

# Instruction manual

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## Soundbox

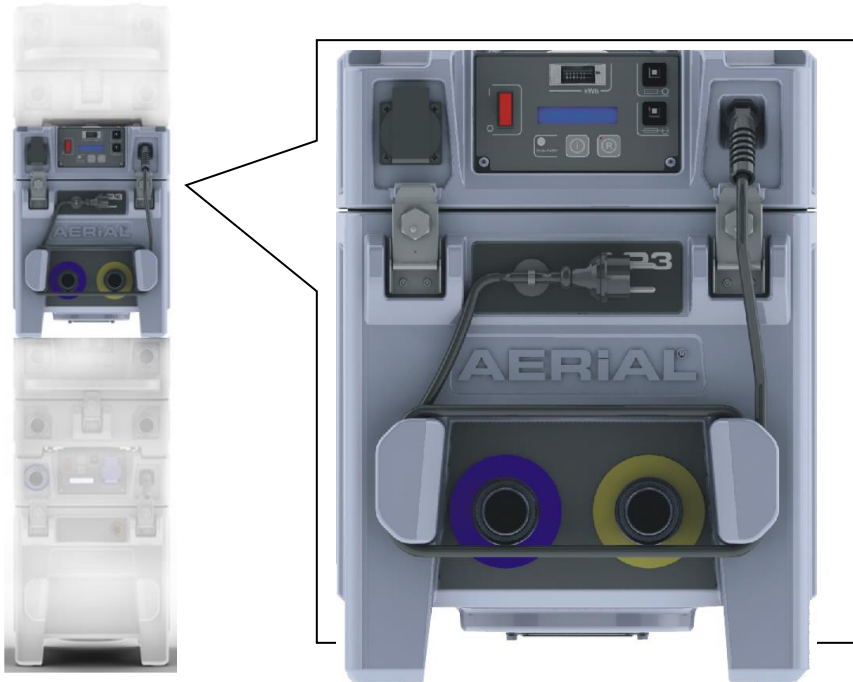
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Series VP2

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VP3

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This instruction manual shall not be reproduced, copied and distributed, neither in parts nor completely, without the manufacturer's written permit.

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The instruction manual is based on the technical and product-specific parameters. The manufacturer reserves the right to add supplementary information to the instruction manual.

Using a device outside the specified conditions and contrary to its designated use will lead to the forfeiture of all warranty claims.

As of: 06\_2020

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### 1 Notes on this instruction manual

This instruction manual is part of the product. It contains all important information on how to transport, install, operate, store and dispose of the device from **AERIAL** properly and safely. Therefore keep this instruction manual in a safe place.

#### Target groups

This instruction manual addresses the users and operators of the devices manufactured by **AERIAL**. They must have read and understood the instruction manual. The physical and psychological preconditions for proper and safety-conscious handling of the devices must always be guaranteed.

### Conventions

#### Warnings

In this instruction manual you will find information intended to warn you of possible hazards at the beginning of a specific action.



#### Type and source of hazard

This symbol in connection with the signal word "DANGER" refers to a life-threatening situation. Failure to observe this warning will result in serious, fatal injury.

- ➞ This arrow marks precise steps to avert danger which must always be performed.



#### Type and source of hazard

This symbol in connection with the signal word "WARNING" refers to a dangerous situation. Failure to observe this warning can result in life-threatening injury and death.

- ➞ This arrow marks precise steps to avert danger which must be performed.



#### Type and source of hazard

This symbol in connection with the word "CAUTION" warns of minor or moderate injury and potential material damage.

- ➞ Measures to prevent personal injury or material damage are described here.



In this box you find tips and information concerning the use of the device.

### Designated use

The soundbox VP2 / VP3 is designed for conveying air and non-explosive gases and gas/air mixtures as pressure or vacuum pump.

The soundbox VP2 is designed exclusively for use at atmospheric pressure. Operating the adsorption dryers within the limits of designated use also involves observing the specified operating conditions (refer to page 7). Any use of the device going beyond the designated use specified above is considered contrary to its designated use.

Misuse is concerned if the soundbox VP2 / VP3 is used for purposes not included in designated use. In these cases the manufacturer does not assume any liability for personal and material damage.

## 2 Safety

### Safety devices

The soundbox VP2 / VP3 was subjected to thorough safety testing. Improper operation or misuse will cause danger to

- the operator,
- the machine and other material property of the user,
- efficient operation of the machine.

All persons involved in the installation, commissioning, operation, maintenance and servicing of the devices must

- be properly qualified,
- closely observe the instructions set out in this manual.

### Hazards from accessories

Air hoses, power cables and air filters must be properly installed, and must not disable the protection devices of the VP2 / VP3.. The operating elements must always be accessible.

### Authorised operator

The soundbox VP2 / VP3 may only be operated by persons commissioned and instructed by the user. In the working area the operator is responsible to third parties. For all activities on the device the responsibilities must be clearly defined and observed. Unclear competences are a safety risk.

### User

The user must

- make the instruction manual accessible to the operator,
- make sure that the operator has read and understood the instruction manual.

### Safety instructions

The devices must **not** be used under the following conditions:

- in rooms with potentially explosive atmospheres.
- in rooms with aggressive atmospheres, e.g. ammonia, wood acids.
- in rooms with water with a pH value outside the range from 7.0 to 7.4.
- In rooms with salt or liquids with a salt content > 1%.
- in rooms with ozone-treated air
- in rooms with high solvent concentration.
- in rooms with extreme dust load.

In addition the following must be observed when using the soundbox VP2 / VP3:

- Work on electrical equipment may only be carried out by skilled electricians.
- Original spare parts or spare parts approved by the manufacturer shall exclusively be used.

### 3 Construction

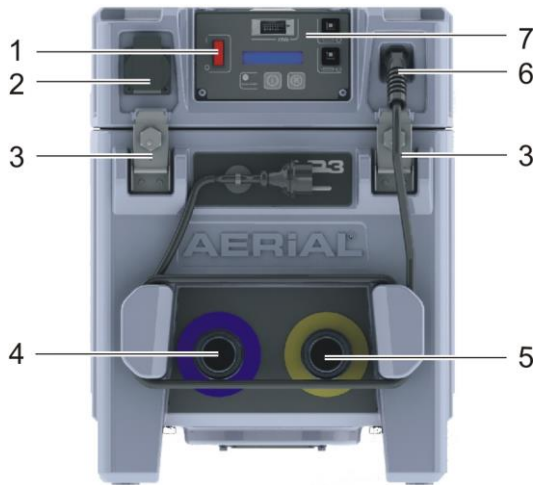


Fig. 1: AERIAL soundbox series VP2 / VP3 - overview

1	On / Off switch	5	Tube connector, pressure side
2	Appliance socket	6	Power cable
3	Tension lock	7	Control panel with full text display
4	Tube connector, intake side		

The sound box VP2 / VP3 is equipped with a side channel compressor installed with vibration damping. The installed compressor is air-cooled and works 100 % oil-free. The integrated noise stop system ensures a low noise level.



Use tubes of 50 mm diameter for efficient drying. Smaller tubes result in high energy consumption and longer drying times.



### 4 Transport and installation

#### Transport

1. Remove the packaging material completely and dispose of according to the local regulations.
2. Check the delivery for completeness.
3. Use the lateral handles or the handle in the middle of the cover to transport the sound box to the place of installation.

#### Scope of delivery

- Soundbox VP2 / VP 3
- One instruction manual

#### Operating conditions

The soundbox VP2 / VP3 is intended for use in screed and insulation layer drying and hollow space drying. It works without problems in the temperature range from 0 °C to +35 °C. In case of floor installation it must be ensured that sensitive floors are protected against the thermal load from the device.



Fig. 2: Fixing points for belt system

#### Installation

The devices can be stacked, and are provided with fixing points for a belt system on the right and left.

### Connection



#### **Danger to life due to electric shock**

- ➔ Prior to commissioning the technical data of the soundbox VP2 / VP3 must be compared with the conditions prevailing in the room of installation!

The following items must be checked prior to electrical connection of the soundbox:

- Is the mains voltage in conformity with the voltage of the device?
  - Are socket and supply system sufficiently fused?
  - Has an RCCB (required) been installed?
4. Connect the power plug of the soundbox to a suitable power outlet.

## 5 Operation and operator control



### Danger of injury and damage to appliance

Inadmissible ambient conditions and improper operation of the device may constitute a risk.

- Read the instruction manual before commissioning the soundbox VP2 / VP3..

### Operating elements

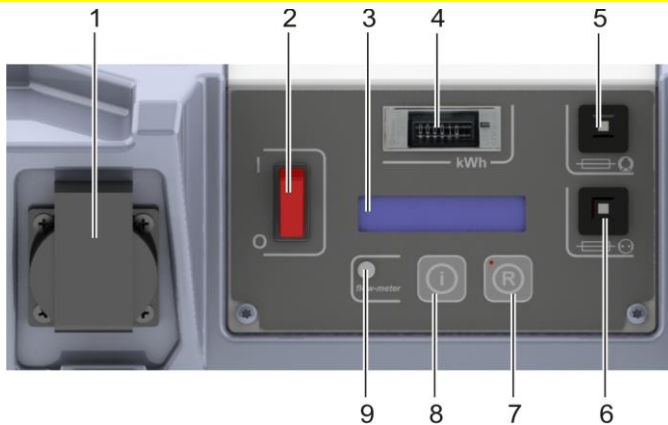


Fig. 3: Operating panel Soundbox VP2 / VP3



1	Appliance socket	6	Appliance socket fuse
2	On / Off switch	7	Membrane key "Reset" with red LED
3	Display LED matrix, blue	8	Membrane key "Info"
4	Watt meter (MID)	9	LED green, yellow, red
5	Compressor fuse		

In the standard version, the energy consumption of the units connected to the unit socket (item 1) is **not** counted by the calibrated watt meter (MID) (item 4). Customized solutions are possible.



## OPERATION AND OPERATOR CONTROL

### Membrane key "Info"

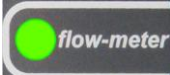
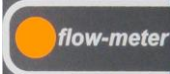
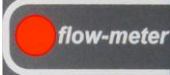
Display also when power plug has been pulled, time 5 seconds.

	Press briefly	Operating hours Temperature in the box	123456 h T1 = 35 C
	press for 3 s	Software version Software serial number	V 6.0 SN 12345

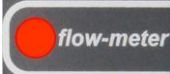


### Membrane key "Reset"

	Press briefly	Reset fault	
	red LED flashing Press briefly	Reset after overload	

### Counter-pressure display

	Compressor in normal mode	
	Compressor at power limit	
	Compressor overloaded	

### After 10 seconds of overload:

 LED flashes	and	 flashes	Compressor off, plug socket off, fan remains on
	When red LED flashes		press "Reset", fan on, compressor on

### Commissioning and operator control

1. Connect the soundbox VP2 / VP3 electrically, s. page 6.
2. Ensure that air tubes have been connected properly.

- Switch on the soundbox VP2 / VP3 via the On switch (s. page 6, Fig. 1, item 1).  
The following indication appears in the display:



Then the device starts and the display changes to:



## 6 Maintenance and service

### Maintenance work



**Danger of injury by electric shock and risk of material damage**

- ➔ Always observe the general safety instructions when performing any maintenance and service work!



**Damage to the device**

- Cleaning agents can cause damage to surfaces.
- ➔ Use only mild detergents.

The cleaning intervals depend largely on the operating conditions. Therefore check your soundbox after each drying operation.

In order to guarantee trouble-free functioning of the device it must be cleaned at regular intervals, and in particular the air filter must be checked. Proceed as follows:



Fig. 4: Air filter change




Fig. 5: Coarse filter intake socket

- Remove and clean air filter (see fig. 4). Replace, if required.
- Insert new or cleaned filter. Use only original filters to guarantee proper functioning of the soundbox VP2 / VP3.
- Visual inspection: Coarse filter (see fig. 5, arrow) in intake socket. If the coarse filter is soiled turn out the intake socket and clean the filter.
- Clean casing on the outside with a moist cloth.

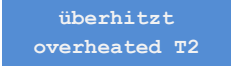

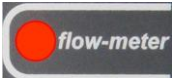

## 7 Troubleshooting

If problems arise with the soundbox VP2 / VP3 please check the following points. Should the fault not be located please contact your technical advisor.

 **WARNING** **Danger of injury by electric shock and risk of material damage**

- ➔ The device may only be repaired by trained specialised staff. Within the warranty period, any work on the device shall only be carried out by the manufacturer or persons commissioned by him.
- ➔ Any work carried out by unauthorised persons shall lead to the forfeiture of all warranty claims!

### Fault messages

Display	Meaning	Remedy
	Motor overheat protection tripped, LED flashing red	Let the device cool down
	Device overloaded, indicator flashes	Remove the cause of the overload. Check the tube connections, the device filter, connected filters. Replace clogged filters by new ones. Press the Reset button.
	LED flashing red	
	LED in Reset button flashes red	

### Shutdown, storage and disposal

#### Shutdown

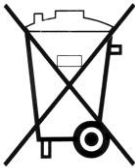
If you do not need the soundbox VP2 / VP3 for a longer period of time you can shut it down for some time. To do so proceed as follows:

1. Switch off the soundbox via the On/Off switch (page 6, Fig. 1, item 1).
2. Pull the power plug.

#### Storage

Store the soundbox VP2 / VP3 in conformity with the specified safety instructions (see page 4).

#### Disposal



Please do not dispose of this device with the domestic waste. Dispose of the device in accordance with the legal regulations.

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## 8 Specifications

<b>General data</b>			
Power supply	230 V/50 Hz		
Protection class	IP 22		
Fusing	RCCB to be installed by user		
Operating conditions	0 °C to +35 °C		
<b>Type</b>	<b>Unit</b>	<b>VP2</b>	<b>VP3</b>
Air circulation rate	m <sup>3</sup> /h	140	150
Max. differential pressure			
Vacuum	mbar	140	170
Pressure	mbar	160	190
Power consumption	watt max.	800	1100
Noise level measured at a distance of 3 m	dB (A)	<48	<48
Dimensions H x W x D	mm	507/390/455	
Weight	kg	26.5	27.5
Power cable length	m	4.5	4.5

## 9 EU Declaration of Conformity

### EC declaration of conformity

according to the EU Machinery Directive 2006/42/EC, Annex II 1. A

#### Manufacturer

Dantherm GmbH  
Oststrasse 148  
D - 22844 Norderstedt

#### Person established in the Community authorised to compile the relevant technical documentation

Manfred Föhlich  
Dantherm GmbH  
Oststrasse 148  
D - 22844 Norderstedt

#### Description and identification of the machinery

Product / Article	Soundbox
Type	VP-2, VP-3
Project number	Aerial VP 2, VP-3
Funktion	<p>The soundboxes VP-2 /VP-3 is designed for conveying air and non-explosive gases and gas/air mixtures as pressure or vacuum pump.</p> <p>The soundbox VP6 is designed exclusively for use at atmospheric pressure. Operating the device within the limits of designated use also involves observing the specified operating conditions. Any use of the device going beyond the designated use specified above is considered contrary to its designated use.</p>

#### It is expressly declared that the machinery fulfils all relevant provisions of the following EU Directives or Regulations:

2006/42/EG	Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) (1) Published in L 157/24 of 09.06.2006
2014/35/EU	Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits Published in L 96/357 of 29.03.2014

2014/30/EU

Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast)  
Published in L 96/79 of 29.03.2014

**Reference to the harmonised standards used, as referred to in Article 7 (2):**

EN ISO 12100:2010-11	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN 60204-1:2006/A1:2009	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
EN 60335-1:2012/AC:2014	Household and similar electrical appliances - Safety - Part 1: General requirements IEC 60335-1:2010 (Modified)
EN 60335-1:2012/A11:2014	Household and similar electrical appliances - Safety - Part 1: General requirements IEC 60335-1:2010 (Modified)

Norderstedt, 23.06.2020

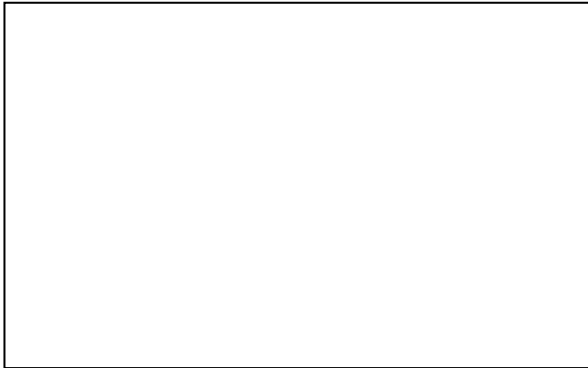


Place, Date

Signature  
Manfred Föhlisch



Dealer stamp:



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