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User Manual
Ionizer

KERN ALJ-A03

Version 1.0
2018-08
GB





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GB

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Version 1.0 2018-08

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1 General information

This ionizer is equipped with blades supplied with high voltage, in the immediate vicinity of which positive and negative ions are generated as a result of corona discharge. They are attracted through the weighed material with static charge, thus neutralizing the interfering static charge. This eliminates also the forces leading to false weighing results (e.g. false weighing result, floating weighing value).

2 Basic safety guidelines

WARNING



The ionizer is designed solely for use in connection with electronic balances. Do not use it for any other purpose.



Do not use the ionizer in any rooms with explosion hazard present. Serial installation is not an explosion-proof one.



Protect the ionizer from high ambient humidity/temperature, vapours and dust.

Ensure location free from water/oil.

Do not expose the ionizer to long-term heavy moisture. Any unexpected condensation (condensation of the air humidity on the ionizer) may take place when a cold device is placed in a much warmer environment. In such circumstances leave the ionizer, not connected to the power supply, for ca. 2- hours to ensure acclimatisation to the ambient temperature.



When the ionizer is on, do not touch any ion source, see the label to the left.



Because a high-voltage technology is used, handle the ion source and outputs with care.



Do not dismantle and do not modify the ionizer.



Prevent any damage caused by falls, vibrations or impact, see the label to the left.



Always use the OEM power adapter. The printed voltage value must comply with the local voltage.



Hazard of harm, ion source blades are very sharp.



The ionizer generates poisonous ozone, ensure suitable ventilation.



Before you start any maintenance or cleaning, disconnect the ionizer from the power supply.



Always disconnect the unused ionizer from the power supply.

CAUTION



Always maintain and clean the ionizer at regular intervals.

- Ion source cleaning following 100 hours.
- Ion source replacement following 10,000 hours.



Operating the damaged ionizer can result in short circuit, fire or electric shock.



It is prohibited to switch it outdoors or in vehicles, this shall invalidate any warranty.



If any electromagnetic fields are present, high readout fluctuations are possible (mistaken weighing results). Discharge the sample at the appropriate distance from the balance.



The ionizer may heat slightly during the operation.



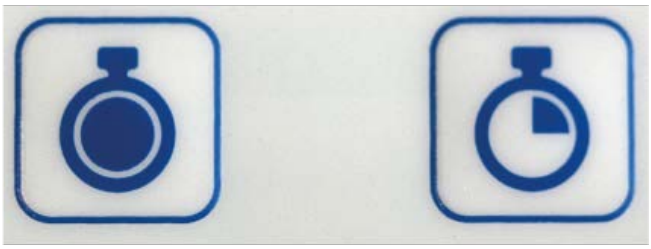
For improved ionization results, switch the blower on. This will make the sample discharge time shorter.

3 Technical specification

Distance "sample–ion source"	ca. 5-40 cm
Ozone concentration	0~0,05 ppm (2 cm from the ion source)
Weight	525 g
Dimensions [cm]	110 × 105 × 60
Ambient conditions	0–50°C, air humidity 20–80% (non-condensing)
Power adapter Input voltage	100–240 VAC, 50/60 Hz
Ionizer input voltage	12 VDC, 500 mA
Pollution degree	2
Overvoltage category	Category II
Height above see level for the installation	up to 2000 m
Installation site	Only indoors

4 Device overview

Keyboard overview



1 2

1 Active ion source (Continous Mode) (automatic switch-off in 8 h)	**2** Active ion source (Time Mode) (t2-minute work mode)

i	To switch between the two work modes, press one of the two buttons.

Indication overview



Green LED	Ionizer operating	Ionizer on
Red LED	Ionizer operating	Continuous Mode
Red LED flashes	Ionizer operating	Time Mode

5 Unpacking, placement and start-up

Unpacking

Remove the device carefully from its packaging, remove the plastic bag and place the device in the working location.

Scope of delivery

1. Ionizer
2. Power adapter EURO/UK/US/AUS
3. User Manual

Installation



Power

Choose the plug suitable for the country where the unit is to be operated and plug in the power adapter.
The printed voltage value must comply with the local voltage.
Always use the original power adapters by KERN. To use any other products, you need the consent of KERN.
Always connect the ionizer to the power adapter when the device is off.

6 Start up

- Switch the ionizer on, pressing  button.
  The ionizer is in the Continuous Mode, the working time is 8 hours. Red LED is on. The ionizer will switch off automatically in 8 hours.
- Switch the ionizer on, pressing  button.
  The ionizer is in the Time Mode. The ionizer is on for 2 minutes, red LED is flashing. The ionizer will switch off automatically in 2 minutes.
- When the ionizer is on, you can press any button to switch to another work mode.

Applications

The ionizer is designed solely for use in connection with electronic balances!

⇨ Discharging solid objects or balance pans.

For improved ionization results, switch the blower on. This will make the sample discharge time shorter.

⇨ Discharging powder samples. Discharging prevents whirls, a problem for toxic samples.

If the samples easily whirl, switch the blower off.

⇨ Discharging weighed material, glass windproof protection or balance pans.

Place the ionizer near the balance.

⇨ Discharging beakers etc.

When you shake the beaker with the powder sample, the powder will deposit on the inner beaker wall. This will be prevented by discharging the beaker.

7 Maintenance, service, disposal

Cleaning

WARNING



Disconnect the device from the power supply before you start cleaning.



Do not dismantle the ionizer.

Do not use any aggressive cleaning agents (solvents etc.) for cleaning. Use solely a cloth with a mild soapy water. The liquid must not penetrate inside the device, use a soft cloth to wipe the device dry after cleaning.

Keep the ion sources clean.

Maintenance, service

The device can be operated and maintained solely by service technicians trained and authorised by KERN.

Disconnect the device from the power supply before you open it.

Disposal

The packaging and device should always be disposed in accordance with the national or regional law in the location where the device is used.

8 Declaration of Conformity

The up-to-date EC/EU declaration of conformity is available at:

www.kern-sohn.com/ce