Operating instructions
Ion-Air one

Operating instructions
Ion-Air one

Air Line

Types:	Ion-Air one tabletop unit	115 V / 230 V
	Ion-Air one series unit	115 V / 230 V

Keep in a safe place for future reference!

Contents

1 Notes on operating instructions

In these operating instructions, the Ion-Air one is also referred to as “the unit”.

1.1 Pictorial markings used

In these operating instructions

Caution!
Important instructions!

Danger!
High voltage!
Danger of fatal accidents!
Do not open unit!

Only plug in/unplug coaxial connector
when the power pack is switched off!

In the operating instructions and on the unit

Danger!
High voltage!
Danger of fatal accidents!
Do not open unit!

Only plug in/unplug coaxial connector
when the power pack is switched off!

2 Safety

The Ion-Air one is operationally safe, provided that it is operated in accordance with its intended use. In case of misuse, dangers may result:
- for life and limb of the operator,
- for the unit and other assets.

Also note Chapter 4.1 (Important installation notes).

For operators with heart pacemakers special instructions should be requested from the manufacturer!

2.1 Intended use

In combination with a HAUG ionizing bar, the Ion-Air one generates an air stream with positive and negative ions. These ions lead to the neutralization of the electrical charge (e.g. on paper, films and foils, textiles, glass, plastics etc.).
HAUG power packs only must be used to supply the high voltage to the ionizing bars.

The Ion-Air one must not be installed or used in areas subject to explosion hazards.

For reasons of safety, unauthorized conversions and modifications of the unit are not permitted. The installation and operating conditions indicated in these Operating Instructions must be adhered to.

2.2 Danger sources

Defective high-voltage terminals and cables may lead to danger of electric shocks. Shut down the unit immediately in case of visible damage and suspected electrical defects.

Danger!
High voltage!
Danger of fatal accidents!
Do not open unit!

Only plug in/unplug coaxial connector when the power pack is switched off!

2.3 Installer qualifications

The unit may be installed by trained electricians only. The above mentioned person must have read the operating instructions and must follow the instructions, notes and safety advice.

2.4 Operator qualifications

The unit may be maintained and put into operation by trained electricians only or by authorized persons instructed in the potential dangers. The above mentioned persons must have read the operating instructions and must follow the instructions, notes and safety advice.

3 Design, operating elements

3.1 Operating elements Ion-Air one tabletop unit

Figure 1

1. Ionizing bar
2. High voltage connection PRQ
3. Mains cable
4. Fuse
5. On/Off switch; green lamp lights up when unit is switched on.
6. LED for warning of clogged filter
7. Power pack
8. Connecting cable
9. Speed controller
10. On/Off switch for heating

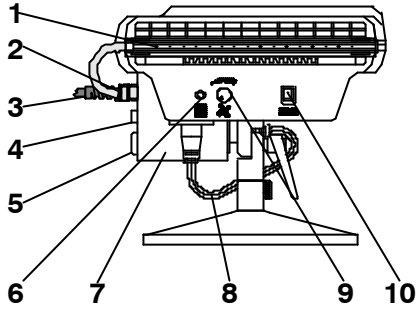

Figure 1

3.2 Operating elements Ion-Air one series unit

Figure 2

1. Ionizing bar
2. Fuse
3. Mains cable
4. LED for warning of clogged filter
5. Connecting cable
6. Power supply output
7. Speed controller

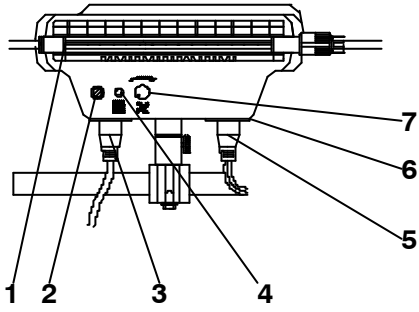

Figure 2

4 Installation

The unit may be installed and put into operation by trained electricians only. The above mentioned person must have read the operating instructions and must follow the instructions, notes and safety advice.

4.1 Important installation instructions

The functioning of the Ion-Air one is not affected by which way up it stands. However, we recommend horizontal positioning to ensure reliable warning of clogged filter.

4.2 Versions of Ion-Air one

4.2.1 Tabletop unit

The tabletop unit serves to eliminate electrostatic charges on table workplaces such as pcb assembling, etc. It is fixed upon the provided plate-shaped base and is equipped with an integrated power pack to supply the built-in ionizing bar. The Ion-Air one is switched on with the power switch of the power pack (see Fig. 1). The integrated heating (see Fig. 1) can be switched on as required. The speed of the blower can be modified with the speed controller (see Fig. 1).

4.2.2 Series unit

The series unit serves to eliminate electrostatic charges on material webs. It can either be fixed on a transversal bar with the provided swinging support or be put on a horizontal surface with the optional plate-shaped base. It can be powered on and off through a connected machine switch; it is NOT possible to manually power the unit on or off by itself.
Several series units can be connected in series with connecting cables so that all units can be switched on and off through a common contact. Attention must be paid to the fact that the total length of the power supply cable must not exceed 8 m.
The air is ionized through HAUG ionizing bars which are separately available. It is possible either to mount one ionizing bar over the total length of all of the series units or to connect individual ionizing bars in each single Ion-Air one by means of high voltage cables. The high voltage supply of the ionizing bars is provided by a HAUG power pack, which is separately available as well.

4.3 Setting up, connecting

1. Before connecting always check that the unit is suitable for the local mains voltage (the voltage is indicated on the name plate). The unit will be destroyed if used with wrong mains voltage.

2. Position and fix unit in appointed place.

3. Connect the PE conductor (green-yellow) with the protective earth of the mains. Connecting the PE conductor via parts of a machine body is insufficient.

4. Install ionizing bars and power pack (only series unit; for ionizing bars and power pack see separate operating instructions).

5. Switch on unit with power switch (only tabletop unit) or switch on machine contact (only series unit).

6. Adjust speed with speed controller as required.

7. Switch on heating as required (only tabletop unit).

Please note in general:

Only plug in/unplug coaxial connector when the power pack is switched off!

5 Application

Preconditions:
The unit must be connected correctly.
The unit may be put into operation by trained electricians only or by authorized persons instructed in the potential dangers. The above mentioned persons must have read the operating instructions and must follow the instructions, notes and safety advice.

Switching the unit on will cause the clogged filter LED (see Fig. 1 and 2) indicator to briefly illuminate. The LED will continue to illuminate if the filter is indeed clogged. This warning will only function if the motor is running at greater than ¾ its maximum speed.

6 Remedy of defects

Any troubleshooting and remedy of defects must be carried out by trained electricians only.

In case of malfunctions in connection with the unit, first check its correct installation and fusing (for replacement refer to Section 7.1). If this does not solve the problem, please return the unit and the power pack (only series unit) for a check-up.

7 Maintenance and repairs

Danger!
High voltage!
Danger of fatal accidents!
Do not open unit!

Except the air filter, the unit does not include any parts which can be maintained or repaired by the operator. HAUG only is authorized to repair the unit.
The built-in ionizing bar of the unit should be cleaned every 2 weeks with the special cleaning brush and fluid or the special cleaning system (see Section 7.3 Accessories).

Should the unit prove defective or if a defect is suspected, switch off unit immediately and secure against subsequent reuse.

7.1 Changing the fuse

1. Switch off unit.
2. Determine and remove the cause of the blown fuse.
3. Detach the fuse holder using a screwdriver and lift out.
4. Replace fuse and reattach fuse holder.

Use the following fuses only:

Unit type	Fuse
Tabletop unit 115 V	5,0 A slow, 5 x 20 mm
Tabletop unit 230 V	2,5 A slow, 5 x 20 mm
Series unit 115 V	1,0 A slow, 5 x 20 mm
Series unit 230 V	0,5 A slow, 5 x 20 mm

The unit type and the rated voltage are indicated on the nameplate.
Only use fuses of the type indicated.

7.2 Changing the air filter

When the clogged filter LED indicator continually illuminates, the air filter must be replaced.

The light-emitting diode only works if the motor is running at greater than ¾ its maximum speed.

1. Switch off unit.
2. Remove the clogged filter (bottom side of the unit) and replace it by a new filter.

7.3 Accessories

	X - 2396
Special cleaning brush	10.7218.000
Special cleaning fluid	10.7220.000
Special cleaning system	10.7218.001
Circular brush for special cleaning system	X - 6822

Series unit:

Transversal bar Ø 25 mm	06.8945.000
Support for transversal bar	X – 2401
Connecting cable 1,5 m	06.8940.793

8 Technical data

8.1 Characteristics and specification

Reference temperature 23 °C

High voltage terminal (only tabletop unit)	1 HAUG bayonet locking connector
Secondary voltage (only tabletop unit)	U = 6,7 kVeff

8.2 Supply voltage

Nominal value	230 VAC / 115 VAC
Operating range	± 10 %
Frequency range	50 – 60 Hz
Power input tabletop unit	Pmax = 500 VA
Power input series unit	Pmax = 100 VA

8.3 Ambient conditions

Ambient temperature:

Rated application range	+5 °C to +45 °C
Extreme range for storage and transport	+15 °C to +60 °C

Humidity:

Rated application range	20 % to 65 % RF
Extreme range for storage and transport	0 % to 85 % RF

Air pressure:

Rated application range	800 mbar to 1060 mbar

Vibrations:

Extreme range for storage and transport	max.	1,5 g	(10 to 55 Hz), 1 h
Shock	max.	15 g	in each direction

Recommended service position	horizontal

8.4 Housing

Degree of protection	IP 20
Protection class	I
Connection to supply voltage	through provided power cord

Dimensions:

Tabletop unit	Height	275 mm
	Width	310 mm
	Depth	415 mm
Series unit	Height	240 mm
	Width	310 mm
	Depth	415 mm

Weight:

Tabletop unit	approx. 12 kg
Series unit	approx. 7 kg

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