prismaTS

PC Software for Data Analysis of Löwenstein Medical Technology Therapy Devices

Version 5.13



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2

1 Introduction

This user manual contains information on the operation of the prismaTS.

The following information can be found in the separate installation instructions:

- Intended use and function
- Safety information
- System requirements
- Network settings
- Installation and update
- Function check
- Troubleshooting
- Remote maintenance
- Technical Data

2 Operation

2.1 Starting prismaTS

1. Double-click on the pts program icon on your desktop.

or

Call up the menu items **Start** > **Programs** > **Löwenstein Medical Technology** and click on **prismaTS.exe**.



2.1.1 Calling up the online help / user manual

1. Press F1 to call up the online help.

or

Click Menu > Help.

You can find the user manual in PDF format in the **Manuals** folder on the installation medium and on the hard disk under the installation path in the **Manuals** folder. It is identical to the online help.

2.1.2 Selecting the language of the user interface

The user interface of prismaTS is available in a number of different languages.

- 1. Click on **Menu** > **Change language**.
- 2. Select your preferred language.
- 3. Restart prismaTS.

2.1.3 Selecting the unit of pressure

There are a number of different units of pressure available for the pressure values displayed in prismaTS.

- 1. Click Menu > Options > Configuration > DISPLAY.
- 2. Select your preferred pressure unit.

The selected pressure unit is also adopted automatically for prismaTSlab.

2.2 Patient administration

2.2.1 Searching for a patient

Quick search



1. Enter the patient's last name in the search field.

If any hits are found, they are shown to you automatically in the form of suggestions. If no hits are found, the name is suggested to you for creation of a new patient (see "Adding a new patient").

Advanced search

1. Click Menu > Patients > Patient list.

or



2. Click Patient list.



- 3. To search for an existing patient, enter a search term in the empty search field in the top right-hand corner.
- 4. If necessary: To specify the fields to be searched, open the **Search in:** list using the arrow next to the search field.
- 5. If necessary: Check the required boxes in the **Search in:** list.



You can sort the entries in the patient list by clicking on the heading of a column. The arrow shows whether the order is ascending or descending.

- 6. To select an existing patient, click on the respective name.
- 7. Confirm your selection by clicking **OK**.

or

Double-click the corresponding line.

2.2.2 Adding a new patient



1. Click Add new patient.

or

Click Menu > Patients > Add new patient.

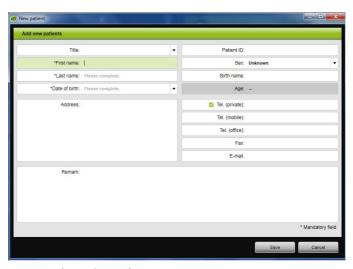
or



2. Click Patient list.



3. Click on **New patient** in the **Select patient** window.



4. Enter the patient's data.



The fields marked with * (**First name**, **Last name**, and **Date of birth**) are mandatory fields, which must be filled in.

The age of the patient is calculated automatically based on the date of birth.

To use one of the telephone numbers provided by a patient in the prismaTS information bar and the reports (see "Creating reports (not for LM150TD)"), you can store a telephone number as the *preferred* telephone number.

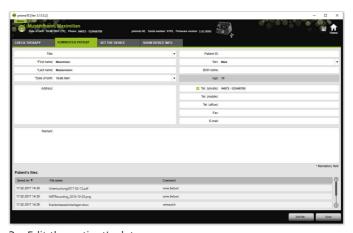
- 5. After entering the telephone number, right-click the telephone number field.
- 6. Now select **Specify as standard**. The symbol **designates** the preferred contact number.
- 7. Click on **Save**.
- 8. You can assign a device to a patient by dragging it to the open patient file from the list of available devices with the left mouse button depressed (drag & drop).



Commonly used devices and/or patient files can be pinned to the start screen so that they are always shown in the desired position on the screen. To do so, click the drawing pin symbol in the top right-hand corner of the patient-device tile.

2.2.3 Editing patient data

- 1. Open the patient file (see "Searching for a patient").
- 2. Click the **ADMINISTER PATIENT** tab.

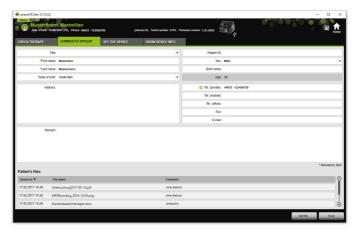


- 3. Edit the patient's data.
- 4. Click on Save.

2.2.4 Managing the patient's files

All of the saved reports relating to a patient are automatically stored in the **Patient's files** section. Other files —even those from external systems — can be saved here so that all the data relating to a patient are compiled together.

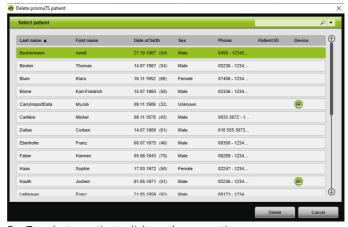
- 1. Open the patient file (see "Searching for a patient").
- 2. Click the **ADMINISTER PATIENT** tab.



- 3. To add a new file, click on **Add file** and select the desired file. Enter a brief description of the file if you wish to do so.
- 4. To open or delete an existing file, or save it in another location, right-click on the desired file and select the respective entry. Please note that you can only open files for which the software programs are installed on your PC.

2.2.5 Deleting a patient

- 1. Click Menu > Patients > Delete patient.
- To search for a patient, enter a search term in the empty search field in the top right-hand corner (see "Searching for a patient").



- 3. To select a patient, click on the respective name.
- 4. To delete the patient, click on **Delete**.

or

Double-click the corresponding line.

To confirm the deletion, click on **Delete** in the **Delete patient** window.

All data are permanently deleted.

2.3 Editing patient-device assignment

After having been assigned once, the respective patient will be detected as soon as the device is connected. This saves you having to search for the patient. The imported therapy data are stored automatically for assigned patients.

2.3.1 **Creating patient-device assignment**



It is not possible to assign patients to devices with the serial number 0.

1. With the left mouse button held down, drag and drop the desired device from the device list to the desired patient in the main window.

A device symbol appears for the patient and a patient symbol for the device.

or

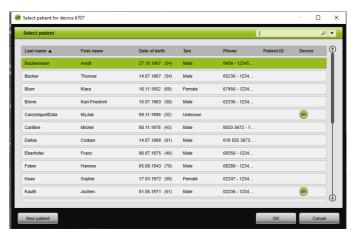
Select the required patient and device in the main window.

- 2. Right-click on the device.
- 3. Select Assign selected patient to this device.

or

prismaTS

Select the entry Assign patient from patient list to device.



To select an existing patient, click on the respective name in the **Patient list**.

To assign this patient to the device, confirm with **OK**.

4. If you want to assign the device to a patient to whom another device is already assigned , you first need to delete the existing connection between the patient and device (see "Deleting patient-device assignment").



Alternatively, you can also assign a patient when selecting a therapy device (see "Selecting therapy device").

2.3.2 Deleting patient-device assignment

- 1. If the device is connected, mark the device that you want to deassign from a patient in the main window.
- 2. Right-click on the patient.
- 3. Select the entry **Delete assignment of device to patient**.
- 4. When the prompt appears, confirm removal of the assignment with **Yes**.



When changing patients, first delete the existing patient-device assignment and then assign the device to another patient.

2.4 Selecting therapy device

All the therapy devices which are available on the network or connected via USB and all SD cards are shown in the list of available devices.

- 1. Double-click the required therapy device in the list.
- 2. If the selected therapy device is already assigned to a patient, the patient's file is opened.

You can now import the therapy data (see "Importing therapy data").

or

If the therapy device is not yet assigned to a patient and you wish to save the imported therapy data, device serial number, etc., for a specific patient, confirm the **Do you want to assign a patient now?** prompt with **Yes**.

If you only wish to view the data once or to configure the therapy device without assigning a patient, click **No**.



- To select an existing patient, click on the respective name in the Patient list.
- 4. To assign this patient to the device, confirm with **OK**
- 5. If you want to assign the device to a patient to whom another device is already assigned , you first need to delete the existing connection between the patient and device (see "Deleting patient-device assignment").

2.5 Importing therapy data

The therapy data can be directly imported from the therapy device or an SD card.



You **cannot** import the therapy data:

- while a therapy is in progress
- while data are being copied from the device to the SD card (see the instructions for use for the corresponding therapy device)
- directly after the end of the therapy as long as the device is still
 processing the recorded therapy data (see the instructions for
 use for the corresponding therapy device). In prismaTS, the
 message The requested device is processing data or is
 already being used. is shown if an import is attempted.
- if the device is selected in prismaTSlab
- if the device is configured manually.

Connecting therapy device to the PC

The therapy device must be connected to the PC for it to be possible to import the therapy data from the therapy device.

Requirement:

- Therapy device is connected to the power supply (see instructions for use of therapy device).
- Therapy device is in **Standby** mode (see instructions for use of therapy device).
- SOMNO devices: Converter cable driver is installed (see installation instructions).

intended use									
	LM150TD	WM120TD	WM110TD	WM100TD	WM090TD	SOMNO devices			
Importing therapy data	USB-C flash drive	LAN SD card	LAN SD card	LAN USB SD card	LAN SD card	USB SD card			
Configuring therapy device	-	LAN*	LAN*	LAN* USB SD card	LAN* SD card	USB SD card			

*If a LAN connection is used, configuration is only possible in prismaTSlab

Connecting therapy device to the PC via USB



Only use a data cable. Using the wrong USB cable can impair the data import.

 WM100TD: Connect the USB cable (e.g., WM 35160) up to the Micro USB port on the therapy device (see instructions for use of therapy device).

or

- SOMNO devices only: Connect the USB converter cable (e.g., WM 93321) up to the serial interface on the therapy device (see instructions for use of therapy device).
- Connect the USB cable up to a USB port on the PC.
 SOMNO devices: A COM port is automatically assigned to each device in Windows[®].

Connecting therapy device to the PC via LAN

- 1. Connect a communication module (prismaCONNECT or prisma HUB) to the therapy device (see instructions for use for the prismaCONNECT or prisma HUB module).
- 2. Connect an Ethernet cable up to the LAN port on the module and connect it to the LAN port on your PC.

or

Connect the therapy device to the network with the help of the communication module.

Connect the PC to the network.

3. If necessary: Change the network settings of the network module (see instructions for use of the prismaCONNECT module or the prisma HUBconfig software).

2.5.1 Importing from device with patient assignment

Requirement:

- The device is connected to the PC (see "Connecting therapy device to the PC").
- The selected device is assigned to a patient (see "Creating patient-device assignment").
- There are therapy data on the device.



Assignment of therapy data to an incorrect patient can prevent therapy or result in the incorrect therapy!

When importing the therapy data from a device, confusion of the device or incorrect device-patient assignment can result in an incorrect analysis and an incorrect therapy.

- ⇒ Ensure that the correct patient is selected
- To print a report with the therapy data immediately, right-click the device.
 - Select **Importing data and creating report directly...** (see "Creating reports (not for LM150TD)").
- 2. To import the data, double-click the device with the assigned patient in the list of available devices.

The import list is shown.



The imported therapy data are stored automatically for the assigned patient.



If you have accidentally saved the therapy data to the wrong patient, you can transfer the therapy data to the intended patient (see "Assigning incorrectly assigned therapy data to the correct patient").

2.5.2 Importing from device without patient assignment

Requirement:

The device is connected to the PC (see "Connecting therapy device to the PC").

- Double-click the required therapy device in the list of available devices.
- 2. If you do not wish to assign a patient, click **No** in the **No** patient assigned prompt.
- 3. Click **Import from device**.

The therapy data are imported.



EN

The imported therapy data are shown but not yet saved.

- 5. Confirm with Yes.



- To select a patient, click on the respective name in the **Patient** list.
- 7. Confirm with **OK**.

or

Double-click on the highlighted entry.



The device is not assigned to this patient when the therapy data are saved.

To save the therapy data for a patient and assign the device to this patient, you can also perform an additional device-patient assignment (see "Creating patient-device assignment").

If you have accidentally saved the therapy data to the wrong patient, you can transfer the data to the intended patient (see "Assigning incorrectly assigned therapy data to the correct patient").

2.5.3 Importing from SD card

If you have the therapy data on an SD card, you can import the therapy data directly from it.

- 1. Check whether the SD card is labeled with the patient's name and date of birth to avoid confusion.
- 2. Insert the SD card into the SD card slot on your PC.

If prismaTS is open:

The SD card symbol with the serial number of the therapy device from which the SD card originates is shown in the list of available devices.

- 1. Compare the serial number displayed with the serial number of the therapy device to avoid confusion.
- 2. To print a report with the therapy data immediately, right-click the device.

Select **Importing data and creating report directly...** (see "Creating reports (not for LM150TD)").

3. To import data, click Import from SD card in the import list.

If prismaTS is not open:

Double-click on the prismaTS file on the SD card.
 prismaTS starts and the therapy data are imported.

2.5.4 Importing from file

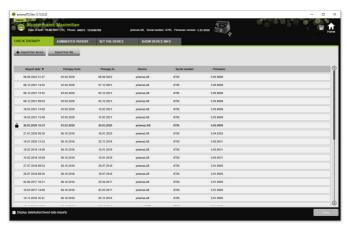
If you have the therapy data in a file on your PC, you can import the therapy data from the file.

If prismaTS is open:

1. Select the patient under whom you wish to save the therapy data.

The import list is shown.

- 2. To import therapy data from a file, click **Import from file**.
- 3. Select the file.



The imported therapy data are stored automatically for the selected patient.

If prismaTS is not open:

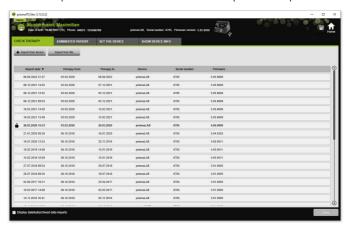
- 1. Double-click on the prismaTS file. prismaTS starts and the therapy data are imported.
- 2. Assign the therapy data to the corresponding patient (see "Creating patient-device assignment").



If you have accidentally saved the therapy data to the wrong patient, you can transfer the data to the intended patient (see "Assigning incorrectly assigned therapy data to the correct patient").

If prismaTS is open:

Select the patient under whom the therapy data are saved.
 The import list shows all the available imports for a patient.



You can sort the entries in the import list by clicking on the heading of a column.

The arrow shows whether the order is ascending or descending.

2. To select the required therapy data, double-click on the corresponding entry.

If prismaTS is not open:

1. Double-click on the prismaTS file.

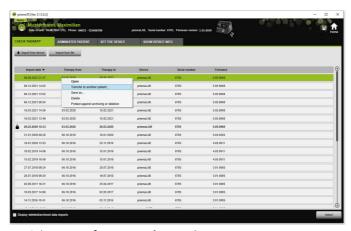
prismaTS starts and checks whether the therapy data have already been imported. If the therapy data have already been imported, they are opened. If the therapy data have not yet been imported, they are imported now.

2.5.6 Assigning incorrectly assigned therapy data to the correct patient

If therapy data which have already been imported have been assigned to the wrong patient, you can transfer the therapy data to another patient.

Requirement:

- The patient file of the patient to whom the therapy data have been incorrectly assigned must be open.
- 1. Open the import list (see "Opening already imported therapy data").
- 2. To select the required therapy data, click on the corresponding entry.
- 3. Right-click the entry to open the context menu.



4. Select Transfer to another patient.

All the saved patients are displayed.

5. Double-click on the required patient.

or

Highlight the required patient.

Confirm with OK.

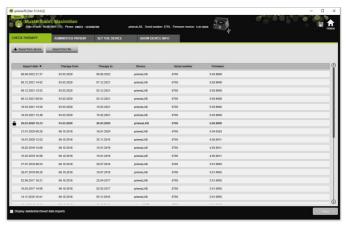
- If necessary, check and correct the patient-device assignment (see "Creating patient-device assignment"), as the therapy data being imported to the wrong patient is generally a result of an incorrect assignment.
- 7. Confirm the **Do you really want to transfer the therapy** data "XY" of "patient 1" to patient "2"? prompt with Yes.

The therapy data and corresponding device settings are saved for the other patient.

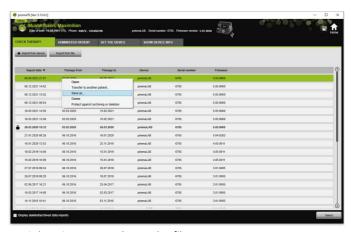
2.6 Exporting therapy data

Therapy data can also be exported in order to save them externally in a file and import them into another prismaTS database, for example.

1. Open the import list (see "Opening already imported therapy data").



- 2. To select the required therapy data, click on the corresponding entry.
- 3. Right-click the entry to open the context menu.

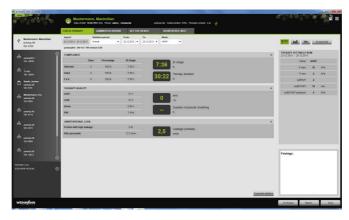


4. Select **Save as** and save the file.

2.6.1 CSV file (not for LM150TD)

This is the file format for importing data if you want to import them into report generators, ERP or HIS systems, or into studies, for example.

1. Open the required therapy data (see "Opening already imported therapy data").



2. Select the period to be analyzed from the **Statistics period** list.

or



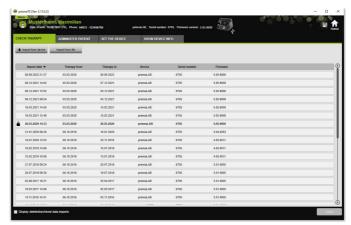
- 3. Select the period to be viewed from the **From:** and **To:** lists.
- 4. Click on **CSV export**.
- 5. Save the file.

2.7 Deleting therapy data

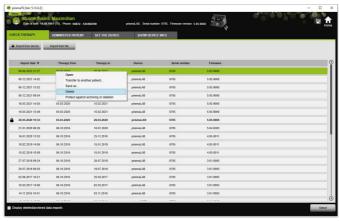


For deleting therapy data after a certain time (see "Deleting therapy data after a certain time").

1. Open the import list (see "Opening already imported therapy data").

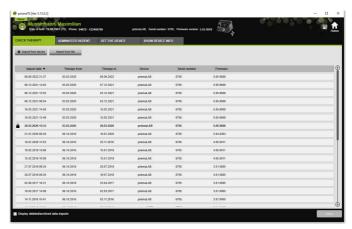


- 2. To select the required therapy data, click on the corresponding entry.
- 3. Right-click the entry to open the context menu.



- 4. Select **Delete**.
- Confirm the prompt Do you really want to delete? with Yes.

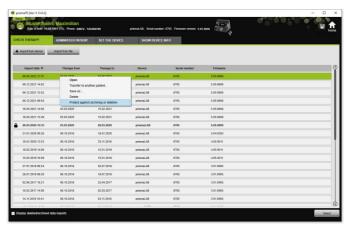
1. Open the import list (see "Opening already imported therapy data").



2. To select the required therapy data, click on the corresponding entry.

Protecting therapy data against archiving or deletion

1. Right-click the entry to open the context menu.



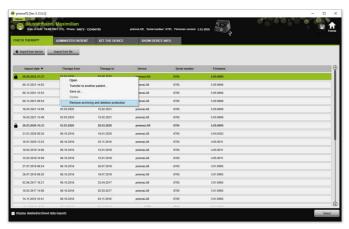
2. Select **Protect against archiving or deletion**.

EN

The entry can be identified with a padlock symbol. This entry is excluded from archiving and deleting after a certain time.

Removing archiving and deletion protection for therapy data

1. Right-click the entry to open the context menu.



2. Select Remove archiving and deletion protection.

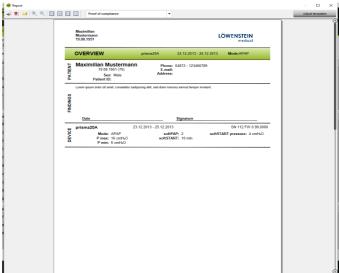
The padlock symbol next to the selected entry is removed. Archiving and deleting after a certain time is possible for this entry.

2.9 Creating reports (not for LM150TD)

You can read out therapy data in different reports in order to save them all together and in a clear manner, print them, or send them via e-mail.

Depending on what you want the reports to include, you can either select one of the predefined templates or use them as a basis for creating your own template.

Depending on the device type, mode, and scope of the import, not all data may be available in full. Nevertheless, you can still select the templates and the reports will automatically be generated in an abridged form.



The currently selected therapy data are shown each time.

2. Select a predefined report template from the list.

or

Create a new report template based on a predefined template (see "Adjusting templates").



The predefined templates are shown on a white background and cannot be directly edited. Your adjusted templates are shown on a gray background, and can be edited, deleted, and renamed.

- 3. To print the report from the print preview, click on **Print**.
- 4. To save the report from the print preview as a PDF, click on **Save as PDF**.
- To send the report as a PDF by e-mail, click on Send as e-mail.
 The Send as e-mail function can only be executed with an e-mail program which supports MAPI (e.g., Microsoft[®] Outlook).



To be able to export diagrams in high contrast on the black and white printout as well, change this setting under **Menu** > **Options** > **Configuration** > **Report**.

2.9.1 **Adjusting templates**

Predefined templates can be selected and adapted to include the data you require.

- 1. Click on **Adjust templates** in the **Report** window.
- 2. Select the template that you would like to adapt from the list of templates in the **Adjust template** window.



To adopt screenshots from Signal view in reports, activate **Display** signal data.

- 3. Enable the elements whose data you want to include in your template.
- 4. Click **Save as...** and give the adapted template a name. Click on **Save**

The template is stored centrally and can be opened again, edited, and deleted.

2.9.2 Customizing the header of the reports

You can customize the header of the reports. This setting applies to all reports.

1. Click Menu > Options > Configuration.

32

- 2. Select the **OPERATOR INFORMATION** section.
- Enter the operator's data in the Institution and Contact details fields.

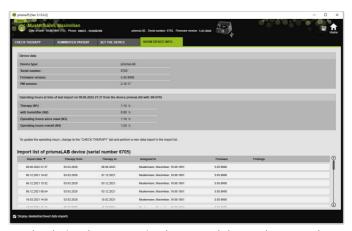
The data are visible in the report header.

- 4. To load your logo, click the **Browse** button, and select the logo.
 - The logo is visible in the report header. The size is adapted automatically.
- 5. To save your inputs, click on Apply.
- 6. To save your inputs and close the **prismaTS Configuration** window, click **OK**.
- 7. To discard your inputs and not save them, click on **Cancel**.
- 8.

Viewing device information 2.10

Requirement:

- A therapy device is connected.
 - or
- There is an SD card from a therapy device in the PC.
- A device or patient file is selected.
- The therapy data are imported from the device (see "Importing therapy data").
- 1. Select the **SHOW DEVICE INFO** tab.



The device data, operating hours, and therapy hours read out the last time therapy data was imported are shown. Slightly different data are shown depending on the type of therapy device.

Further information on the individual parameters can be found in the **Additional information for experts** or the clinical instructions for use for the therapy devices.

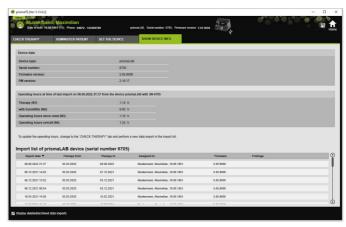
2. To print out the data for the operating hours and therapy hours, create a report (see "Creating reports (not for LM150TD)").

2.10.1 Managing the device's import history

A list of all the data ever imported into the device is listed as the import history. The files are patient-independent and only refer to the selected device with the respective serial number.

Requirement:

- A device is selected (see "Selecting therapy device").
- The **SHOW DEVICE INFO** tab is open.



- 1. To assign an import file to another patient, right-click on the file in the **Import list of device** section.
- 2. Select Transfer to another patient.
- 3. Select the patient to whom the file is to be assigned and confirm with **OK**.

or

4. To delete a file or save it in another location, right-click on the desired file and select the respective entry.

3 Settings (not for LM150TD)

You can set the therapy and device parameters in prismaTS and then transfer them to the therapy device via USB, LAN, or SD card.

Configuration in prismaTS								
	WM120TD	WM110TD	WM100TD	WM090TD	SOMNO devices			
via SD card	-	-	as of version 2.05	Х	as of version 10.0			
via LAN	only in prismaTSlab	only in prismaTSlab	only in prismaTSlab	only in prismaTSlab				
via USB	-	-	Х	-	via Weinmann converter cable Not possible if the device is being configured manually or the device is connected to prismaTSlab.			

3.1 Setting parameters

Requirement:

 The therapy device is connected to the PC via a USB cable (see "Connecting therapy device to the PC")

or

An SD card is inserted in the SD card slot on your PC.



You can only configure a therapy device once with an SD card.

A therapy device is selected.



- Click on the SET THE DEVICE tab in the main window.
- 2. To open or close the parameter groups, click on the arrow on the right-hand side of the parameter group.
- 3. To set parameters, select the required values with the arrow keys.



For information on which ventilation modes are available in which therapy devices and which therapy parameters (ventilation, comfort and accessories, and alarm parameters) can be set for the individual ventilation modes as well as information on the further configuration possibilities, please refer to the instructions for use for the therapy device.

4. To apply the parameters to the therapy device or save them to the SD card, click **Apply**.

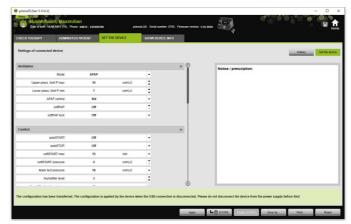


Data loss if power supply to the therapy device is interrupted during configuration via USB connection!

If the power supply is interrupted prematurely the configuration will not be performed properly which may result in incomplete or incorrect therapy settings and could injure the patient.

EN

⇒ Leave the therapy device connected to the power supply throughout the configuration.



5. In case of USB connection: To overwrite the old configuration on the therapy device with the new one, disconnect the USB connection between the therapy device and PC when the following message appears: The configuration has been transferred.

or

If you do **not** want to activate the new configuration on the device, disconnect the device from the power supply **before** removing the USB cable, or click the **Reset** button.

The configuration is not adopted by the therapy device and the existing configuration is retained.

6. In case of SD card: To overwrite the old configuration on the therapy device with the new one, remove the SD card from the PC when the following message appears: The configuration has been transferred, and insert it in the therapy device.



You should always check for changed time settings on the device following configuration.

3.1.1 Setting the scope (therapy goal)

You can define and create scopes for all modes (depending on the type of device and its firmware version). This saves the time-consuming and complicated optimization of individual parameters for many patients. It is always possible to adjust the parameters directly in case of special requirements.

- 1. Click the **SET THE DEVICE** tab.
- 2. Make the required settings for the scope.



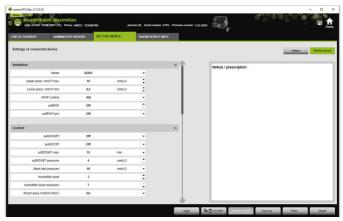
- 3. Click on **SCOPE** to save the ventilation parameters on the screen as the scope.
- 4. Give the scope an unambiguous name. The scope is saved.
- 5. To apply the scope to the therapy device, click **Apply**.
- 6. To edit a user-defined scope, select it in the **SCOPE** field. Edit the settings.
- To delete a user-defined scope, select it in the SCOPE field. Click on Delete SCOPE.

3.2 Using the settings history

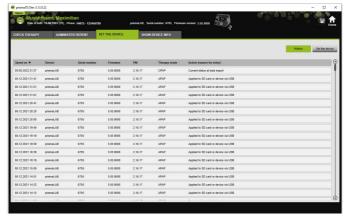
If the device supports the settings history, all the relevant settings for a patient are automatically documented and saved there. The settings can be viewed again, amended if necessary, and transferred to the therapy device via an SD card when changing devices or for therapy optimization purposes. If so prescribed, the last settings can be subsequently adapted to reflect the titration result and printed or transferred to the patient device via SD card.

Saving is performed automatically:

- after every data import;
- after every configuration of a device with prismaTS;
- after every printout of the settings;
- and after every export of the settings.



Click on the SET THE DEVICE tab in the main window.



- 2. Click **History**.
- 3. To open a data record, double-click on the required entry.
- 4. To change the settings if required, click **Edit copy...**.

or

To print the settings in a report, click **Print...**.

or

To save the settings to a blank SD card, for example, click on **Save as...**.

5. To revert to the current settings, click on **Set the device**.



If the therapy device with the same firmware version is currently connected to the PC via a USB connection or the SD card, you can transfer a setting to the device directly.

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3.3 Using a master SD card

With a master SD card you can configure multiple therapy devices with the same data (e.g., your preferred presets).



A master SD card can only be used to perform configurations; it **cannot** be used as an SD card for patient data. If necessary, import any therapy data prior to the conversion.

3.3.1 Creating a master SD card

You can convert an SD card into a master card.

Requirements:

- There is a valid SD card in the SD card slot.
- The SD card does not contain any patient data.
- The SD card is selected (see "Selecting therapy device").
- 1 Click the **SET THE DEVICE** tab



- 2. Click on the master SD card symbol M.
- 3. Confirm the **Create master card?** prompt with **Yes**.

3.3.2 Configuring a master SD card

Requirements:

- There is a valid master SD card in the SD card slot.
- The master SD card appears in the list of available therapy devices.
- 1. Click on the master SD card symbol M.
- 2. Edit the settings (see "Setting parameters").

3.4 Deleting and archiving therapy data after a certain time

You can delete and archive therapy data after a certain time, as well as re-import archived therapy data. To do so, apply the required settings in the prismaTSconfig program.

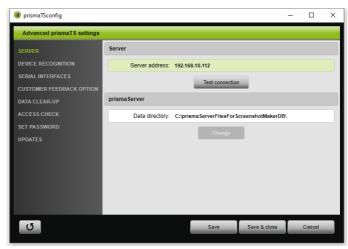


To be able to open prismaTSconfig, close prismaTS and prismaTSlab beforehand.

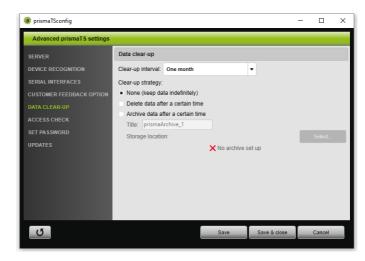
For protecting therapy data against archiving or deletion (see "Protecting therapy data against archiving or deletion").

3.4.1 Starting prismaTSconfig

 Call up the menu items Start > Programs > Löwenstein Medical Technology > Tools and click on prismaTSconfig.



2. Click on the **Data clear-up** menu.



3.4.2 Archiving therapy after a certain time

You can archive therapy data after a certain time, as well as re-import archived therapy data.

Archiving therapy data after a certain time

- To archive therapy data after a certain time, in the Data clear-up menu select the required period from the Clear-up interval drop-down list.
- 2. Activate the **Archive data after a certain time** option field.
- 3. Select the required name for the archive.
- To define the storage location for the therapy data to be archived, click on **Select...**.
- 5. Define the storage location and click on **OK**.
- 6. To archive the therapy data, click on **Save**.
- To archive the therapy data and close the Expanded prismaTS settings menu, click on Save & close.
- 8. To exit the prismaTSconfig program, click on **OK**.

3.4.3 Deleting therapy data after a certain time



Deleted files cannot be restored.

You can delete therapy data after a certain time. Deleted therapy data is indicated with a trash can symbol.

- To delete therapy data after a certain time, in the Data clearup menu select the required period from the Clear-up interval drop-down list.
- 2. Activate the **Delete data after a certain time** option field.
- 3. To delete the therapy data, click on **Save**.
- 4. To delete the therapy data and exit the prismaTSconfig program, click on **Save & close**.
- 5. To exit the prismaTSconfig program, click on **OK**.

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4 Therapy check

There are different views available for checking the therapy:

- Statistics view
- Therapy calendar
- Annual view of therapy calendar
- Signal view
- Therapy analysis

The views are available depending on device variant.

4.1 Opening statistics view

Requirement:

- A device or patient file is selected.
- The therapy data have been imported from the device (see "Selecting therapy device") or the therapy file is open (see "Opening already imported therapy data").



- 1. Select the CHECK THERAPY tab.
- 2. To open the statistics view, click on **Example 2** Statistics view.
- 3. Select the period to be analyzed from the **Statistics period** list.



Select the period to be viewed from the **From:** and **To:** lists.

4. If required (WM100TD only): Filter the statistics period to a single ventilation mode.

The statistics overview shows the most important values for compliance, therapy quality, leaks, and SpO_2 (as long as the SpO_2 module was connected at least once during the therapy). It shows the respective last therapy settings for the selected period.



You can set whether diagrams and/or main indexes are displayed in the statistics overview under **Menu** > **Options** > **Configuration** > **Therapy monitoring**.

To be able to export diagrams in high contrast on the black and white printout (report) as well, change this setting under **Menu > Options > Configuration > Report**.

5. To view additional statistical values for the therapy, click on **Expanded statistics**.



The **Expanded statistics** view shows values for the mode, compliance, humidifier usage, AHI mean values, respiratory characteristics, pressure, leaks, and SpO₂.

6. If you run a mouse over the displayed parameters, you will be shown additional information on the individual points.

4.2 Viewing therapy calendar

The therapy calendar offers you an overview of the customer's usage pattern (how many hours the patient uses the therapy device for and at what time and on what days). In addition, the therapy calendar displays data on compliance, therapy quality, and leaks during this period.



Different views are available depending on the device version.

1. To view the therapy calendar with data related to a specific day, click on **11 Therapy calendar**.

alternatively

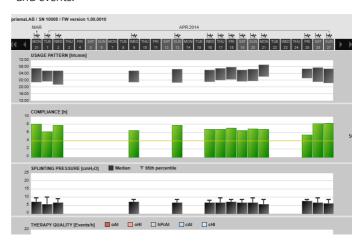
To view the therapy calendar with data related to a specific week, click on **Annual view of therapy calendar**.



- 2. If you run a mouse over the displayed bars, you will be shown additional information on the individual points.
- The statistical data column is displayed in the right-hand area of the therapy calendar as standard.
 To hide or show the statistical data column, click on **Statistics**.
- 4. Click **Print...** to output the current view with the name and date of birth of the patient.

4.2.1 Viewing days with signals and events

The w button in the therapy calender shows the days with signals and events.

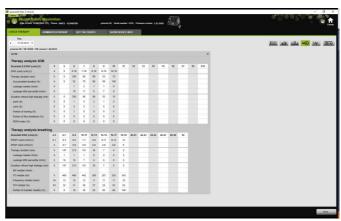


- To view a day's signals and events, click on .
 The signal view for the selected day is opened (see "Opening signal view").
- 2. To view the therapy calendar again, click on **41** Therapy calendar.

4.3 Viewing therapy analysis

The therapy analysis is displayed for all modes and for each individual therapy night. The tabular overview illustrates in detail the relevant respiratory parameters and respiratory disorders as well as unintentional leak flow depending on the respective pressure/pressure range over the course of a therapy night. It assists the expert quickly and easily in setting an optimal pressure range for the subsequent therapy.

1. To open the therapy analysis, click Therapy analysis.



- 2. Select the required day from the **Day** list.

 The arrow keys can be used to go back or forward one day.

 Days without any signal data are skipped.
- 3. If you run a mouse over the displayed parameters, you will be shown additional information on the individual points.
- 4. Click **Print...** to output the current view with the name and date of birth of the patient.

4.4 Opening signal view

The signal view displays signals and events.

1. To open the signal view, click on **Signal view**.



- 2. The statistical data column is displayed in the right-hand area of the signal view as standard.
 - To hide or show the statistical data column, click on **Statistics**.
- Select the required day from the **Day** list.
 The arrow keys can be used to go back or forward one day.
 Days without any signal data are skipped.
- 4. Select the period in hours, minutes, or seconds from the **Zoom** list.

or



Zoom using the context menu opened by right-clicking (see "Zooming").



Depending on the device version, there are one or several view options available. Different signals and events are displayed in accordance with the view option selected.

5. If necessary: Select the desired view option in the **View** list. There are different views available to choose from depending on which device is connected.



- 6. WM100TD and WM090TD devices only: To view the current device settings at the time of an event, move the mouse into the green bar in the area above the event.
- 7. Click **Print...** to output the current view.
- 8. To print out a protocol of a titration night with all active events, click on **Therapy protocol** (see "Print therapy protocol").

The meaning of the colors of the individual signals can be taken from the key.

If there are SpO_2 data available for individual days, these days are highlighted in light blue in the selection calendar.

Following signal values

If you run the mouse over the signal view, the current measurement at the mouse position is shown for every channel. If several signals are shown in a channel, the value shown always refers to the top signal in the channel key (see "Opening signal view").

Units and sampling rates

To view the units and sampling rates of the signals, click





4.4.1 **Customizing signal view**

You can customize the signal view and, for example, remove channels which are not required from the view and change the order of the channels to suit your requirements.

- 1 Click on **Customize view**
- 2. To remove or add a channel, right-click on the corresponding channel in the **Customize view** window
- 3. Select the corresponding entry.
- 4. To move a channel, click on it and drag it to the required position with the left mouse button.
- 5. To save your changed settings, click on **Save**.

The changed view can be identified by a green dot in the list and is saved under the same name.

or

Click on Save as

Enter the required name for the changed view and click on **OK**.

The changed view can be identified by a green dot in the list and is saved under the name just assigned.

- 6. To delete your settings saved under one of your own names, click on Delete.
- 7. To restore the original view after saving, click on **Restore** default.
- 8. To adjust the settings saved under one of your own names and then to discard the adjustments, click on **Reset**.

4.4.2 Zooming

To see more details, you can enlarge a section of the therapy data to fill the screen.

Zooming horizontally

1. Mark the beginning of the period in question with the left mouse button.

3. Release the mouse button.

automatically.



4. Click on **Zoom** in the menu which opens.



If you double click a section of the measurements, it is enlarged to fill the screen. In this way you can switch between the overview of the measurements and a detailed, analyzed signal section. You can then select another signal section for detailed analysis.

Zooming vertically

1. Click on the name of a channel.



- 2. Click on the + or symbols to enlarge or reduce the vertical resolution of the signal.
- 3. The arrow keys can be used to move the signal upward or downward.
- 4. To restore the standard settings, click **R** (Reset).

4.4.3 Measuring period or signal values

You can measure the period of a marked channel with signals.

- 1. Mark the beginning of the period to be measured with the left mouse button.
- 2. Keep the mouse button pressed and drag it to the end of the required period.
 - If you leave the visible part of the record, the display scrolls automatically.
 - The cursor shows the duration of the currently marked period.
- 3. Release the mouse button.
- 4. Click on **Measure** in the menu which opens.

In addition to the exact start and finishing points, the duration of the marked period is also shown. The minimum and maximum of the measurement data and the mean value are shown.

4.4.4 Copying therapy data

You can copy the therapy data of a particular section to the clipboard.

- Mark the start of the period to be measured using the left mouse key.
- 2. Hold down the mouse key and drag to the end of the desired period.
 - If you leave the visible area of the recording, the display will automatically scroll with you.
 - The duration of the period currently marked is displayed at the mouse pointer.
- 3. Release the mouse key.



4. In the menu which opens, click Copy.

4.4.5 Creating screenshots

You can create up to 10 screenshots in Signal view. The screenshots can be enclosed with the reports (see "2.9.1 Adjusting templates", page 32).

- 1. To create a screenshot, click .
- 2. The created screenshots appear next to
 cremove a screenshot from the selection.

4.4.6 Entering findings

Entering findings without a template

- To enter findings, click on Statistics view.
 If the Statistics view page is open, the button will be highlighted green
 Image: Statistics view
 Image: Statistics view
- 2. Enter your findings in the **Findings** field.
- 3. Click on Save.

The findings are saved with the already opened import and then appear in the printed reports.

Entering findings with a template

You can save texts as a template in the **Findings** field and load saved findings to the **Findings** field. Findings can be created as a combination of freely selectable text and saved findings templates.

Saving findings as a template

- To save findings as a template, enter the text in the **Findings** field.
- 2. Click on ⊕ in the **Findings** field.



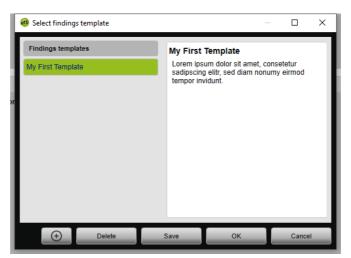
- 3. Enter the name under which you would like to save the findings template.
- 4. Click on **OK**.

Loading saved findings in the Findings field

- 5. To load saved findings in the **Findings** field, click on [▶] in the **Findings** field.
- 6. Select the required findings from the list.

or

Select More...



In the **Select findings template** window, you can select, delete and save existing findings.

To create new findings, click on .

4.4.7 Print therapy protocol

The therapy protocol contains all the events (e.g., alarms, events) of a titration night in the form of a table. You can filter by type if you only wish to list certain types of events.

- 1. Click on Therapy protocol in the signal view.
- 2. Click **Filter** if you only want selected types of events to appear in the therapy protocol.
- 3. Select the required types of events.
- 4. Click **Therapy protocol**.
- 5. Click **Print** to print the therapy protocol.
- 6. To proceed from the therapy protocol directly to a certain event in the signal view, double-click the required event or click **Go to**.

5 Appendix

5.1 Technical Data

Specification	prismaTS
Product class to directive 93/42/EEC	lla
Software risk class according to IEC 62304	В

5.2 Labels and symbols

Label	Description
	Follow the user manual
UDI	Unique device identifier (uniform product code for medical devices)
MD	Indicates the product is a medical device
C € 0197	CE symbol (confirms that the product conforms to the applicable European directives/ regulations)

5.3 Declaration of conformity

Löwenstein Medical Technology GmbH + Co. KG, Kronsaalsweg 40, 22525 Hamburg, Germany, the manufacturer, hereby declares that the product complies with the relevant regulations of the Medical Device Directive 93/42/EEC.

The complete text of the Declaration of Conformity is available on the manufacturer's website.

In the EU: As a user and/or patient, you must reportany serious incidents occurring in conjunction with the product to the manufacturer and to the responsible authority.

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C€ 0197

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