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Operating Manual
Ionizer

KERN YBI-01A

Version 2.0
10/2016
GB



YBI-01-BA-e-1620

GB

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Version 2.0 10/2016

Operating Manual

Ionizer

English

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1 GENERAL

The ionizer has conductive peaks supplied by high voltage which, based on corona discharge, generate positively and negatively charged ions in the immediate vicinity. These are attracted by the electrostatic charge of goods to be weighed and, thus, neutralise the interfering electrostatic charge. This also does away with the forces falsifying the weighing (such as falsified weighing result, weighing value drifted).

2 Basic Safety Precautions

⚠ WARNING



The use of ionizer is only intended in combination with electronic weighing balances. Do not use for any other purposes.



Never operate the ionizer in explosive environment. The serial version is not explosion protected.



Protect the ionizer against high air humidity / temperature, steams and dust;

Take care to select a location free of water and oil

Do not expose the ionizer to strong humidity for extended periods. Non-permitted condensation (condensation of air humidity on the appliance) may occur if a cold appliance is taken to a considerably warmer environment. In this case, acclimatize the disconnected ionizer for ca. 2 hours at room temperature.



Whilst the ionizer is switched on, do not touch the ion source; see sticker on the left side.



In case of smoke development, smell of fire, strong heating-up of the ionizer or when the red LED starts glowing, turn off the ionizer immediately and disconnect it from the mains.



If water or other foreign matter enters the ionizer, turn off the master switch immediately and disconnect it from the mains.

English



On account of the high voltage technology, handle the ion source and exits with care.



Do not take apart or modify the ionizer.



Prevent damage caused by dropping, vibration or shock; see sticker on the left side.



Always use the genuine power pack. The stated voltage value must be the same as the local voltage.



Risk of injury! The peaks of the ion source are sharp and cutting.



The ionizer generates poisonous ozone; ensure sufficient ventilation.



For maintenance and repair work disconnect the ionizer from the mains.



Disconnect the ionizer from the mains during periods of idleness.

English

⚠ CAUTION

Maintain and clean the ionizer at regular intervals.

- Clean the ion source after 100 hours.
- Replace the ion source after 10 000 hours.

Starting up a damaged ionizer may result in a short circuit, fire or electric shock.

Starting up out of doors and inside vehicles is prohibited and will result in total loss of warranty.

The occurrence of electromagnetic fields may result in major display deviations (incorrect weighing results). Discharge sample at a sufficient distance from the weighing balance.

During normal operation the green LED will be glowing, in case of a breakdown the red LED.

If the red LED is glowing, turn off the ionizer at the master switch and turn it on again. If the red LED continues to glow, inform the manufacturer.

The ionizer may heat up slightly during operation.

Prior to ionising powdery goods to be weighed, turn off the fan.

Ionisation results are better when the fan is turned on and the period required for discharging the sample will be shortened.

English

3 Technical Data

Distance “sample ion source“	c. 5 – 40 cm
Discharge time	9 s/5 cm, 13 s/10 cm, 100 s/40 cm (with fan turned on)
Ozone concentration	0 ~ 0,05 ppm (2cm from ion source)
Ion source	Stainlees steel
Maximum air volume	0.06 cm^3/min
Weight	310 g
Dimensions [cm]	11 x 10,5 x 6
Ambient conditions	0- 50 °C, 20 – 80 % air humidity (non-condensing)
AC adapter (primary)	AC 100-240V, 50 / 60Hz
Rated electric power supply	DC 12V, 500 mA
Pollution Degree	2
Overvoltage Category	Category II
Altitude	Up to 2000 m
Installation Site	device may only be used indoors

4 Appliance overview





1. Ion source
2. LED Ionizer operation (green = normal operation, red = breakdown)
3. LED fan operation (yellow = on)
4. Fan on- and off-switch
5. Mains adapter connection
6. Fan
7. Main switch

English

5 Unpacking, Setup and Commissioning

Unpacking

Remove device carefully from packaging, remove plastic wrapping and place device at the planned work place.

Scope of delivery

1. Ionizer
2. Mains adapter
3. Operating instructions

Placing



With adjustable feet



Without adjustable feet

Mains connection

Select a country-specific power plug and insert it in the power unit.
Power is supplied via the external mains adapter. The stated voltage value must be the same as the local voltage.
Only use original KERN mains adapters. Using other makes requires consent by KERN.



Turn off the ionizer (master switch “OFF“) before connecting it to the mains adapter.

6 Commissioning

Turning on the ionizer

⇨ Set master switch to “ON“.
The green LED starts glowing.

During normal operation the green LED will be glowing, in case of a breakdown the red LED.



If the red LED is glowing, turn off the ionizer at the master switch and turn it on again. If the red LED continues to glow, disconnect the device from the mains and contact the manufacturer.

After use turn off with master switch "OFF".

Turning on the fan

Ionisation results are better when the fan is turned on and the period required for discharging the sample will be shortened.

Information:
Turn off fan for powdery, easily whirled up samples.

⇨ Set switch of fan to “ON”.
The yellow LED starts glowing.



Ensure sufficient ventilation even when the fan is turned on.

English

Applications:

The ionizer is designed to be used in combination with electronic weighing balances!

⇨ Discharge of solids or weighing containers.

Ionisation results are better when the fan is turned on and the period required for discharging the sample will be shortened.

⇨ Discharge of powdery samples. Discharge prevents whirling up, problems with toxic samples.

Turn off fan for easily whirled up samples.

⇨ Discharge of goods to be weighed, glass wind screen or weighing containers.

⇨ Discharge of beakers etc.

Powdery samples are deposited at the inner wall of the glass when being poured into the beaker. This is prevented by discharging the beaker.

7 Service, maintenance, disposal

Cleaning

WARNING



Disconnect the device from the mains before cleaning / change of filter.



Do not take apart the ionizer.

Do not use aggressive cleaning agents (solvents etc.) instead clean with a soft cloth soaked in mild soap suds. Take care that the device is not penetrated by fluids and polish it with a dry soft cloth.

Remove loose sample residues / powder carefully with the help of a brush or hand-held vacuum cleaner.

Keep ion source and fan clean, keep holes placed on front part of the ionizer clean.

Maintenance
Service

The appliance may only be opened by trained service technicians who are authorized by KERN.

Before opening, disconnect from power supply.

Disposal

Disposal of packaging and appliance must be carried out by operator according to valid national or regional law of the location where the appliance is used.

8 Declaration of conformity

To view the current EC/EU Declaration of Conformity go to:

www.kern-sohn.com/ce

English