

Description and
Operating Instructions

VENTI*support*

Version 1



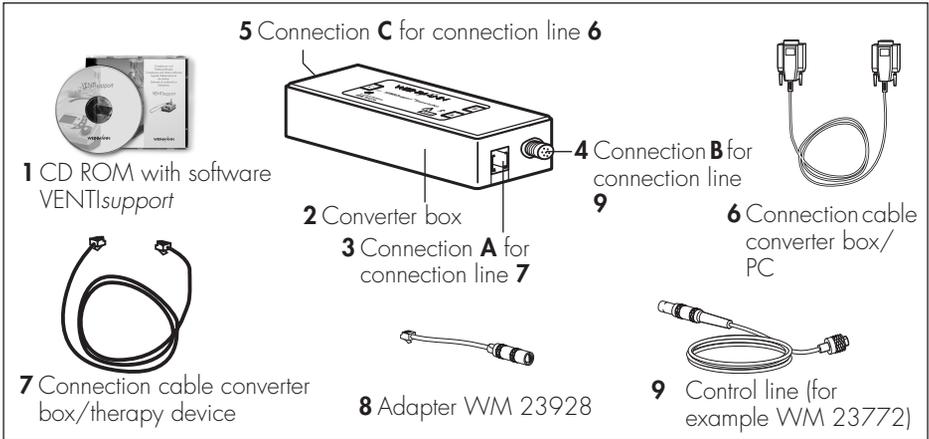
Compliance and titration software



WEINMANN

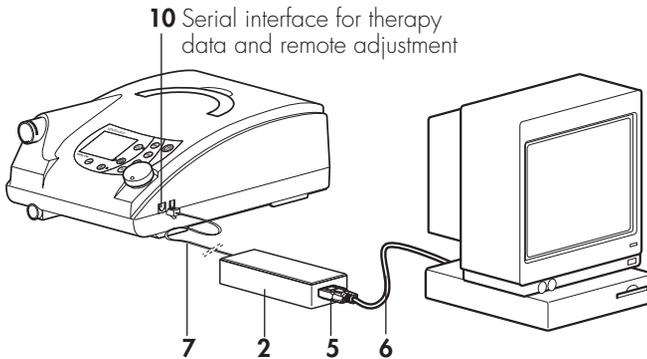
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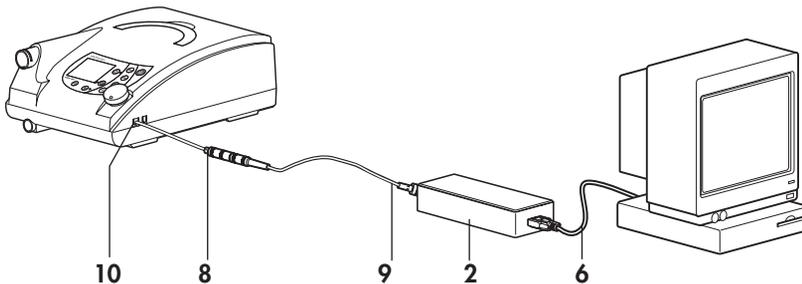


Connections

I: Connection of therapy device via connection line, converter box/therapy device



II: Connection of therapy device via existing control line



1. Description

1.1 Purpose

VENTI*support* is the PC software designed to accompany Weinmann therapy devices. It makes it possible to read and display therapy control data, and also permits PC-aided analysis. With its VENTI*adjust* remote settings module, VENTI*support* also allows you to display and set therapy parameters.

For further information on visualisation of data and adjustment of therapy parameters, please consult the Online Help (see "4.3 Online Help" on page 10). It is part of VENTI*support*.

1.2 Labelling

The symbols on the rear of the converter box have the following meanings:



Manufactured on



Attention, take note of accompanying documents



Application parts type B

You can use the VENTl*adjust* remote settings module to display the following symbols in the VENTl*support* software:



Low-priority alarm was triggered from the therapy device



Medium-priority alarm was triggered from the therapy device

2. Safety

For your own safety please observe the following points:

- Read these operating instructions carefully. They are part of VENTl*support* and must be kept available at all times.
- Use VENTl*support* for the designated purpose only. Only therapy devices manufactured by Weirmann may be connected to the converter box.
- The system may only be used by trained persons with adequate specialist knowledge.



Attention!

A PC and patient may not be connected simultaneously to the therapy device unless there is a sufficient galvanic separation. This is only ensured by using the converter box with galvanic separation WM 93316.



Attention!

The VENTl*adjust* remote settings module is not an on-line monitoring system. Do not use the remote settings module to monitor the alarms or the therapy pressure.

- The converter box must not be immersed in fluid or cleaned with liquid cleaners. Clean the converter box with a dry or slightly moistened cloth. Make sure that no liquid enters the connecting sockets.
- Do not have repairs performed by anyone except for the manufacturer, Weinmann.
- Observe the system requirements (see "3.1 System requirements" on page 6). Do not install the software on a computer that does not meet the system requirements.
- Protect the CD ROM from intense sunshine or mechanical effects such as bending and scratching.
- Observe the online help provided as part of the *VENTI*support software. It is part of *VENTI*support.
- Please ensure that selection of adjustment of the therapy parameters using *VENTI*support (*VENTIadjust* functionality) does not simultaneously bring about changes to the therapy device. It is possible for each to be influenced by the other.
- Make sure that the therapy device connected to the PC is not changed during data import or while using the *VENTIadjust* functionality in *VENTI*support. This could result in confusion of data or incorrect settings on the therapy device.
- To prevent confusion, always enter the patient's name for the therapy data.
- Do not terminate the data transfer prematurely by removing the power plug on the therapy device or by interrupting the connection between the therapy device and PC. If the data transfer was not completed properly, you may want to check what the settings of the therapy parameters are.



Please note!

You should only ever connect one therapy device and just one converter box to a PC. This also applies to Weinmann sleep therapy appliances.

- Additional equipment connected to the analog and digital interfaces of the device must clearly meet the requirements of the corresponding EN specifications (for example EN 60950 for devices that process data and IEC 60601 for electronic medical devices). In addition, all configurations must meet the requirements of system standard and IEC 60601-1-1 + A1. If you connect additional devices to the signal input or output stage, you are a system configurator and are thus responsible for ensuring that System Standard VDE 0750 Part 1-1 is observed. If you have additional questions, please contact your local distributor or the customer service department of Weinmann.
- Malfunctions may result if third-party articles are used. Please bear in mind that in these cases any warranty entitlement and liability shall lapse where the accessories recommended in the instructions for use or original spare parts are not utilised.
- Please note that a safe distance must be maintained between the converter box with connected data transfer cables (see accessories, spare parts) and any equipment that emits HF radiation (e.g. mobile phones), otherwise malfunctions may occur (see "Recommended safe distances between portable or mobile HF telecommunication devices (e.g. mobile phones) and data cables" on page 17).

3. Installation

3.1 System requirements

The VENTIsupport software requires an IBM compatible computer that satisfies the following requirements:

- Processor: Pentium III, 1 GHz or better
- Free storage: at least 300 MB on a hard drive, at least 50 MB in system partition
- Active memory: at least 128 MB RAM
- Connection: free RS232 serial interface (COM1 to COM4, 16550-compatible UART)
- Drive: CD ROM drive, at least 12x
- Graphics card: VGA resolution or higher, color monitor (min. 1024x768, max. 1600x1200), card supported by MS Windows
- Input: keyboard and mouse or another suitable pointing device supported by MS Windows
- Printer: supported by MS Windows
- Operating system: MS Windows 2000 (Service Pack 4), MS Windows XP (Service Pack 2)
- Software: Adobe Acrobat Reader 6.0; Internet Explorer 6.0 SP1 or better.

Recommended system

We recommend a Pentium III processor with a clock rate of at least 1 GHz, 512 MB memory, and a 17" VGA monitor.

3.2 Software installation

Note:

VENTI*support* is not designed for installation on network drives. Install VENTI*support* on a local hard disk. Our hotline is available to help with questions and problems of all kinds:

Phone: +49/40/5 47 02-0

E-mail: ventisupport.hotline@weinmann.de

1. Start MS Windows 2000/XP and exit all programs that are running before installing the VENTI*support* Software.

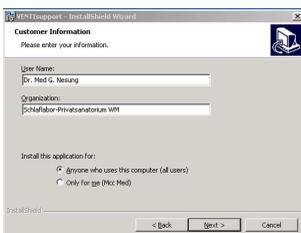
If you are installing VENTI*support* Software on a MS Windows 2000 or MS Windows XP operating system, make certain that you have administrator rights.

2. Insert the CD ROM in the drive.

The installation will now be started automatically.

3. You will be guided in all additional installation steps by the dialog window:

- Use **Next** to continue the installation;
- You can use **Back** to return to the previous menu;
- You can exit the installation with **Cancel**.

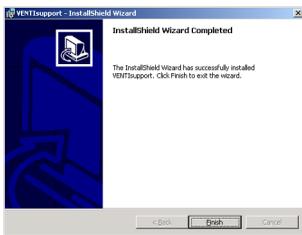
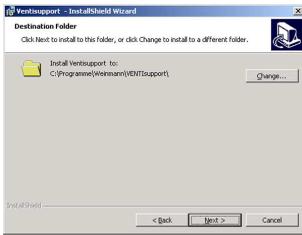


During the installation

1. In the following window, enter your user name and the department for which you are installing the VENTI*support* Software.

If you are installing VENTI*support* Software on a MS Windows 2000 or MS Windows XP operating system, the installation program will suggest installing the software for every user of the computer.

If you would not like any other user except for you to use the *VENTIsupport* Software, click on **Only for me**.



2. The installation program will suggest installing the *VENTIsupport* software in the directory:
C:\Program Files\Weinmann\VENTIsupport
If you accept this path, click on the **Next** button. If you want to select another path, click on **Change** and enter a new path.
3. After that the installation program copies the required files from the CD ROM onto the hard drive.
4. If the window you see to the side here appears, the installation was completed successfully. Click on **Finish** to complete the installation.
5. The *VENTIsupport*-Symbol symbol is automatically placed on your desktop.

3.3 Deinstallation



1. Please click on the **Start** icon in the lower left of the desktop.
2. In the **Settings** menu, select the sub-menu **Control panel**.
3. In the Control Panel window, click on the sub-program **Software**.
4. In the selection list, select **VENTIsupport** and then click on the **Delete** button.

4. Operation

In this chapter you will find important information to enable you to use *VENTIsupport*. All further applications and explanations within the *VENTIsupport* software can be found in the printable Online Help, which is organised like your familiar Windows Help.

For information on how to print individual Help topics or the entire Online Help, turn to the chapter “4.3 Online Help” on page 10.

4.1 Starting *VENTIsupport*



1. If the *VENTIsupport* icon is located directly on your graphical user interface, (because you placed a link on your desktop), you can open the program by double-clicking on the icon.

If the *VENTIsupport* icon is not on your desktop, you can start the program as follows:



2. Select one after the other the menu items **Start Programs, VENTIsupport**.
3. Select the *VENTIsupport* icon to start the program.

4.2 Selecting the language

The *VENTIsupport* program runs in a number of languages. To switch to the English language setting, perform the following steps:

1. Select **Language** from the **Settings** menu.
2. Click on **English**.

3. From now on, the program will run in English. The next time you start the program it will automatically open in English. The setting remains unchanged until you select a different language.

4.3 Online Help



Consulting Help topics

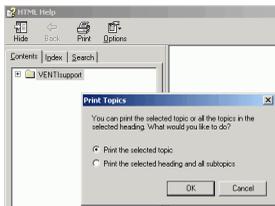
1. First start the Online Help:
 - Press function key F1 or
 - select one of the tab cards **Contents**, **Index** or **Search** in the Online Help.

In the Online Help you will find under **Contents** an overview of all Help topics. Under **Index** you can select keywords from a list, and under **Search** you can find and display all Help topics for a keyword.

2. Open the Help topic:
 - using **Contents**: Click on the topic to open the appropriate Help topic.
 - using **Index**, **Search**: Open the Help topic by double-clicking it.

Printing a Help topic

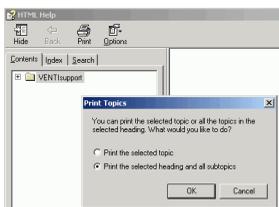
1. Open the relevant Help topic.
2. Click on the Print icon.
 - Select **Print the selected topic** from the **Print Topics** menu and click **OK**.
3. Click **OK** in the print dialog to start printing.



Printing the entire Online Help

The Online Help covers the functionality of both VENTIsupport and VENTIadjust.

You can print the Online Help for VENTIsupport and VENTIadjust as follows:



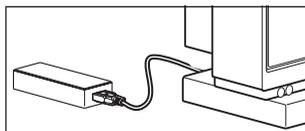
1. On the **Contents** tab, mark the folder VENTIsupport or VENTIadjust.
2. Click on the Print icon.
3. Select **Print the selected heading and all subtopics** from the **Print Topics** menu and click **OK**.
4. Click **OK** in the print dialog to start printing.

4.4 Connecting therapy devices to the PC

A serial interface is used to transfer stored data from the therapy devices to the PC. The default setting in the software provides for a COM2 connection.

Connecting the converter box to the PC

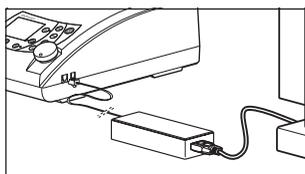
If the COM2 connection is not yet assigned on your computer, please use it. If it is assigned, select another COM connection that is free (see "Adjusting the COM connection" on page 12).



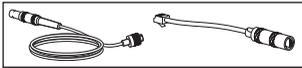
1. Screw the connection for the converter box/PC **6** connection line onto the 9-pin socket **5** identified as **C** on the converter box **2**.
2. Plug the other end of the connection line **6** into the PC's COM connection.

Connection for reading the therapy data and for making remote settings

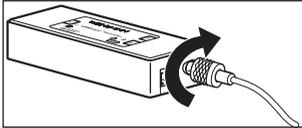
To read the therapy data from the therapy device and to make remote settings to it, connect the **10** socket of the therapy device with the socket **3** (identified as A) on the converter box **2**. Use the **7** connection line to do this.



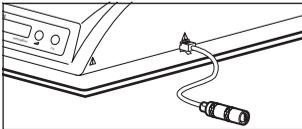
Connecting with existing control lines



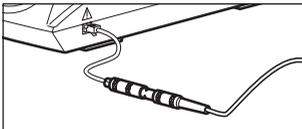
If you would like to use on-site control lines (WM 23772, WM 23770 and WM 23775) to connect to the converter box **2** you will also need the **8** WM 23928 adapter for the control line.



1. Connect the end of the control line **9** with the converter box **2**. To do this, screw the coupling onto the input **4** identified as **B**.



2. Plug the adapter **8** WM 23928 into the device connection **10**.

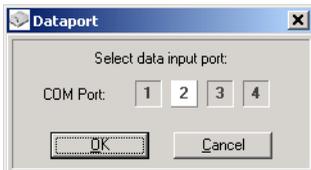


3. Connection the control line **9** plug with adapter **8**.

Adjusting the COM connection

If you have not connected the therapy device onto the COM2 connection of your computer, adjust the COM connection as follows:

1. Please start VENTIsupport (see "4.1 Starting VENTIsupport" on page 9).
2. Select the **Serial port** submenu in the **Settings** menu.
3. Select the desired COM connection and click on **OK**.



4.5 Remote settings for the therapy device

1. Make certain that the therapy device is receiving electrical power.
2. Please start the *VENTI*support Software (see "4.1 Starting *VENTI*support" on page 9).
3. Start the remote settings with the menu item **Tools, VENTladjust** and follow the instructions of the program.

For the adjustable parameters, please refer to the Online help. *VENTI*support detects the attached therapy device, displays the current therapy parameters for it and offers you only those functions that are adjustable for this device.

4. Close the window with the therapy parameters before connecting another therapy device to the converter box.

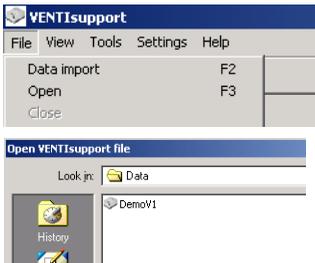
4.6 Transferring data

1. Make certain that the therapy device is receiving electrical power.
2. If you want to import data from the appliance, switch the appliance off.
3. Please start the *VENTI*support software (see "4.1 Starting *VENTI*support" on page 9).
4. Start the data transfer with the menu item **File, Data import** and follow the instructions in the program. You can import all data into one file.

5. Functional check

The installer copies a demo file to the subdirectory **\Data**. You can use this file to test the options of the *VENTIsupport* software:

1. Start *VENTIsupport*.
2. Select **Open** from the **File** menu.
3. Select the subdirectory **Data**.
4. Open the file **Demo...**



Remote settings

To monitor the function of remote settings, please proceed as follows:

1. Connect a therapy device for report settings (see "4.4 Connecting therapy devices to the PC" on page 11).
2. Make certain that the device is turned off.
3. Start the option for remote settings in the program (see "4.5 Remote settings for the therapy device" on page 13):
 - When the device is turned off, the window for *VENTIadjust* in the program must show "Therapy device OFF" in the therapy parameters;
 - The respiration pressure (actual pressure) must be 0 hPa.

6. Maintenance

VENTI*support* requires no maintenance.

6.1 Disposal



Do not dispose of the appliance as domestic refuse. To ensure proper disposal of the converter box and data cables, consult an approved electronic scrap recovery firm.

You can find out their address from your environmental officer or your municipal authorities.

7. Troubleshooting

Fault	Cause	Remedy
VENTI <i>support</i> cannot establish connection with therapy device.	No power supply to therapy device.	Use power cord to connect device to a wall outlet.
	Trying to import data; the therapy appliance is switched on.	Turn off the therapy device.
	Serial port incorrectly set.	Set a free serial port by selecting Serial port from the Settings menu.
	No connection between therapy device and PC.	Check connections of PC connection cable at PC and converter box, and of connection cable between therapy device and converter box.
	Port being used by other applications.	Exit these applications.
Communication error reported despite correct connection to therapy device.	The connection between appliance and PC was interrupted during the data transfer. However, the therapy appliance is still sending data as a result of the last data transfer command.	– Wait until data transfer is completed , then start it again. or – Stop data transfer by unplugging the power plug of the therapy appliance, then start data transfer again.
The therapy device does not contain any data.	The data in the therapy device was inadvertently deleted despite a warning message from the VENTI <i>support</i> software.	Error cannot be corrected. Record the data again.

8. Scope of supply

8.1 Standard product

VENTI*support*
consisting of:

WM93340

Item	Order No.
Software VENTI <i>support</i> (1 CD-ROM 1)	WM 93350
Converter box 2	WM 93316
Connection line 6 Converter box/PC, 2 m	WM 93312
Connection line 7 Converter box/therapy device, 2 m	WM 93313
Operating instructions VENTI <i>support</i>	WM 96602

8.2 Spare Parts

Item	Order No.
Software VENTI <i>support</i> (1 CD-ROM 1)	WM 93350
Converter box 2	WM 93316
Connection line 6 Converter box/PC, 2 m	WM 93312
Connection line 7 Converter box/therapy device, 2 m	WM 93313
Operating instructions VENTI <i>support</i>	WM 96602

8.3 Accessories

Item	Order No.
Control line 9 , 2 m	WM 23772
Control line, 15 m	WM 23770
Control line, 30 m	WM 23775
Adapter 8 Therapy device/control line	WM 23928

9. Technical Data

VENTIsupport		
General	Device class EC 93/42	IIa
	Temperature range: Operation and storage	+10 °C to +40 °C
	Relative humidity: Operation and storage	0 – 95% non-condensing
Converter box	Dimensions WxHxD	135 x 55 x 30 mm
	Weight	approx. 100 g
	Electromagnetic compatibility according to EN 60601-1-2 – Radio interference suppression – Radio interference resistance	EN 55011 (VDE 0875 T11) EN 61000-4 Parts 2 to 6

9.1 Safe distances

Recommended safe distances between portable or mobile HF telecommunication devices (e.g. mobile phones) and data cables			
Rated output of HF device in W	Safe distance as a function of transmission frequency in m		
	150 KHz - 80 MHz	80 MHz – 800 MHz	800 MHz – 2.5 GHz
0.01	0.12	0.12	0.24
0.1	0.37	0.37	0.74
1	1.17	1.17	2.34
10	3.69	3.69	7.38
100	11.67	11.67	23.33

Contact Weinmann for further technical specifications.

10. Warranty

- Weinmann offers a warranty that the product, when used in accordance with requirements, will remain free from defects for a period of two years from date of purchase. For products whose durability is clearly indicated as less than two years, the warranty expires on the expiration date indicated on the packaging or in the user's manual.
- Claims against the warranty can be made only when accompanied by the sales receipt, which must show salesperson and date of purchase.
- We offer no warranty in the case of:
 - Disregard of usage instructions
 - Operating errors
 - Improper use or handling
 - Third-party intervention by non-authorized persons for the purpose of device repair
 - Acts of God, e.g., lightning strikes, etc.
 - Transport damage as a result of improper packaging of returned items
 - Lack of maintenance
- Weinmann is not liable for consequential harm caused by a defect if it is not based on intention or gross negligence. Weinmann is also not liable for minor physical injury to life or limb resulting from negligence.
- Weinmann reserves the right to decide whether to eliminate defects, to deliver a defect-free item or to reduce the purchase price by a reasonable amount.
- If Weinmann rejects a claim against the warranty, it assumes no expense for transport between customer and manufacturer.
- Implied warranty claims remain unaffected by these changes.

EEC Letter of Conformity on Medical Devices

We, the manufacturer

Weinmann
Geräte für Medizin GmbH+Co.KG
Kronsaaßweg 40 · D – 22525 Hamburg

declare in sole
responsibility the

Product Name: **Compliance and titration software**

Type/Model: **VENTIsupport**

being in conformity
with the respective
regulations of the
following guideline:

Medical Device Directive 93/42/EEC

Classification:

II a

Standards used

in particular: EN 60601-1-4 / 2001-04

Hamburg, 01.04.2005



Dr. K.-A. Feldhahn
Executive Vice President
Chief Operating Officer

WEINMANN

01.2004 Alb

For decades Weinmann has been developing, producing and marketing medical devices for markets around the world. In cooperation with our partners we design economic health systems for diagnosis and therapy in Sleep Medicine, Home Mechanical Ventilation, Oxygen Medicine and Emergency Medicine.



WEINMANN

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