

Operating Manual

Translation of Operating Manual

SONOREX TECHNIK

Air circulation dryer UT



Valid for:
Air circulation dryers UT 16, UT 40, UT 75

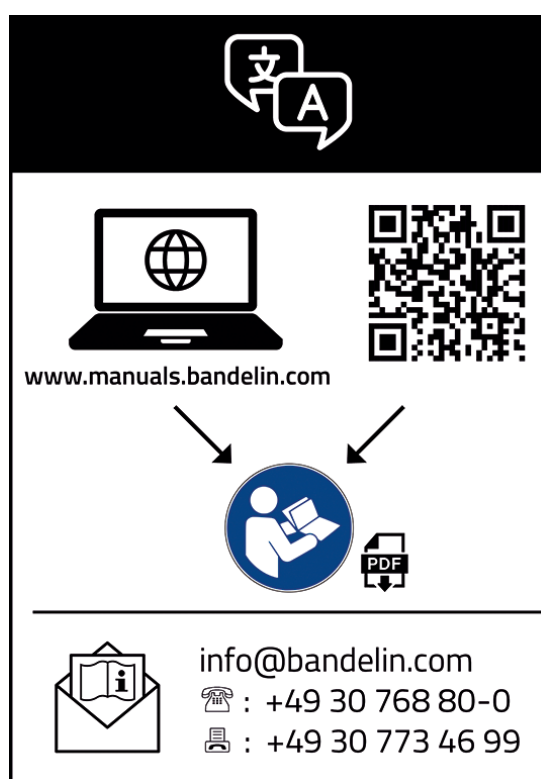


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1 About this operating manual

This operating manual contains both necessary and useful information for operating the device safely and efficiently.

- Read this operating manual before using the device.
- Pay particular attention to chapter **2 Safety**.
- If you pass this device on to someone else, provide this operating manual with it.
- Should this operating manual leave any questions unanswered, please contact your specialist dealer or BANDELIN. Notes on service can be found in chapter **6.4 Repairs**.

In the event that the translation cannot be understood, the German original version of BANDELIN must be followed.

BANDELIN assumes no responsibility or liability for damage caused by improper handling or use.

Illustrations are exemplary and not to scale. Decorations not included with delivery.

2 Safety

2.1 Using the device

The device is intended to rid items that are to be dried of solid, non-combustible materials from residual aqueous liquid. The parts to be dried must be introduced into the air circulation dryer in a basket provided for this purpose.

The device is intended for use in the commercial sector.

2.2 Keep out of reach of children

Children may not detect hazards emanating from the device. Therefore, keep the device away from children.

2.3 Risk of electric shock

The device is an electrical device. Failure to follow safety rules can result in a life-threatening electric shock.

- Never let the device become wet. Keep the surface and operating elements clean and dry.
- Only transport the device when it is empty.
- Only empty the device when it is switched off.
- Do not shower the device or expose it to splash water.
- Disconnect the device from the mains before any cleaning or maintenance measures.
- Only connect the device to a socket with an earth contact.
- If you discover a defect in the device, unplug the mains plug immediately. Do not connect any defective device to the mains.
- Only have repairs carried out by qualified personnel or by the manufacturer. See Section 6.4 Repairs.
- Position the device in such a way that it is possible to disconnect the mains connection at any time without difficulty.

2.4 Danger due to noise emissions

The continuous sound pressure level that emanates from the device is < 75 dB(A).

Check the overall condition of the device according to the maintenance plan. Only switch on the device if it is found to have no defects during this check of its overall condition. Inform your supervisor if this check of the overall condition of the device reveals defects.

Note: noise can cause hearing damage at a daytime exposure of 85 dB or more, which can lead to noise-induced hearing loss. Hearing protection must be provided from a level of 80 dB; hearing protection must be worn from a level of 85 dB (source: DGUV – German Social Accident Insurance).

2.5 Danger due to high temperatures

The device and the items to be dried may become hot during operation. Touching them may cause burns. The temperature can be set to up to 140 °C.

Very high temperatures can occur during prolonged operation.

- Do not reach into the tank by hand. Remove items that have been dried using the insert basket or forceps.
- Allow the dried items to cool before touching them.
- When lifting by the handles, your hands may touch the edge of the tank, which can be very hot.

2.6 Interference with wireless communication

The device may interfere with other wireless communication devices in close proximity, such as:

- mobile phones;
- Wi-Fi devices
- Bluetooth devices

If a wireless device malfunctions, increase its distance from the device.

The device complies with the requirements for Class B devices according to EN 55011.

2.7 Safety stickers on the device

- Observe all safety stickers on the device.
- Keep the safety stickers in a readable state. Do not remove them. Replace them when they are no longer legible. Please contact our customer service for this. See chapter **6.4 Repairs**.

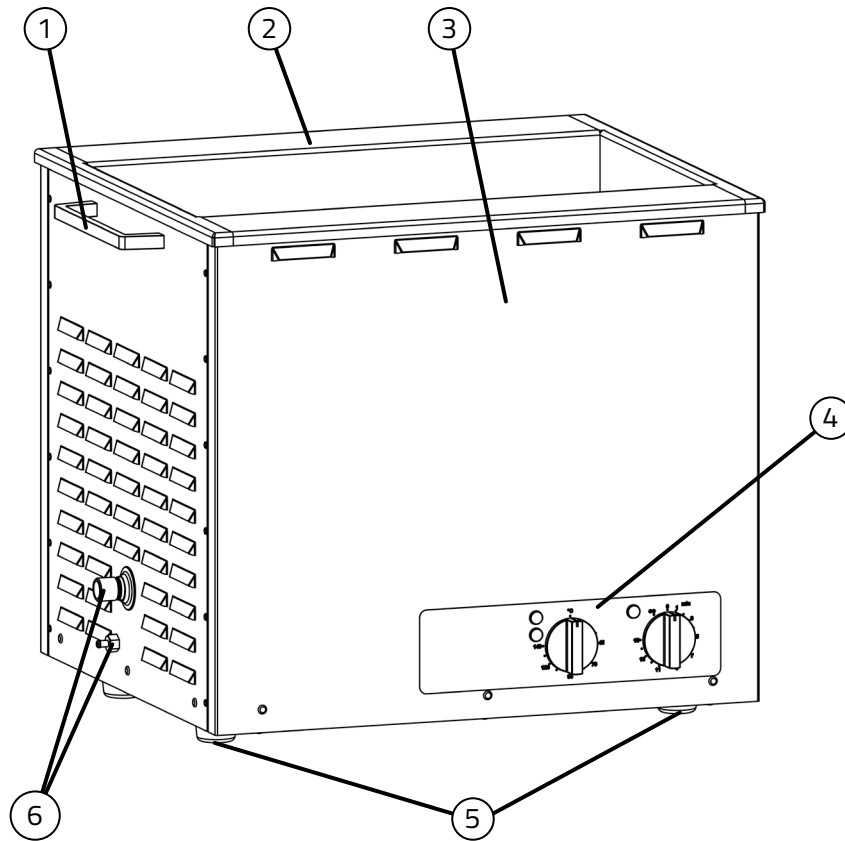
2.8 Not overloading accessories

Observe the specified load capacity or load capacity of the respective accessory used.

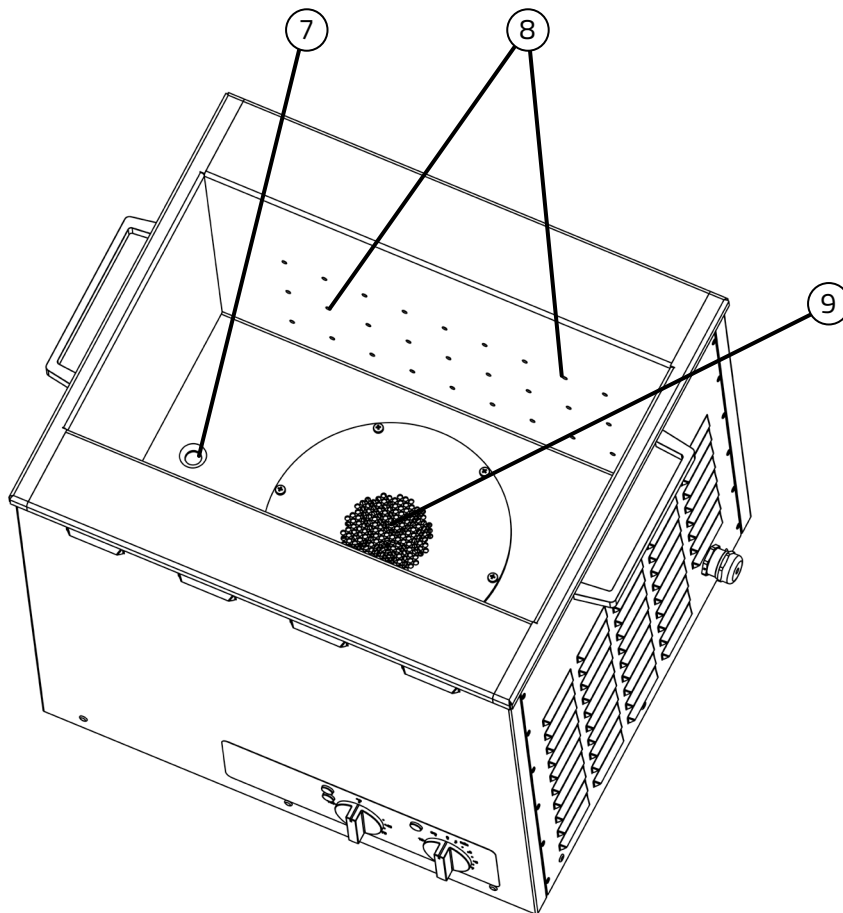
- Accessories can be baskets and receptacles.
- The corresponding information can be found in the appendix or in the dimension sheet. If you do not have this information, please contact the manufacturer.

3 Construction and function

3.1 Structure

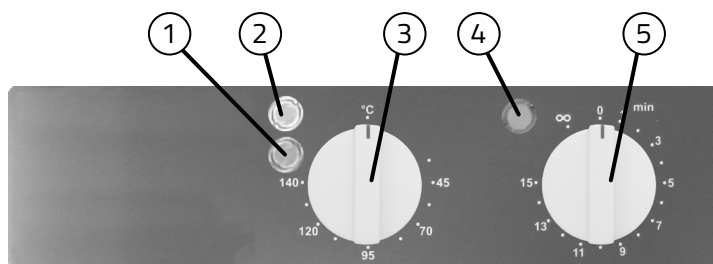


- 1 Handles
- 2 Stainless-steel tank
- 3 Stainless-steel housing
- 4 Control panel
- 5 Feet for a secure footing
- 6 Outlet for hose socket



- 7 Floor drain for discharging dripping water
- 8 Inlet air openings
- 9 Suction opening

3.2 Control panel



- 1 Yellow pilot lamp
Lit up means: heating is switched on
- 2 White pilot lamp
 - Lit up means: heating is switched on
 - Lit up means: heating control active
- 3 Turning knob for adjusting the heating temperature
- 4 Green pilot lamp
Lit up means: device is switched on
- 5 Turning knob for adjusting the drying time

3.3 Function

The air circulation dryer is used to dry cleaned and rinsed wet or moist workpieces.

The air, which is heated by means of heating elements, is directed via air ducts specifically onto the objects to be dried in order to achieve rapid drying.

A small portion of the recirculating air flow is always exchanged via the device, which is open at the top. The ability of the circulating air to absorb moisture is thus retained.

The desired drying temperature and operating time are set via the controllers at the front.

If use of the basket is not possible, the shelf can be used as an option. The shelf is placed on the tank bottom of the dryer. The items to be dried are then placed directly on the shelf.

4 Preparation for operation

4.1 Installation site requirements

The installation site of the device must meet the following conditions:

- The installation surface must be horizontal, firm and dry.
- Its load-bearing capacity must be sufficient for the device. For the weight, see chapter **8.1 Technical specifications**.

4.2 Scope of delivery

- 1 air circulation dryer; see delivery note
- 1 shelf
- 1 operating manual
- 1 declaration of conformity

Other accessories, depending on the order – see delivery note

4.3 Set-up and connections

After removing the packaging, check the device and the additional equipment for any transport damage. Should you find any transport damage, do not connect the relevant devices to the mains, but report the damage immediately in writing to the shipping carrier and the supplier.

The original packing must be retained.

- Remove transport aids (pallets, transport locks) completely. The air supply under the air circulation dryer must not be impeded
- Set up the air circulation dryer in a dry room.
- Place a collecting tray (provided by the customer) under the outlet, or connect the outlet to a drain by means of a hose.
- During set-up, minimum distances must be observed on all sides: 15 cm.
- The suction openings of the fans on the underside and the ventilation slots on the outsides of the dryer must not be covered, as this impedes cooling inside the device.

5 Operation

5.1 Putting into service

Requirements

- Check whether the outlet has been connected to the drain without any kinking.
- Check whether there are any foreign objects in the device that could get sucked in.
- Check whether there are any parts in the device that are not sufficiently temperature-resistant.
- The mains plug is plugged into a grounded socket.

Procedure

- The desired temperature can be selected via the turning knob for the heating.
- The turning knob for the time preselection can be used to set the desired drying time.



Information

- The heating will only operate while the blower is switched on via the time preselection. This is also a safety circuit – the heating will remain cold without the blower.
- When switched off, the air circulation dryer can remain connected to the mains. The mains is disconnected by pulling the mains plug.

5.2 Drying time

The drying time depends on a number of factors:

- How much moisture has remained on the items to be dried
- Type and appearance of the items to be dried.

Before the basket and/or items to be dried are placed in the air circulation dryer, the parts should be allowed to drip dry. The tank has an outlet that leads out at the side. The fan chamber under the tank of the dryer also has an outlet. After loading the device with the items to be dried, the operator sets the desired temperature and drying time. The drying process starts when the process duration is set.



WARNING

Risk of explosion

The residual liquid must not contain any solvents that can create an explosive or toxic atmosphere.

5.3 Introducing items to be dried

To achieve a good result, observe the following instructions when introducing items to be dried:

- Use suitable accessories, such as a basket or shelf. Do not place items directly on the bottom.
- Spread out the items as you insert them. Do not stack them. Sensitive items must not touch other items.
- The device must be switched off while items are being introduced.

5.4 Removing dried items



WARNING

Danger of burns

The items to be dried, the surface of the device, and the accessories can be very hot.

- Do not touch the surface of the device or accessories. Do not reach into the tank.
- Allow the dried items to cool before touching them.

Switch off the heating before removing the dried items.

Do not remove the dried items by hand. Carefully remove, e.g., the insert basket containing the items, and place it on a flat surface.

5.5 Troubleshooting

Malfunction	Possible causes	Troubleshooting
The air circulation dryer does not heat or does not become properly warm	- One or more heating elements have failed	- Contact the manufacturer; see chapter 6.4 Repairs.
	- The thermostat on the device is set too low	- Switch on the thermostat
	- The time switch is defective	- Replace the time switch
	- The heating is defective	- Contact the manufacturer; see chapter 6.4 Repairs.
	- The air circulation dryer is too hot.	- Allow it to cool.
The heating heats non-stop	- The temperature sensor is defective	- Contact the manufacturer; see chapter 6.4 Repairs.
The blower does not turn on	- No mains voltage	- Checking the power supply and main circuit breakers
	- The blower fan is defective	- Contact the manufacturer; see chapter 6.4 Repairs.
	- The motor circuit breaker is off	- Actuate the motor circuit breaker (the rotary knob must be vertical)
	- The motor circuit breaker is defective	- Contact the manufacturer; see chapter 6.4 Repairs.

6 Maintenance

6.1 Servicing

The device does not need to be serviced.

Functional tests can be performed for regular checks; see chapter **6.3 Tests**.

6.2 Cleaning and looking after the device

Cleaning the housing

- Wipe the housing with a damp cloth. Wipe it dry with a soft cloth.
- Do not use abrasive cleaning agents; only use care products free from abrasive additives.
- If necessary, disinfect the housing with a suitable surface disinfectant.

Looking after the tank

- Wipe the tank dry with a soft cloth after each use.
- Remove rims and residues with a stainless steel cleaning product that is free from abrasive additives.
- Do not use steel wool or scrapers to clean the tank.
- Metal parts and rust particles in the tank cause corrosion. Therefore, do not leave any metal parts in the tank. If rust stains are visible, remove them immediately with a soft cloth and a stainless steel cleaning product without abrasive additives.

6.3 Tests

If one of the tests does not lead to the desired result, contact the servicing team. See section **6.4 Repairs**.

Check the control lamps

Check the function of the pilot lamps.

- Briefly turn the device on.
 - » The green pilot lamp will remain on as long as operation is switched on.
- Briefly switch on the heating to above 30 °C using the turning knob.
 - » The white and yellow pilot lamps will remain on as long as the heating is switched on.

Check the power of the device and the heating

The power can be checked with a wattmeter between the mains plug of the device and the socket.

Procedure

1. Switch the device and the heating on and then off again, one after the other. Take the power reading.
2. Compare the readings with the technical specifications. See chapter **8.1 Technical specifications**.

The measured values may not deviate from the values in the technical specifications by more than $\pm 20\%$.

6.4 Repairs

During the warranty period, contact your specialist dealer or the manufacturer.
Only have repairs carried out by qualified personnel or by the manufacturer.
The manufacturer assumes no liability for unauthorised interventions on the device.



WARNING

Health hazard due to contaminated device

- Decontaminate the device before shipping if it has come into contact with hazardous substances.
-

If the device needs to be repaired, send it to the manufacturer.
Clean and decontaminate the device and the accessories before shipment.
The "Certificate of decontamination" serves the occupational safety and health of our employees in accordance with the German "Infection Protection Act" (Infektionsschutzgesetz) and the Accident Insurance Regulations (UVV) of the employers' liability insurance associations.
Before being returned for inspection/repair, the device and accessories must be cleaned in accordance with the applicable laws and regulations and, if necessary, disinfected with a surface disinfectant that is listed by the VAH (Association of Applied Hygiene).
Please understand that we can only start the work if this certificate is completed in full.
Download the "Certificate of decontamination" form here:

<https://www.bandelin.com/downloads>



Fill out the form and attach it so as to be clearly visible on the outside of the packaging. Acceptance will be refused without a completed form.

Send the unit to the following address:

BANDELIN electronic GmbH & Co. KG
Heinrichstr. 3–4
12207 Berlin
Germany

+49 30 76880-2674
service@bandelin.com

7 Disposal



WARNING

Health hazard due to contaminated device

- Decontaminate the device before disposal if it has come into contact with hazardous substances.
- Also decontaminate accessories before disposal.

Dispose of the device properly as electrical waste if it can no longer be used. Do not dispose of the device in the household waste. Observe local regulations for the disposal of electrical waste.

Dispose of accessories as metal scrap or as plastic waste according to the material used.



8 Information about the device

8.1 Technical specifications

Mains supply:	400 V 3N~ (± 10%) 50/60 Hz, cable length 2 m
Tank:	Stainless steel 1.4404, 2 mm, welded
Serial number:	See type plate on the back of the device
Degree of protection:	IP 21

Device	UT 16	UT 40	UT 75
External dimensions (L × W × H) [mm]	365 × 480 × 390	540 × 480 × 495	640 × 640 × 550
Internal dimensions (L × W × D) [mm]	325 × 300 × 195	500 × 300 × 295	600 × 500 × 295
Outlet	G ½	G ½	G ¾
Heating power [W]	4000	4000	5000
Nominal power of blower motor [W]	125	125	260
Fuse [A]	16	16	16
Current consumption [A]	8.7	8.7	10.9
Weight (net) [kg]	27	39	57

8.2 Ambient conditions

Ambient conditions

Overvoltage category:	II
Degree of contamination:	1
Permissible ambient temperature:	20 to 40 °C
Permissible relative humidity to 31 °C:	65%
Permissible relative humidity to 40 °C:	65%
Permissible air pressure:	800 to 1050 mbar
No dewing.	
For indoor operation only.	

8.3 CE conformity

The device meets the CE marking criteria of the European Union:

- 2006/42/EC – Machinery Directive
- 2014/30/EU – EMC Guideline
- 2011/65/EU – RoHS Directive

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