1 or higher
- Microsoft Internet Explorer 5.01 or higher (approx. 40 MB); if needed, Internet Explorer 6.0 can be installed from the CD supplied.

During the installation of WINSONIC DT, the installation program may prompt for installation of the aforementioned components, see also chapter 2.2.

Contents of the installation CD:

Folder/File	Description
Setup_WINSONIC_DT_2.02.exe	Set-up file for WINSONIC DT, version 2.02
\Tools\dotnetfx1_1.exe	Installation file for Microsoft.NET Framework 1.1
\Tools\ie6	Installation files for Microsoft Internet Explorer 6.0

1.5 Warning and safety precautions

- During active connection, the ultrasonic bath can be switched off at any time by pressing the "On/Off" button on the ultrasonic bath, or the "Ultrasonic Bath Off" button in WINSONIC DT (!)
- The ultrasound output can be halted at any time by pressing the "Start/Stop" button on the ultrasonic bath.
- In the event of broken or faulty communication, the ultrasonic bath will shut down automatically after 30 seconds for safety reasons.
- Always ensure that there is sufficient sonication fluid in the ultrasonic bath. The fill level is not monitored by the WINSONIC DT program!

In addition, the safety precautions in the SONOREX DIGITEC and SONOREX DIGITEC RC user instructions are applicable.

2 Preparation

Carefully unpack the program CD and accessories and inspect them for completeness and/or possible transportation damages. If any damage or defects are found, these must be immediately notified in writing to the transportation company and to the supplier.

2.1 Scope of delivery

1 Program CD

1 Infrared adapter IR 1

1 Instructions for Use manual

Additional accessories according to order - see delivery slip

2.2 Installation of the program

Start installation of WINSONIC DT by double-clicking on the "Setup_WINSONIC_DT_2.02.exe" file.

The installer will guide you with the appropriate instructions through the installation process. If any components are missing, the respective message will appear.

After installation of the missing components, the installation process should be repeated, if necessary.



Notes:

- Administrator rights are required for installation.
- If this is an update, the older version must be uninstalled beforehand.
- For installation of the program, it is recommended that the program components be installed in the sequence indicated in section 1.4.1. The installation files included with delivery can be used for this purpose.

2.3 Positioning of the infrared adapter

- Connect the IR 1 infrared adapter to an RS 232 interface (COM 1 ... COM 16) on the PC.
- Next, place the adapter to the right of the SONOREX DIGITEC RC ultrasonic bath, at a distance of 1 – 10 cm.
The infrared interface in the ultrasonic bath emits continuously toward the right, the optimal distance between the IR 1 and the ultrasonic bath is approx. 7 cm.



Additional information can be found in the user instructions for the ultrasonic baths.

Notes:

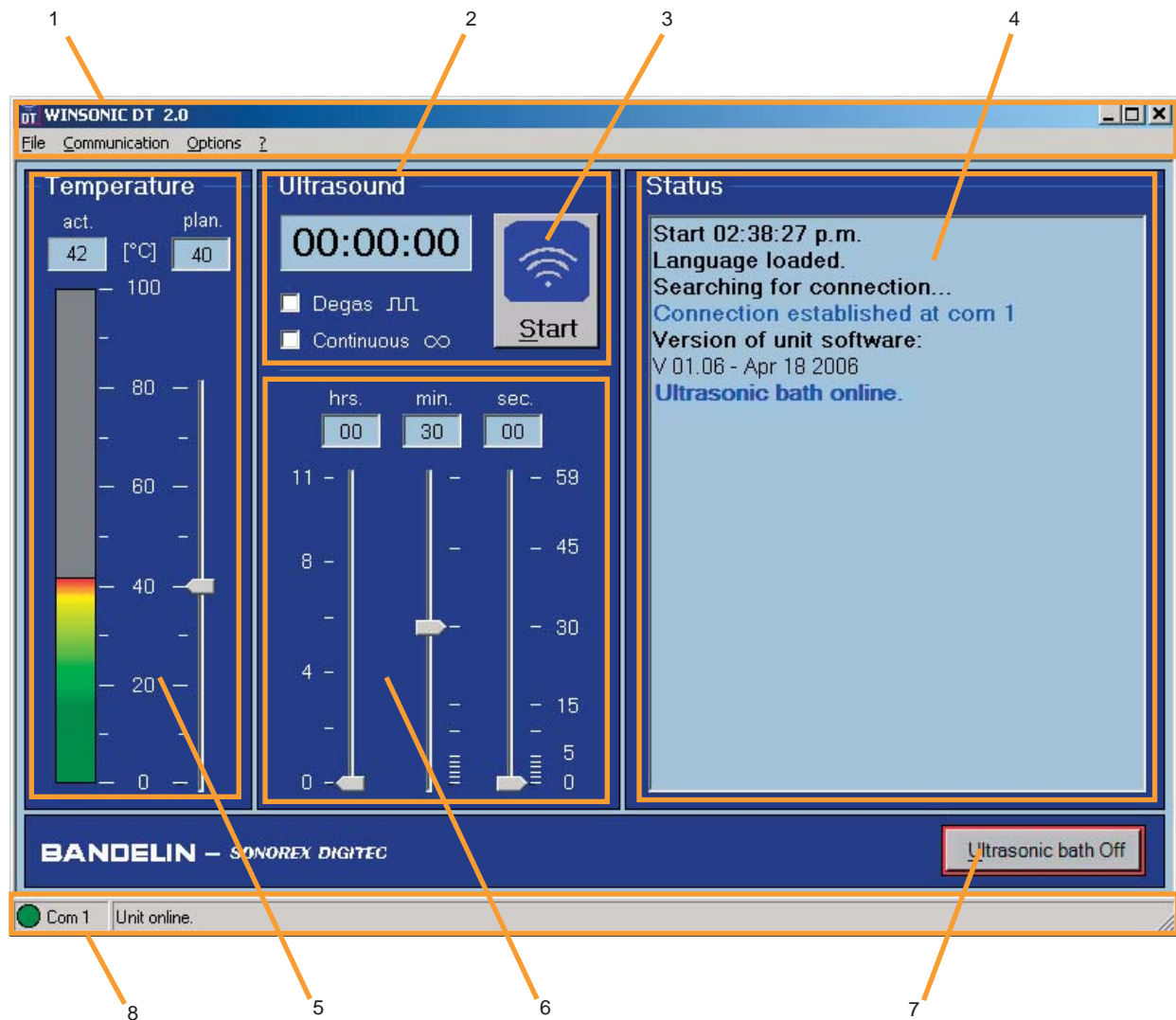


- If a USB adapter that emulates an RS 232 interface is used, the manufacturer's USB driver must be installed in advance.
- If one PC is used to control multiple SONOREX DIGITEC RC baths through multiple infrared adapters, it is recommended that the IR adapters be manually labelled with the number of the COM interface to which they are connected. This will greatly simplify the allocation of programs to baths that is required later on.
- When using multiple SONOREX DIGITEC RC baths at the same time, it is also important to ensure a suitable optical decoupling of the infrared connections. If applicable, a screen must be placed between the baths for this purpose.

3 Operation

3.1 Operating elements

All essential control functions are arranged on the user interface.



- | | | |
|---|--------------------------|--|
| 1 | Menu bar | <ul style="list-style-type: none"> - Call-up of additional functions, e.g. Selection of the COM port section 4.3.2 or Options e.g. logging (see also section 4.3.3). |
| 2 | Ultrasound area | <ul style="list-style-type: none"> - Display of operating time (ultrasound emission) in hours : Minutes : Seconds (00:00:00).
With specification of a runtime = Countdown of the remaining time displayed
In continuous operation = Display of the operating time elapsed - Selection of the operating modes "Degas" or "Continuous operation" via checkboxes, see also section 4.2.2. |
| 3 | "Start" or "Stop" button | <ul style="list-style-type: none"> - Starting/stopping the ultrasound emission |
| 4 | Status area | <ul style="list-style-type: none"> - Monitoring of the bath function through messages and notes on the current status, see also section 4.2.4. |

- | | | |
|---|------------------------------|--|
| 5 | Temperature area | <ul style="list-style-type: none"> - Setting the target temperature (heating control) - Numerical display of the current temperature in °C - Graphic display of the current temperature via a colour bar (0... 100° C, gradient: green-yellow-red). - Numerical display and option to enter the target temperature in °C. - Option to enter the target temperature through a slider control (0 ... 80° C), see also section 4.2.1. |
| 6 | Time setting area | <ul style="list-style-type: none"> - Setting the runtimes (ultrasound duration) - Numerical display and option to enter the desired runtime in hours (hrs.), minutes (min.) and seconds (sec.) - Slider control to set the runtime, separately for hours, minutes and seconds, see also section 4.2.3 <div style="margin-left: 100px;"> Operating parameters: Seconds: 0 ... 59 sec.
 Minutes: 0 ... 59 min.
 Hours: 0 ... 11 hrs. </div> |
| 7 | "Ultrasonic bath off" button | - Switching off the ultrasonic bath (ultrasound and heating) |
| 8 | Status bar | - Display of the current connection status (status LED and notes text) |

3.2 Signals

Meaning of the temperature bar colours

For (actual) temperature values of up to 90 % of the target temperature, the colour bar lights up green. Above this value and up to 99 % of the target temperature, the colour gradient moves to yellow. When the target temperature is reached or exceeded, the colour gradient additionally moves toward red as a warning signal.

Meaning of the status LED colours:



- | | |
|----------|--|
| green = | Connection is active or established and ultrasonic bath is ready for operation |
| yellow = | Connection is active, but ultrasonic bath is turned off or communication error |
| red = | Connection is broken or has not been established. |

4 Use

4.1 Start WINSONIC DT and connect

After the start, WINSONIC DT attempts to automatically establish a connection between the program and the ultrasonic bath.

Options to start the program:

- Double-clicking on the symbol  on the desktop.
- Through the Windows start button:
→ Program → Bandelin electronic →  WINSONIC DT
- Through the program's installation directory:
once there, click on "WINSONIC DT.exe"

The interface (COM port) that was set the last time that the program was opened, will be tested. The connection can be established as soon as the ultrasonic bath is connected to the power supply. With a successful connection, either "Ultrasonic bath turned off (standby)" or "Ultrasonic bath ready for operation" will be recorded in the program's "Status" area, depending on status.

The operating data such as target temperature, runtime, etc. will only be read out and displayed in the program when the bath is in ready-to-operate (=switched on) status. Control is also only possible with this status.



Note:

The ultrasonic bath must be switched on by pressing the "On/Off" key.

If the connection is broken, WINSONIC DT attempts automatically to re-establish the connection for a total of one minute (12 attempts of 5 seconds each). During this time, errors such as incorrect positioning of the IR adapter can be corrected and the connection re-established. In the status display, the lost connection and the search for a connection are documented through relevant messages. In addition, an audible signal (brief beeping) is emitted.

If all attempts to establish a connection are unsuccessful, the connection set-up will be halted. Thereafter, the connection can only be restored manually through the Connection → Establish menu.

4.2 Program functions

4.2.1 Heating control

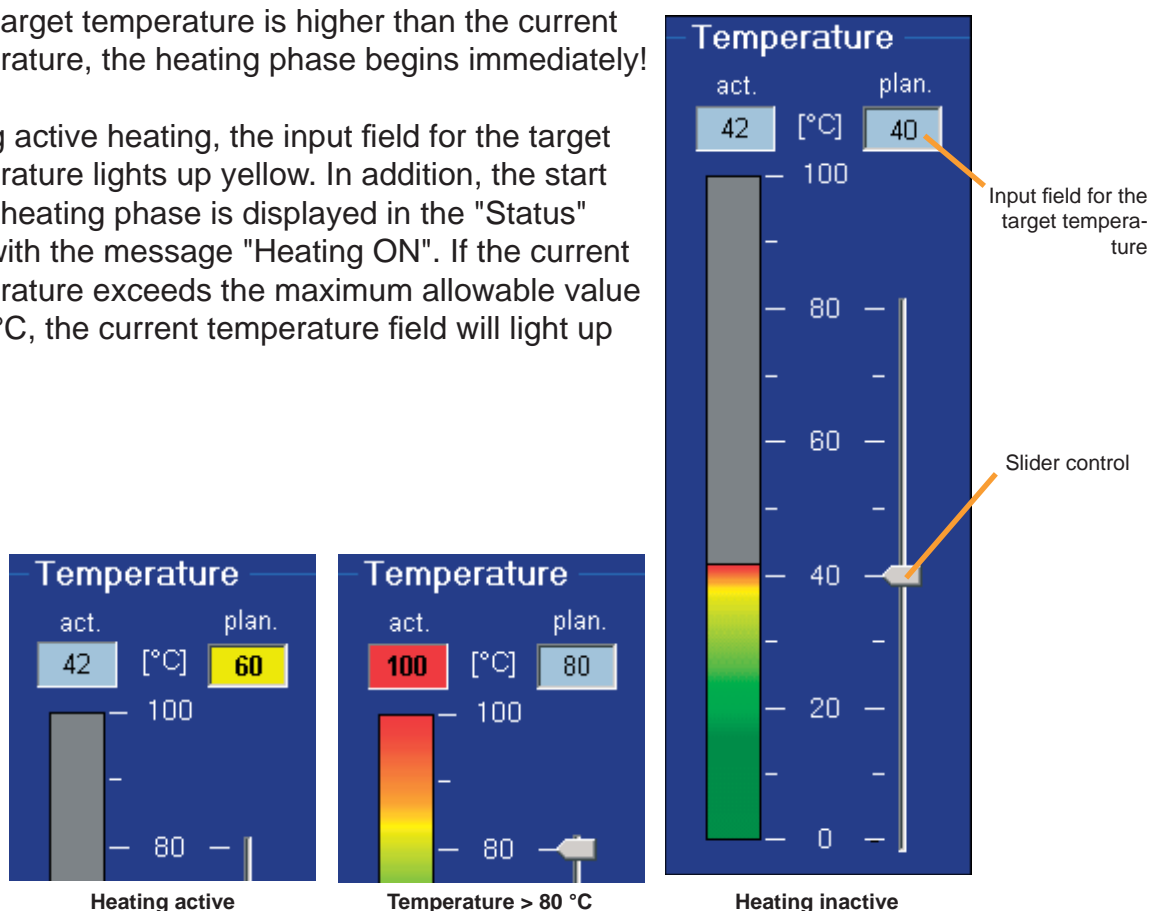
The heating is set and monitored in the "Temperature" area.

Turning on the heating:

The target temperature can be set with the slider control or by entering the desired temperature in the target temperature input field. This entry must be confirmed with the Enter key.

If the target temperature is higher than the current temperature, the heating phase begins immediately!

During active heating, the input field for the target temperature lights up yellow. In addition, the start of the heating phase is displayed in the "Status" area with the message "Heating ON". If the current temperature exceeds the maximum allowable value of 80 °C, the current temperature field will light up red.



Note:

When heating (without the ultrasound switched on), and at a target temperature above 60 °C, the ultrasound is automatically switched on for 3 seconds every minute to agitate the sonication liquid – prevention of retardation of boiling. (Please refer also to the SONOREX DIGITEC and SONOREX DIGITEC RC user instructions, under section 3.1.2.)

Turning off the heating:

When the target temperature is reached, the heating turns off automatically. In order to turn off the heating manually, use the slider control to set the target temperature to "0" or enter a "0" in the text field for the target temperature.

When heating is inactive, the field for the target temperature lights up in light blue. In addition, the end of the heating phase is displayed in the "Status" area with the message "Heating OFF".

4.2.2 Ultrasound control

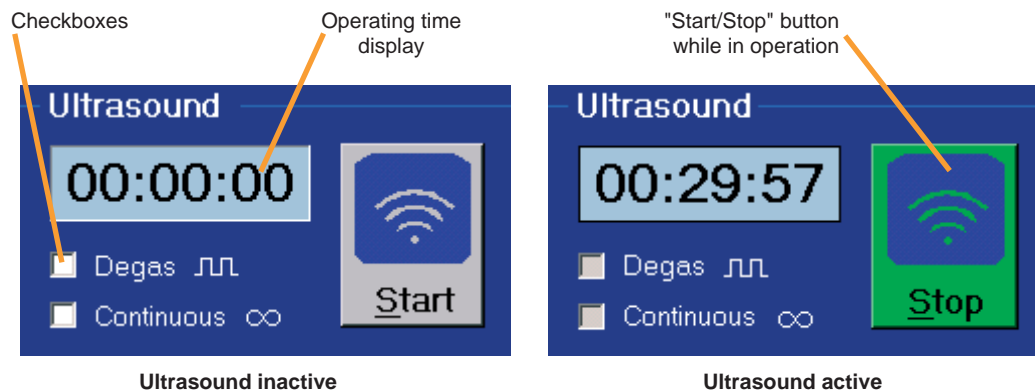
The ultrasound emission can be controlled and monitored from the "Ultrasound" area.

Turning on the ultrasound:

By pressing on the "Start / Stop" button, the ultrasonic bath turns on the ultrasound. The operating time display runs and shows:

- the remaining time (countdown) if a runtime has been specified, or
- the time elapsed under continuous operation.

In addition, the start is displayed in the "Status" area through the message "Ultrasound ON" / "Degas ON".



Turning off the ultrasound:

When pressing the "Start / Stop" button repeatedly, the ultrasonic bath turns off the ultrasound.

The end is displayed in the "Status" area through the message "Ultrasound OFF" / "Degas OFF".

Selecting the operating mode

The operating modes "Degas" and "Continuous operation" can also be set in the "Ultrasound" area via the checkboxes of the same name.

To select the operating mode, click on the desired checkbox. The choice is displayed with a checkmark "✓" in the checkbox.



Note:

If no button is pressed on the ultrasonic bath, the ultrasonic bath will run in continuous operation for a maximum of 11:59:59 hours. At the end, it will turn itself off automatically (please refer also to the SONOREX DIGITEC and SONOREX DIGITEC RC user instructions).

The activities of the WINSONIC DT program have no effect on this safety shut-down feature.

4.2.3 Setting the runtimes

The duration of ultrasound emission is defined in the "Time setting" area.

To do so, enter the desired runtime using the slider control or by entering it numerically in the input field, and confirm each time with the Enter key.

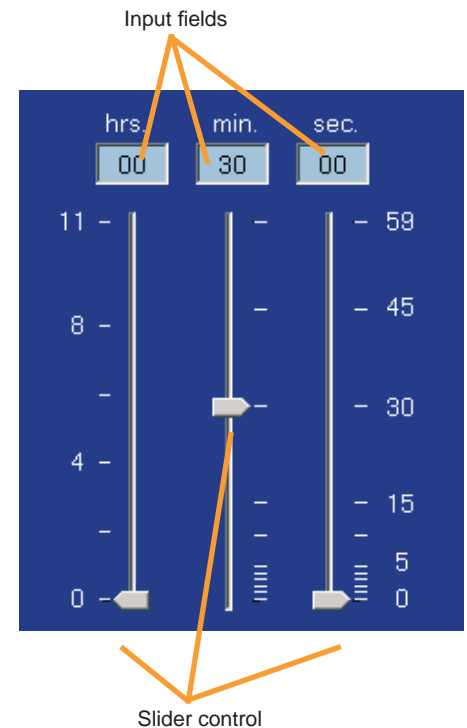
To start the ultrasonic bath, a runtime of at least 1 sec. must be set.

The runtime can only be set when the "Continuous operation" mode is not activated!



Note:

On the ultrasonic bath, the next highest time is always displayed as a chase light for the remaining time. For example, if 5 min 1 sec. are entered with WINSONIC DT, they are displayed on the ultrasonic bath as 10 min. The runtime for the ultrasonic bath matches that of the program, however.



4.2.4 Monitoring of the status

Current operating statuses, notes, and error messages are issued/displayed in the "Status" area. This makes monitoring of the ultrasonic bath possible.

There are three types of status messages:

- Operating statuses = **green**
Example: "Ultrasound ON"
- Notes = **blue** or **black**
Example: "Connection established..."
- Error messages = **red**
Example: "Communication error"

An overview of the possible messages can be found in the following table.



New messages are inserted at the end of the text, in a new row. The previous texts shift upward. When there are more than 20 rows, it is possible to navigate through the text with a scroll bar (appears on the right side of the display).

By right-clicking inside the Status window, the additional functions "Delete contents" and "Undo" / "Repeat" are offered through a shortcut menu. Additional functions for the Status window are accessible through the "Options" menu (see section 4.3.3.2).

Messages in the status display:

Operating statuses (green):

Message	Explanation
Heating ON!	Heating turned on
Heating OFF!	Heating turned off
Ultrasound ON!	Ultrasound turned on
Ultrasound OFF!	Ultrasound turned off
Degas ON!	Degas turned on
Degas OFF!	Degas turned off

Messages (blue or black):

Message	Explanation
Language downloaded	All parts of the program are presented in the current/amended language (e.g. after switching the language in the menu)
Load standard language	Standard language (English) is loaded.
Searching for connection ...	WINSONIC DT is attempting to establish a connection to the ultrasonic bath.
Connection established at COM ...	WINSONIC DT has established a connection to the ultrasonic bath.
Connection severed	Connection was manually broken through the "Sever connection" menu option.
Ultrasonic bath switched off (standby)	Ultrasonic bath not ready for operation
Ultrasonic bath ready for operation	Ultrasonic bath can be controlled with WINSONIC DT.
Ultrasonic bath without continuous operation!	Note regarding configuration.
Ultrasound paused!	Ultrasound interrupted (pause)
Target time:	The target time set (duration) is entered, e.g. continuous operation, a time with readjusted setting US = ultrasound or Deg = degas
Target temperature:	The set target temperature is entered.
Settings loaded	User settings are transferred from the "Loading" menu into the main program.
COM port changed	COM port was changed in the Connection menu

Error messages (red):

Message	Explanation
Error while loading the language	e.g. language file not found
Connection broken	Connection to ultrasonic bath was broken.
Ultrasonic bath not found!	Connection to ultrasonic bath not found.
Communication error!	Disruption of serial communication between ultrasonic bath and PC.
Establishment of connection failed! ...	Definitive interruption of the communication set-up.

4.2.5 Fast shut-down of the ultrasonic bath

The ultrasonic bath is turned off with the "Ultrasonic bath off" button (ultrasound and heating).

Turning on the ultrasonic bath from the program is not possible for safety reasons. In order to continue operating, the ultrasonic bath must be turned on by pressing the "On/Off" key on the ultrasonic bath.

4.3 Menu functions

4.3.1 User settings

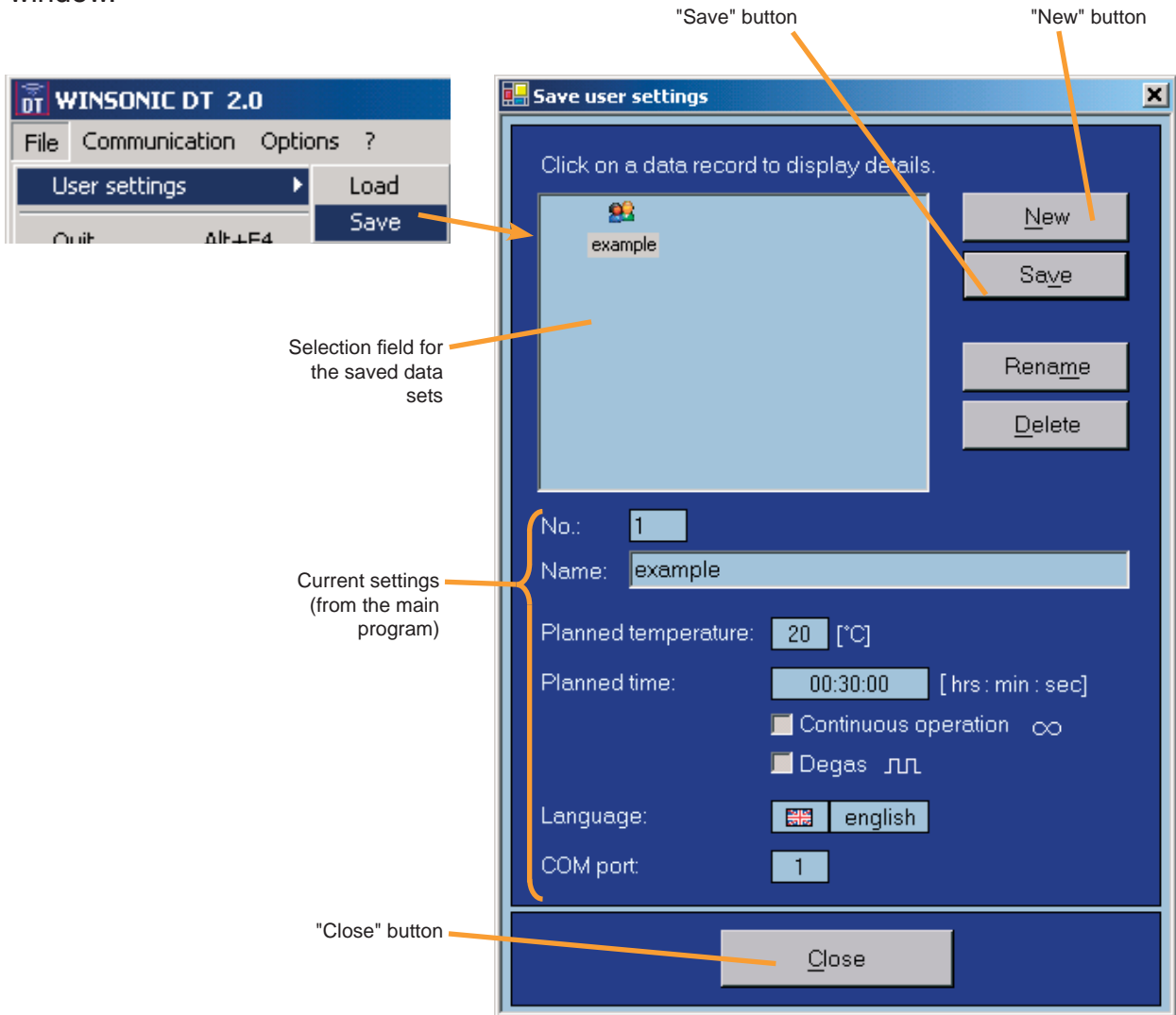
Through the menu item File → User settings, there is an option to save the current settings on the user interface in the form of data sets, and to restore them at a later time using the "Loading" function.

Similar work processes can be automated in this manner.

The target temperature, the prescribed runtime, the operating mode setting, the language setting, and the selected COM port are saved as parameters in the data sets.

4.3.1.1 Saving, renaming, deleting user settings

Clicking on the menu option User settings → Save opens up the "Save user settings" window.



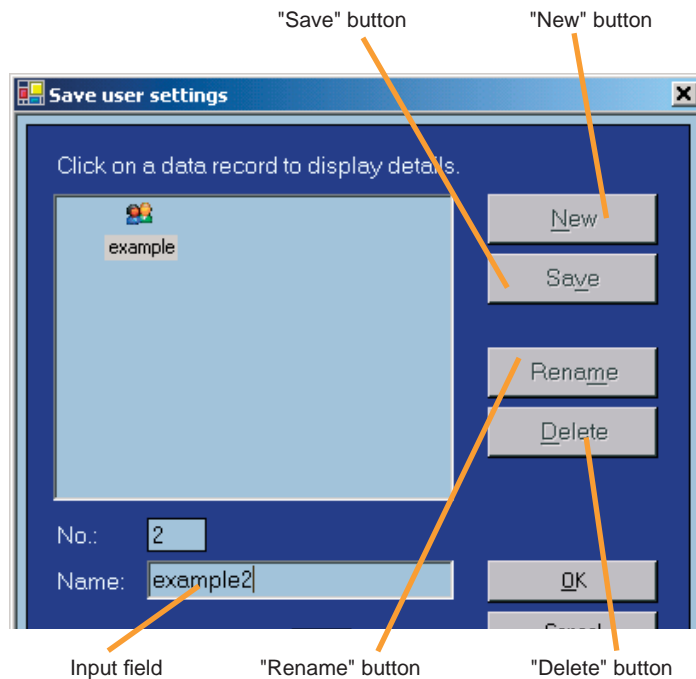
When opening the window, the settings from the main program are displayed in the "Current settings" area. If a data set was opened previously through the "Loading" function, it will be automatically pre-selected in the selection field.

Saving a new data set:

- Click the "New" button. The cursor automatically jumps to the input field "Name" and the "OK" button becomes visible. The input field "Name" can now be edited.
- Enter a name for the new data set.
- Click the "OK" button. The new data set appears in the data set selection field and becomes immediately available in the "Load user settings" function.

or

- Select an existing data set from the selection field by left-clicking on it.
- Click the "Save" button. This will cause the original data set to be overwritten.



Saving a data set under a new name:

- Select a data set.
- Click the "New" button. The cursor jumps automatically to the "Name" input field. The "OK" button becomes visible.
- Enter a new name for the data set.
- Click the "OK" button. The data set appears with a new name in the data set selection field.

Renaming a data set:

- Select a data set.
- Click the "Rename" button. The cursor jumps automatically to the "Name" input field. The "OK" button becomes visible.
- Enter a new name for the data set.
- Click the "OK" button. The data set appears with a new name in the data set selection field.

Deleting a data set:

- Select a data set.
- Click the "Delete" button. When the confirmation prompt appears, confirm the deletion with "yes".

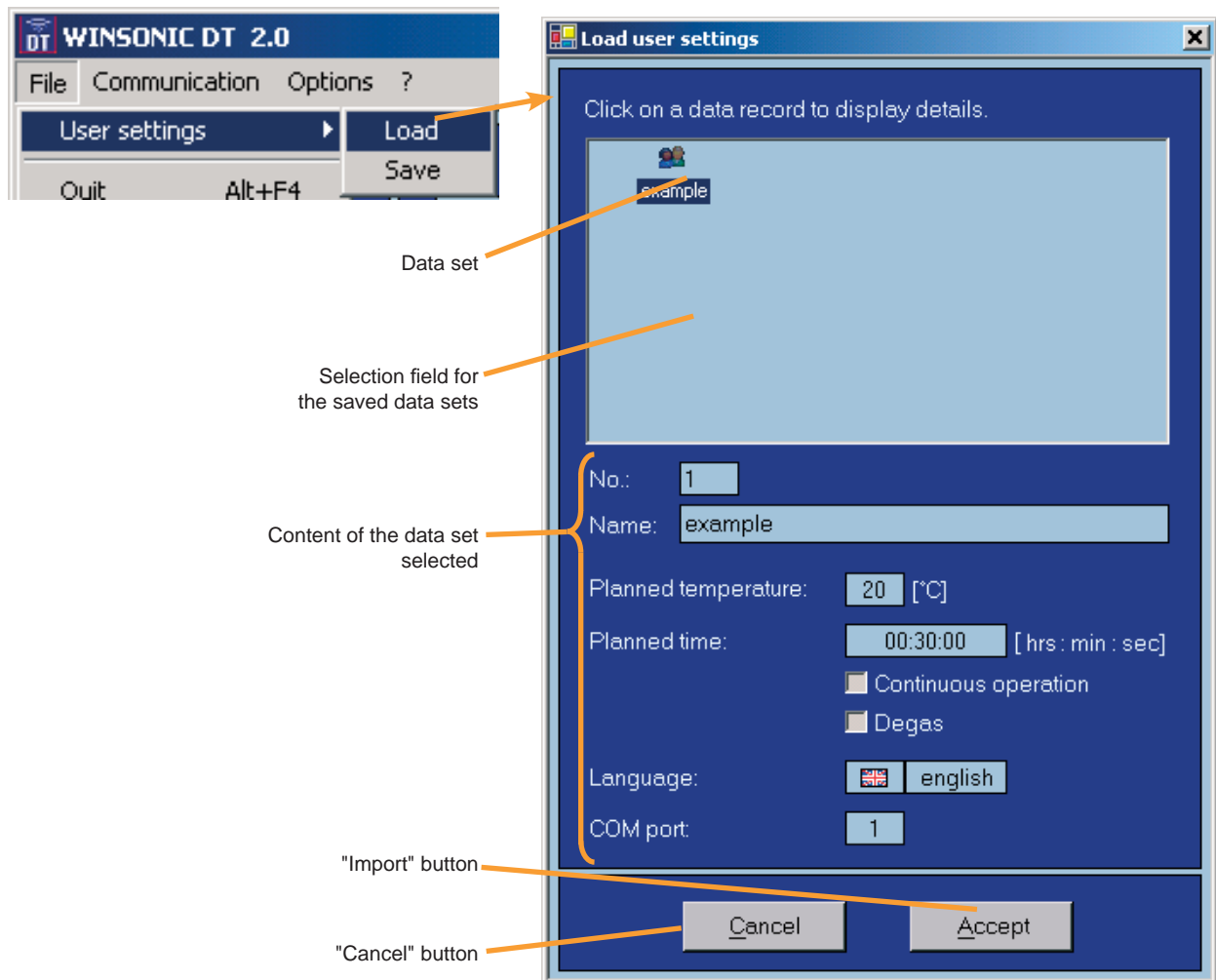


Note:

Deleted data sets cannot be restored subsequently.

4.3.1.2 Loading user settings

Clicking on the menu option User settings → Load opens up the "Load user settings" window.



Loading a data set:

- Click on a data set in the selection field. The contents of the data set will be displayed in the area below ("Contents of the selected data set").
- Click the "Import" button. The data is imported into the main program.
- If the "Cancel" button is pressed, the window will close without importing the data.

The loading of a user data set will be logged in the "Status" area with the message "Settings loaded". If the language or COM port were also modified during this process, this will also be specified in the "Status" area.

4.3.2 Communication connection

Establishing (or restoring) the connection:

The connection between the PC and ultrasonic bath can be manually established through the menu option Connection → Establish. In this process, the program attempts to establish a connection to the currently set COM port (12 attempts of 5 seconds each).

The "Establish" menu is only available when the connection is inactive.

The connection attempts can be terminated ahead of time through the menu option Connection → Cancel search.

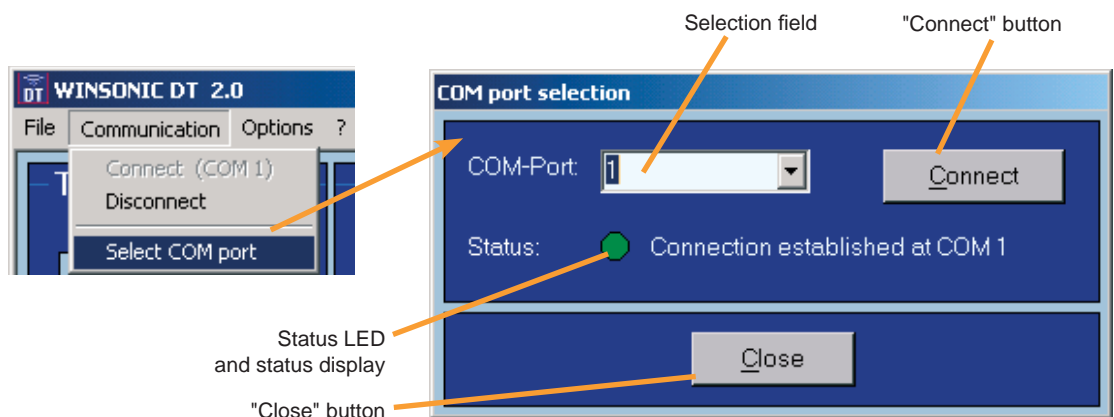
Severing the connection:

By clicking the menu option Connection → Sever, the current connection is manually severed.

The "Sever" menu is only available when the connection is active.

Selecting a COM port:

By clicking the menu option Connection → Select COM port, the respective window opens.



With the "Connect" button, the program will attempt to establish a communication connection to the ultrasonic bath through the COM port specified in the selection field. The function "Automatic" in the selection field conducts an automatic search through the PC's first 16 COM ports.

The status display provides information regarding the current connection status, both during and after the connection search. In addition, the status LED shows this graphically, see chapter 3.2 or 4.2.4.

With the "Close" button, the selected COM port and the current connection status are imported into the main program. The current connection status is displayed in the main window in the status bar. If the COM port is changed, this is documented in the "Status" area with the message "COM port changed".

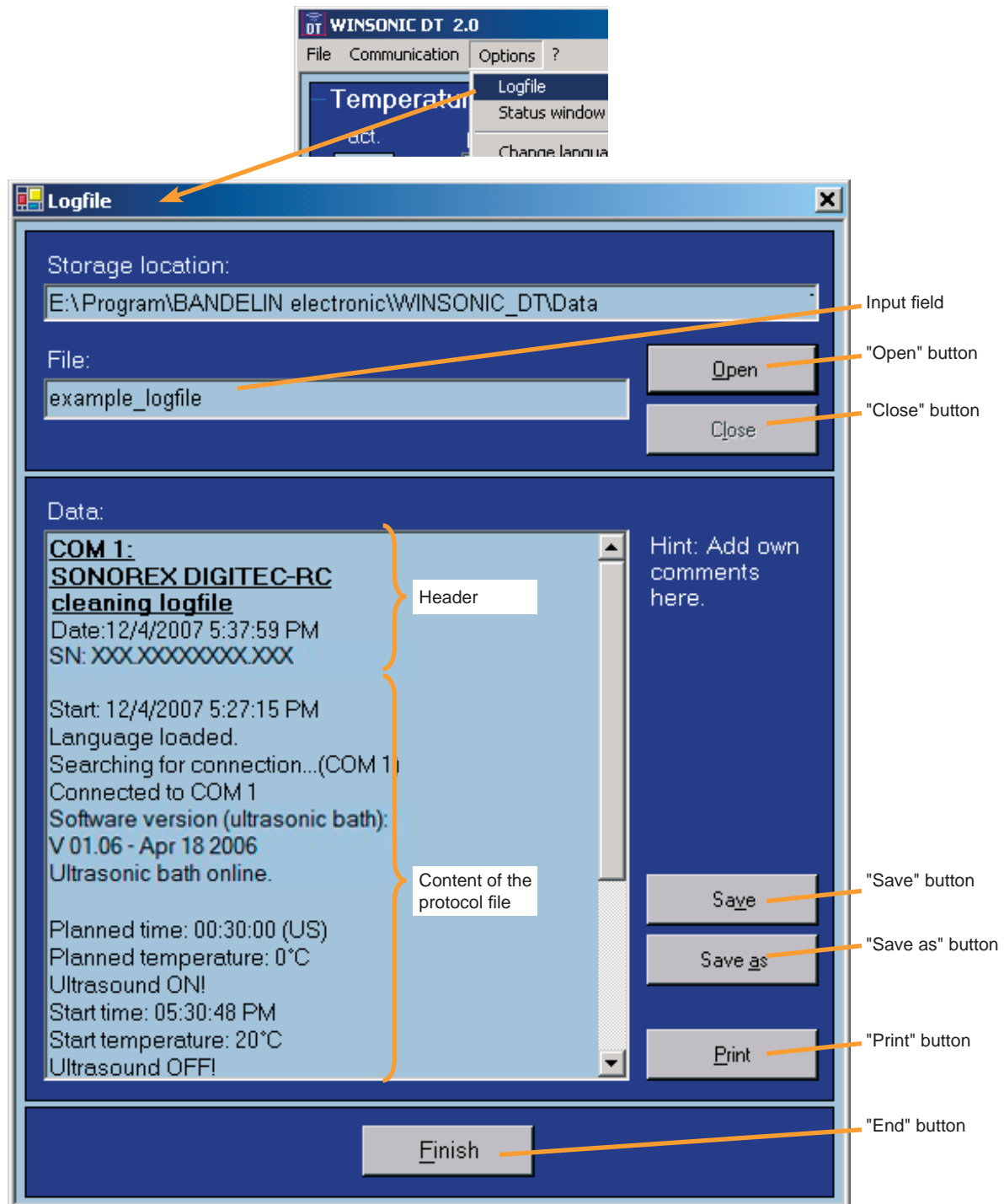
4.3.3 Options

4.3.3.1 Logging the process sequence

With the protocol function, the most important messages regarding the cleaning process can be saved in one file and can be used later on for documentation purposes. The data is stored in text format (*.txt files) and can be read by all current text processing programs.

The protocol contents are automatically imported from the main window. In addition, a header with the current date is automatically added.

When using multiple ultrasonic baths, it is recommended that the product number/serial number (Pro No./SN No.) of the ultrasonic bath be included in the header (see type plate of the respective ultrasonic bath), for clear allocation of the protocol.



In order to open the protocol window, select the menu option "Protocol" from the "Options" menu.

Creating a new protocol:

- In the "File" input field, enter or overwrite the name of the protocol.
- Click the button "Save" or "Save as". A dialogue window will open.
- Enter or review the path and name for the protocol file and confirm with "Save".
- The protocol has been generated. The path and file name for the protocol are displayed in the "Storage location" and "File" fields.
- By clicking on the "Close" button, load the protocol out of the storage area, protecting it in this manner from further changes.

Editing saved protocols:

- Click on the "Open" button to open the dialogue field to load files.
- Select the name and path of the desired protocol file and confirm with "Open".
- The content of the protocol will be loaded in the text field. The file's path and name will be displayed in the "Path" and "Name" fields.
- Edit the protocol contents.
- Save your changes with the "Save" or "Save as" button.
- By clicking on the "Close" button, load the protocol out of the storage area, protecting it in this manner from further changes.

Further processing protocols:

- Before the start of ultrasonic cleaning, load the protocol file with the "Open" button.
- Leave the protocol window by clicking on the "End" button and work as usual.
- With the new call-up of the protocol window, the new text is attached to the old protocol.

or

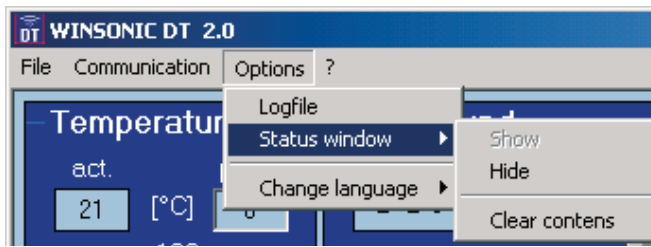
- Highlight the desired text in the main window and e.g. copy it to the clipboard via the status window's shortcut menu. Call up the protocol window, load the old protocol file, and e.g. paste the new text in the desired location via the shortcut menu.
- Save the text with the "Save" or "Save as" button.
- Finally, load the protocol out of the storage area with the "Close" button, protecting it in this manner from further changes.

Printing out protocols:

- Open the dialogue window for printing files by clicking the "Print" button.
- Select the printer and printing options and confirm with "OK".

4.3.3.2 Status window functions

Multiple options for the status window are available through the menu Options → Status window.



Hiding and showing the status window:

To arrange the programs in a space-saving manner on the desktop, e.g. in cases of multiple use, the "Status" area can be hidden by clicking on the "Hide" menu option. The menu option "Show" makes the status window visible once again.

It is recommended that the "Status" area only be hidden when absolutely necessary, since the most important information regarding the ultrasonic bath is most rapidly available here.



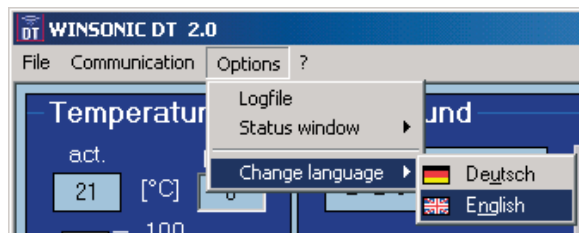
Deleting text in the status window:

The text in the "Status" area can be deleted through the menu option "Delete content".

This deletion can be undone once through the shortcut menu for the "Status" area (see section 4.2.4).

4.3.3.3 Changing the program language (language setting)

The language for the program can be changed with the menu option "Options → Change language". German and English are currently available as options.



A change in the program's language will be logged in the "Status" area with the message "Language loaded".

4.3.4 Program information and contact

Information on the WINSONIC DT program, its version, and its license conditions can be called up through the menu option "?". The manufacturer's contact address can also be found here.

By clicking on www.bandelin.com you will arrive at the BANDELIN website through Internet Explorer. Clicking on info@bandelin.com will open up the E-mail program.

5 Maintenance and cleaning - not applicable -

6 Service and repair

6.1 Service

The WINSONIC DT program is service-free.

6.2 Malfunction / Fault analysis

The following overview of possible sources of error should serve as an aid for error detection and elimination.

Error	Possible cause	Remedial action
Installation of the software components is not possible	Lack of administrator rights	Activate administrator rights.
	The hardware and software components mentioned in chapter 1.4 are not available or only part of them is available.	Install missing components.
Characters or symbols unclear / not legible	Missing character set.	Install "Western Europe and USA (standard)" character set.
Establishment of a connection not possible	IR adapter not properly connected to the PC.	Connection: see PC (RS 232 interface) user instructions.
	IR adapter not positioned correctly or heavily soiled.	Position correctly (see chapter 2.3) or clean adapter.
	IR adapter not compatible.	Connect compatible IR adapter, e.g. BANDELIN IR 1.
	IR adapter defective.	Contact the manufacturer's Service department.
	COM port not available.	Ensure that ports are not already being used by other programs. Verify access rights.
	Ultrasonic bath is not connected to the mains.	Connect the ultrasonic bath to the mains.
	Manufacturer's driver for the IR 1 adapter was installed.	Uninstall driver.
Connection is frequently broken	IR adapter not positioned optimally.	Correct positioning: see chapter 2.3.
Program does not change the language	The language file for the program has been deleted or moved.	Contact Service.
Start/Stop button is not active	No connection established to the ultrasonic bath (see above).	See remedial action "Establishment of a connection not possible".
	Ultrasonic bath is in standby mode.	Turn on ultrasonic bath with the "On/Off" button.
	Runtime is set to »00:00:00«.	Set a runtime of at least 1 sec.
	The attempt to establish a connection was halted after 12 unsuccessful attempts.	Establish new connection, see section 4.3.2.

Error	Possible cause	Remedial action
Time slider controls are not active.	Continuous operation is activated.	Turn off continuous operation.
	Ultrasonic bath is in operation.	Turn off the ultrasound.
	Ultrasonic bath is in standby mode.	Turn on ultrasonic bath with the "On/Off" button.
Control elements on the surface are deactivated	Ultrasonic bath is in operation.	Turn off the ultrasound.
	Ultrasonic bath is in standby mode.	Turn on ultrasonic bath with the "On/Off" button.
Continuous operation cannot be set	Ultrasonic bath is programmed to "without continuous operation".	Use the maximum runtime of 11:59:59 hours.
User interface appears distorted	Large fonts have been set.	Set small fonts via the control panel in the "Display" category.

6.3 Repairs and service

In case of errors or defects please contact the supplier or the manufacturer:

BANDELIN electronic GmbH & Co. KG
Heinrichstrasse 3-4
12207 Berlin
Germany

Repair service:

Phone: +49-(0)-30 – 768 80 – 13

Fax: +49-(0)-30 – 76 88 0 - 2 00 13

E-mail:

info@bandelin.com

In the case of returns, the general terms and conditions for delivery and payment of BANDELIN electronic GmbH & Co. KG shall apply.

7 Accessories - not applicable -

7.1 Required accessories

See scope of delivery, chapter 2.1.

7.2 Optional accessories - not applicable -

7.3 Chemical preparations - not applicable -

8 Consumable materials - not applicable -

9 Deinstallation of the program

The deinstallation of WINSONIC DT is conducted via the control panel, under the "Software" or "Programs and functions" categories (names dependent on the operating system):

- Click on the Windows Start button → Settings → Control panel → Software
- Select the software entry "WINSONIC DT" and press the button "Remove" to start the deinstallation.

Folders and files created by the WINSONIC DT program are not deleted and are used again following an update if the installation directory was not changed.

10 Key words - not applicable -

If service is required, please contact your specialist dealer or write to us at the address provided.

Note:

The user instructions in this and other languages, as well as further information, can be found on the enclosed CD.