

DEZOSTER AirCAT

PORTABLE IONIZER – USER GUIDE



GENERAL INFORMATION

DEZOSTER AirCAT is a **portable device** designed for neutralizing odors and smells and disinfecting the environment. **It can be used as a stand-alone unit or mounted on a wall bracket.**

Air purification takes place on the basis of the deactivation of microorganisms using oxidation with atomic oxygen. **It is effective against microorganisms, allergens and odors, especially against the spread and growth of bacteria and viruses, including coronaviruses.**

DEZOSTER AirCAT can be used at home but also in public spaces such as client centers, waiting rooms, retirement homes, hospices, social and medical facilities, beauty salons, or fitness centers. In households, it can remove odors from animals, cooking, smoke or flooding.

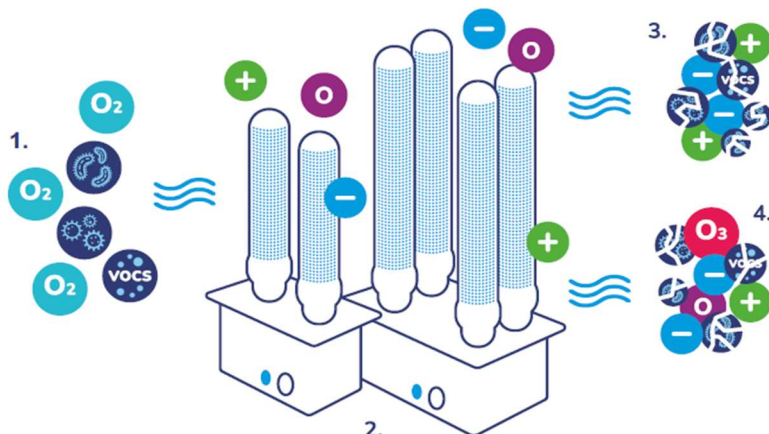
The device and the ionization tubes are covered by a warranty period of 24 months from the date of sale.

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1. PRINCIPLE OF AIR IONIZATION

Activation of oxygen and generation of light air ions



Atomic oxygen	Oxygen
Negative ions	Bacteria
Positive ions	Viruses
Ozone	Volatile organic compounds (VOC)

PRINCIPLE OF WORK

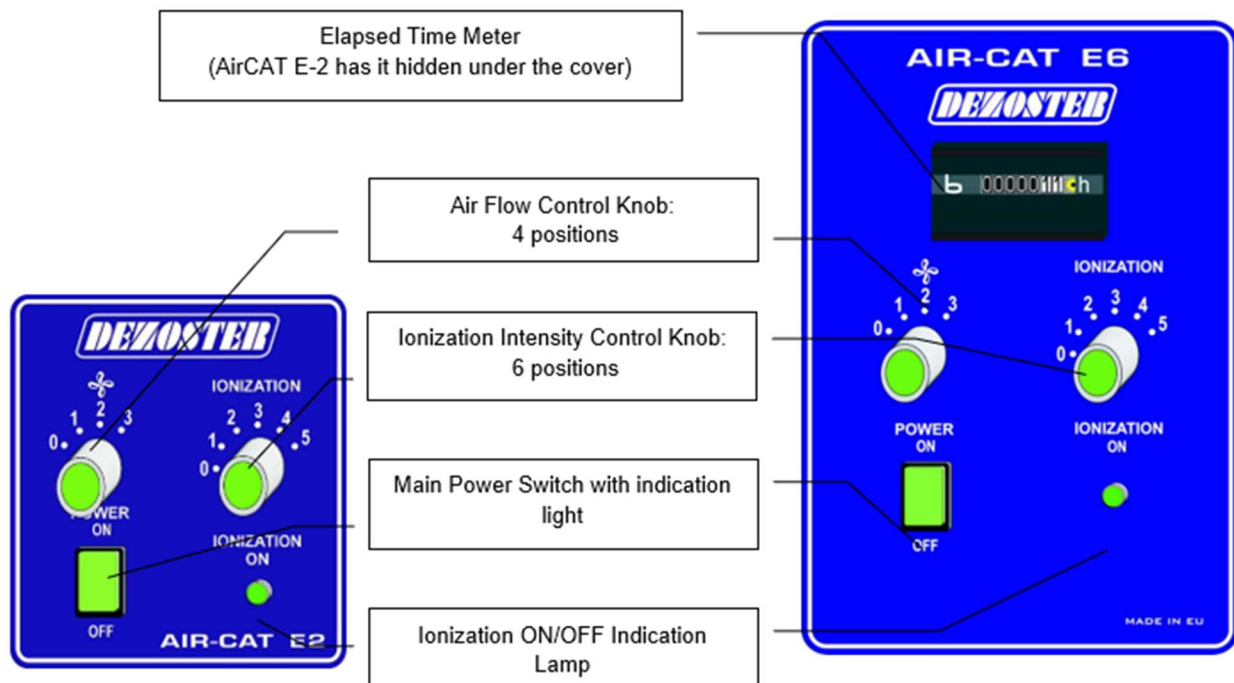
1. When **cleaning and disinfecting the air**, we are inspired by nature
2. We create **ions and atomic oxygen** through a **controlled electric discharge** with our ionization tubes

3. Due to the action of charged ions, **dust, bacteria and viruses are grouped into larger clumps** that are easier to filter out
4. **Air ionization produces natural ozone**, which **destroys microorganisms and removes volatile substances**. We can regulate the amount and concentration of ozone in a sophisticated way using our ozone controllers and sensors.

WHAT DO YOU GET BY USING OUR DEVICES

- **Sedimentation of particles** (easier filtration of dust, bacteria, viruses and molds)
- **Odor neutralization** (VOC oxidation)
- **Reduction of emissions** (ammonia, methane)
- **Destruction of bacteria, viruses and molds**

2. FRONT PANEL DESCRIPTION



3. SAFETY PRECAUTIONS

Explanation Graphical Symbols:



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of not isolated dangerous voltage within the product's enclosure

that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

4. MAINTENANCE



**All service works can be done by the producer or by an authorized service company!
Always disconnect the power supply!**

It is necessary to check regularly disruption of electric power net installation and keep the unit clean. Clean and dry tube will not lose its ionization power and disinfection capacity even in the long-run.

- The dust filter should be checked regularly and replaced once a year. For extended lifetime, you can wash dirty filter in an ordinary detergent.
- Check the ionization tubes at least once per year. If they are dirty, wipe off the dust from the glass and outer stainless steel electrode using detergent.

If the tube is damaged, the fuse will immediately brake out power supply and the unit will be safety disconnected from the main power net.

If necessary, special measurement can be used to check the degree of burning-out of the tubes. Only the producer or an authorized service company can do this work.

To estimate the degree of burning-out of the tubes, check value of the elapsed time meter (*). The ionization tubes` lifetime depends on specific application and working conditions. In wet and dirty conditions, the tube should be replaced for the new one every 1-2 years (in less demanding conditions every 2-3 years at the latest). When operating the device in a polluted environment, we recommend having the efficiency of the tubes checked (and replaced if necessary) after 5000 hours of operation and in a clean environment after 9000 hours.

Only an authorized service center or the manufacturer can service the device, check wear and replace tubes.

(*) *The elapsed time meter in the AirCAT E-2 is placed inside the device. It can be visible at the top right corner of the instrument after taking the air filter off.*

5. OPERATION

In the exposed places, almost all the ions and all the active oxygen created are consumed for the disinfection of the environment and the elimination of odors and ozone in the treated environment does not exceed the limit values.

If the AirCAT is used in less than the recommended space or in a clean room without odors, there is a potential danger that the ozone concentration may exceed the hygiene limit.

You can easily feel the typical smell of ozone at a very low, absolutely safe concentration below 0,015 mg/m³ (0,03 ppm). At higher concentration (above 1 ppm) it is irritable for a breath system. When you

are breathing an air with ozone concentration 1ppm (1,96 mg/m³) cough and lethargy appears in an hour. Eyes become irritated after 3 hours at concentration 0,3 ppm (0,4 mg/m³).



Hygienic allowed limits for ozone concentration:

- average (eight hour): 0,1 mg/m³ (0,05ppm)
- maximum: 0,2 mg/m³ (0,1 ppm)

People and animals are allowed to stay in a treated space only if ozone concentration is under the above listed limits.

If you feel any irritation moving from the treated area, reduce the intensity to level 1 or turn it off completely.

Note:

AirCAT is much more effective in preventive disinfection when the ozone concentration in the treated area is the highest. This can be achieved, for example, at night when people and animals are not present. Use a standard power timer for this (the timer is not sold with the ionizer).

After the treatment, it is not necessary to ventilate the room. Set the timer so that the ionizer turns off at least 30 minutes before entering the treatment area. Ozone is a very unstable gas and decomposes very quickly into ordinary oxygen. All unconsumed ozone O₃ is converted back to oxygen O₂ within 1 hour.

In practice, especially in healthcare, veterinary, microbiological laboratories and in the food industry, it is expedient to make maximum use of the above time mode of operation: maximum intensity at night without personal presence and preventive treatment with intensity level 1 during the day. Ozone concentration should be checked for any of the problems described above.

In homes, AirCAT is mainly used to remove the smell of pets and to treat the area from damp odors or smoke. The device may only be handled by an adult and only in conjunction with this manual and these recommendations.

For a reliable definition of ozone concentration in professional applications, it is recommended to use one of the following tools and ozone detection tools:

Instrument/ Tool	Producer	Supplier
MN Ozone Test colorimetric sticks	MACHEREY-NAGEL GmbH	HIVUS s.r.o.
Ozone Datalogger: HDL – O ₃	HIVUS s.r.o.	HIVUS s.r.o.
Ozone Watch OW-01	HIVUS s.r.o.	HIVUS s.r.o.
Ozone security sensor & switch: OZONSTAT OS-11 psb	HIVUS s.r.o.	HIVUS s.r.o.



- Use of handling, adjustment, or maintenance procedures other than those described in this manual may expose the user to hazardous concentrations of ozone.
- AirCAT operation is not allowed to children! Use out of the reach of children.



- If the symptoms described at the beginning of this chapter appear, it is always necessary to check the ozone concentration, turn off the device or leave the treatment area (don't forget your pets!)

6. TECHNICAL DATA

Parameter type	AirCAT E -2	AirCAT E -6
Treated space volume	90 m ³	270 m ³
Maximal air flow	160 m ³ /h	320 m ³ /h
Ionization tube	2 x HIVUS IT-E tube	6 x HIVUS IT-E tube
Power supply	230V/50 Hz	230V/50 Hz
Power consumption (W)	70 W	95 W
Fuses:	P1, P2: T 0,5A,	P1, P2: T 0,5A,
	P3: T: 0,315A	P3: T: 0,315A
Dimension	420 x 280 x 150 mm	553 x 345 x 255 mm
Weight	7,7 kg	14 kg
Operation temperature	0°C to 45°C	0°C to 45°C

7. IONISATION TUBES

DEZOSTER units use a natural process of air purification by microoxidation. Charged air ions and high-energy oxygen atoms are generated by corona discharge in special ionization tubes. They are the basic active ingredient of all DEZOSTER units. They guarantee a high level of efficiency and reliability. They are produced in four basic sizes.

Type	Length [mm]
IT-C	190
IT-D	250
IT-E	360
IT-F	520

In order to achieve the correct level of ionization, the tubes should be changed regularly. In wet and dirty conditions, the tube should be replaced for the new one every 1-2 years (in less demanding conditions every 2-3 years at the latest).

8. TROUBLE SHOOTING



Only for trained electricians!

Problem: The green light of the main switch does not light

Solution: Check the fuse and replace it if it is blown. If the new fuse blows immediately after replacement, it is possible that the ionization tube may be damaged or a more serious malfunction may occur. You can find out the reason in a very simple way:

- Remove the top cover of the device.
- Visually check that all tubes are OK.
- Replace the damaged one. If you don't have a new tube available, unscrew the bad one, replace the fuse and you can use the unit with lower efficiency for a limited time (order a new tube from your supplier or from the manufacturer)

If you have not visually found any damaged tube, unscrew all the tubes and replace the fuse. If the unit does not work even without tubes, it is a hidden tube failure. You can find out by inserting the tubes step by step. If the fuse blows after inserting a particular tube, replace it, it is damaged.

Other service work:

When servicing, clean or replace the dust filter and blow out the tubes and interior of the unit with compressed air.

9. ELECTRICAL SAFETY



The DEZOSTER is an electrical appliance with a high voltage power supply. Disconnect it from a main power before any handling the unit or its parts.

Disconnect the unit from the main power in the case of any failure or damage and contact your supplier or the producer directly.

To Reduce the Risk of Electric Shock Do Not Remove Cover (Or Back) No User Serviceable Parts Inside. Refer Servicing to Qualified Service Personnel.

To Reduce the Risk of Fire of Electric Shock, Do Not Expose This Appliance to Rain or Moisture. To avoid electrical shock, do not open the cabinet, Refer servicing to qualified personnel only.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

Do not install this equipment in a confined space such a bookcase or similar unit.



This product is manufactured to comply with the radio interference Requirements of EEC DIRECTIVE 89/336/EEC, 93/68/EEC and 73/23/EEC.

Use of controls an adjustments or performance of procedures other than those specified here in may result in hazardous ozone exposure.

Most appliances recommend they be placed upon a dedicated circuit. That is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized service man.

Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.



This appliance is marked in accordance with the European Directive 2002/96/EG on the disposal of used electrical and electronic equipment (WEEE - waste electrical and electronic equipment). This directive establishes a uniform European framework for the take-back and recycling of used equipment.

The appliance contains valuable materials that should be reused. If possible, hand over the appliance to the raw materials collection or to a place designated by the municipality for waste disposal.

10. EC-ATTESTATION CERTIFICATES

ZERTIFIKAT ♦ CERTIFICATE ♦ 認証証書 ♦ CERTIFICADO ♦ CERTIFICAT



Product Service

EC-Attestation

No. D1 06 05 59646 001

Holder of Certificate: Hivus, s.r.o.

Tulska 33
01008 Zilina
SLOVAK REPUBLIC

Product: House work and household appliances
(Air - cleaning appliances)

Model(s): Dezoster Air CAT E2

Parameters:

Rated input voltage: 230 V AC
Rated frequency: 50 Hz
Rated current: 0,3 A
Protection class: I
Degree of protection: IP20

**Directives /
Standards:**

EC Low Voltage Directive 73/23/EEC
EC EMC Directive 89/336/EEC
EN 55014-1/A2:2002
EN 55014-2/A1:2001
EN 61000-3-2:2000
EN 61000-3-3/A1:2001
EN 60335-1:2002
EN 60335-265:2003

This EC-Attestation is issued according to the listed directives. It confirms that the equipment complies with the essential requirements and objectives of those directives and refers only to the sample provided for testing and certification. It expires in the event of changes relating to products of the listed directives. The certificate holder is responsible for the consistent manufacturing of the product in compliance with the test sample submitted to us. See also notes overleaf.

Test report no.:

W 008R, 6450-22/2006

Date, 2006-05-11



After preparation of the necessary technical documentation as well as the conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.

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Product Service

EC-Attestation

No. D1 06 08 59646 002

Holder of Certificate: Hivus, s.r.o.Tulska 33
01008 Zilina
SLOVAK REPUBLIC**Product:** House work and household appliances
(Air - cleaning appliances)**Model(s):** Dezoster AirCAT E6**Parameters:**

Rated input voltage:	230 V AC
Rated frequency:	50 Hz
Rated current:	0,5 A
Protection class:	I
Degree of protection:	IP20

Directives / Standards:

EC Low Voltage Directive 73/23/EEC
EC EMC Directive 89/336/EEC
EN 55014-1/A2:2002
EN 55014-2/A1:2001
EN 61000-3-2:2000
EN 61000-3-3/A1:2001
EN 60335-1:2002
EN 60335-2-65:2003

This EC-Attestation is issued according to the listed directives. It confirms that the equipment complies with the essential requirements and objectives of those directives and refers only to the sample provided for testing and certification. It expires in the event of changes relating to products of the listed directives. The certificate holder is responsible for the consistent manufacturing of the product in compliance with the test sample submitted to us. See also notes overleaf.

Test report no.:

E 220U, 6450-55/2006

Date, 2006-08-09

After preparation of the necessary technical documentation as well as the conformity declaration the required CE marking can be affixed on the product. Other relevant directives have to be observed.

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