Ozone Generator WDH-AP005

Dear Customer,

You have chosen a high-quality product. To ensure that you get a lot of enjoyment from this product, here are a few more tips:

In case of any problems:

We hope that the unit meets your expectations! If, despite the greatest possible care, there should ever be cause for complaint, please contact us briefly, as we are very concerned about your satisfaction and would like to clear up any misunderstanding.

Important safety instructions:

 This unit produces large amounts of ozone ! Ozone is very toxic in these concentrations and must not be inhaled.

The unit may therefore only be operated by specialists who are well acquainted with the mode of action and the application of ozone or who have acquired this knowledge through training !!!

This ozone generator contains high-voltage elements. Only qualified personnel or electricians are permitted to open the unit or carry out repairs !

- After the start of operation, the room/premises must be vacated immediately!
- During operation, neither people nor animals are allowed to stay in the room/object !
- During operation and up to 30 minutes after the end of operation, the room/premises must not be entered. Otherwise, this can lead to damage to health!
- Be aware that, depending on the degree of insulation, neighbouring rooms and/or neighbouring objects may also be exposed to ozone during operation !
- Plants can be severely damaged or even killed when exposed to high concentrations of ozone !
- The user must ensure that no persons enter the room/object or are indirectly exposed to the ozone during operation and up to 30 minutes after the end of operation. We urgently recommend that precautions be taken by means of instructions or insulation!

Notes: For operation within the Federal Republic of Germany, the guidelines of the German employers' liability insurance associations must be observed. For operation in other countries, the national and local rules and regulations applicable there must be observed. Ozone in higher concentrations (above 0.1 ppm or 0.2 mg ozone/m³) is a toxic gas and oxidant and is classified as dangerous and harmful to health! Precautions must be taken to prevent uncontrolled release of ozone.

The MAK value valid in Germany (MAK = Maximum Workplace Concentration) is currently 0.1 ppm or 0.2 mg ozone/m³. In addition, in the USA there is the value that is immediately (acutely) dangerous to health (IDLH), which is 5 ppm or 10 mg ozone/m³ [NIOSH, 1994]. Other limit values apply in some cases for other countries.

If you feel unwell (dizziness, severe coughing, severe eye irritation, breathing problems or pain) in connection with the operation of the ozone generator or ozone, we recommend that you seek medical treatment or a doctor immediately.

Safety instructions:

- Watch out for electricity (danger to life), never enter or insert objects into the unit !
- Do not place any objects on the unit !
- Do not block the exhaust air and/or the supply air openings of the unit and please ensure sufficient space/clearance around the unit !
- Ensure that there is sufficient air supply to the unit, otherwise the performance may be reduced and, in the worst case, overheating and/or fire may occur ! Please always keep a distance of approx. 50 cm to the wall to avoid possible overheating of the appliance !
- Make sure that no moisture gets into or onto the unit !
- Use only the recommended voltage (220V - 240V / 50Hz) to operate the appliance !
- Make sure that the power cable is unfolded (untied) before connecting it to the socket !
- Make sure that the plug is cleanly and properly connected to the socket before using the appliance !
- Do not use multiple sockets for operating the ozone generator !
- Make sure that highly flammable substances (e.g. gases/oils etc.) are never in the vicinity of the unit !
- Do not use insect, oil or paint spray etc. near the ozone generator. This may cause damage to the unit or even fire !
- If you are not going to use the unit for a long time, switch it off and disconnect the mains plug !
- Do not disconnect the mains plug by pulling on the power cable !
- Make sure that the unit is earthed !

Please switch off the unit immediately and disconnect it from the mains/power supply if anything seems to be wrong !!! In this case, please contact a specialist and do not try to repair the unit yourself !!!

Operating information:

The ozone generator converts existing oxygen into ozone without the use of chemicals and thus does not pollute the environment.

Ozone is a special form of oxygen. Normally, two oxygen atoms combine to form an oxygen molecule. The ozone molecule, on the other hand, consists of a loose compound of three oxygen atoms (O3).

Ozone is one of the purest and most powerful oxidising and germicidal agents. (Ozone is three thousand times more powerful in killing bacteria than chlorine !)

Oxidation eliminates all odours. This also includes the particularly stubborn odours such as: Tobacco smoke, fire, animal, kitchen, waste, urine, chemical and musty odours, as well as all other odours and smells. Ozone removes odours by breaking down the molecules responsible for the odours, such as hydrogen sulphide (H2S), ammonia and other organic compounds through chemical reactions.

All germs and bacteria as well as mould are also killed by ozone.

The shelf life of ozone depends, among other things, on the temperature and humidity. Ozone starts to decompose again immediately after its formation, but usually has a half-life of about 20 minutes under normal conditions. After this time, the ozone decomposes and converts back into oxygen.
The odour that remains is mostly based on a series of harmless compounds caused by the reaction of unsaturated organic substances with ozone.

Areas of application:

Odour neutralisation:

Ozone sustainably eliminates all forms of odours, examples are: Burning odours, tobacco odours, animal odours, food odours, waste odours, chemical odours (paints, varnishes, solvents), musty smells, toilet odours, and acid odours (butyric acid etc.).

Mould remediation:

Ozone kills the mould immediately and even destroys the mould spores permanently.

Disinfection:

With ozone, rooms, inventory and objects can be disinfected relatively free of germs, fungi and bacteria, because the disinfecting effect of ozone is three thousand times stronger than that of chlorine. As practical areas of application include, among others: Doctors' surgeries, laboratories, hospitals, cold stores, food handling areas, hotel rooms, cars, fitness facilities, dry cleaners, laundries and sanitary facilities.

Before commissioning:

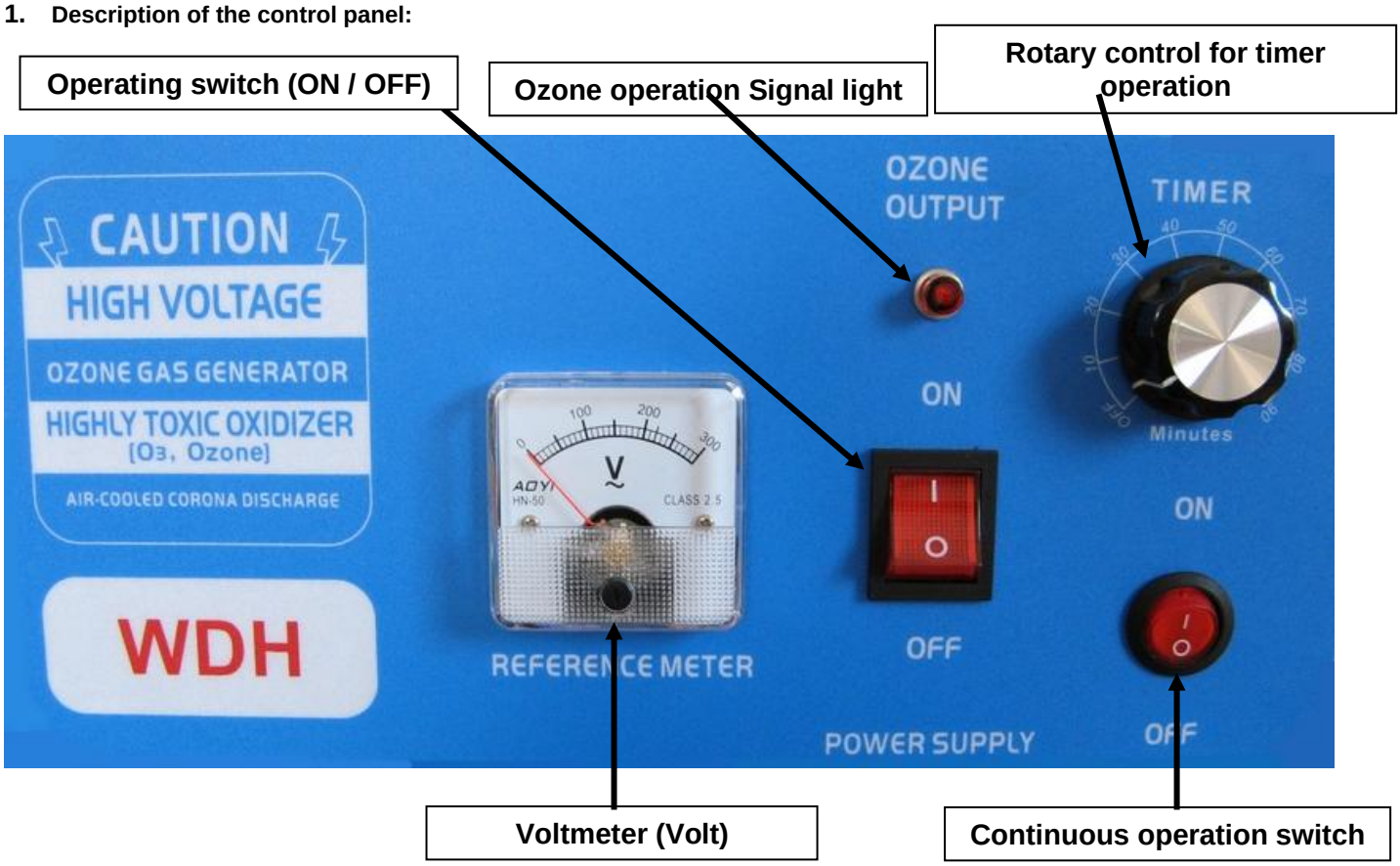
1. We recommend that the user takes appropriate protective measures, ideally protective masks, which adequately protect the mouth, eyes and nose from the ozone gas at all times.

2. Since the ozone generator converts existing oxygen into ozone, we recommend that the room/object be well ventilated before commissioning to ensure that there is as much oxygen as possible in the room/object.

3. For safety reasons, it should also be possible to check the power supply from outside the room where the ozone generator is to be used in order to be able to quickly interrupt the operation of the ozone generator at any time. We therefore recommend that you connect the ozone generator to a power socket that is located outside the operating room/premises.

Instructions for use:

1. Description of the control panel:



2. Commissioning

Observe the safety instructions !

Plug the mains plug properly into the socket and place the ozone generator as centrally as possible and, if possible, halfway up the room.

Switch the ozone generator ON with the large square operating switch. Then select the desired operating mode (see description of the control panel). These are:

3. Timer operation

This is the recommended operating mode. Use the stepless control dial to select an operating time between0 - 90 minutes (see description of the control panel).

The timer operation works on the basis of an "egg timer" and after the set operating time has elapsed, the ozone production switches off automatically.

During ozone operation/production, the red signal light is on (see description of the control panel).

4. Continuous operation

In this operating mode, the ozone production no longer switches off automatically and runs permanently. This operating mode is only recommended if you want an ozone treatment time of more than 90 minutes or if the user wants to monitor the operating room/object with ozone protective equipment (face mask).

To switch on the ozone continuous operation, you must also switch the small round continuous operation switch to ON (see description of the control panel).

During ozone operation/production, the red signal light is on (see description of the control panel).

5. Recommendations for the duration of treatment

The treatment time depends on factors such as room temperature, room size, inventory type, object type, load intensity and air circulation.
We recommend a room temperature between 20°C - 25°C and a humidity of less than 65 % relative humidity. If people or animals are present in the room shortly after the ozone treatment, the room temperature should be slightly lower after the treatment than during the treatment to ensure that ozone does not form again due to natural reactions.
Except for large rooms, a desired high depth of effect and very aggressive odours (e.g. fire smell, butyric acid), a treatment time of maximum 6 hours should be sufficient. If the problem is not eliminated after this time, it is more advisable to repeat the treatment than to run the risk of too high ozone concentrations.

Below are a few non-binding guideline values for the treatment duration at full ozone output level (5 g/h). Unless otherwise stated, these values apply to a room size of up to approx. 30 m² (75 m³):

- Category I odours
  (tobacco odours, animal odours, food odours, waste odours, etc.):

  Between 30 and 90 minutes

- Category II odours
  (Burning odours, musty odours, toilet odours, acid odours and chemical odours such as paints, varnishes, solvents, etc.):

  Between 90 and 800 minutes

- Mould remediation:

  Between 90 and 800 minutes

- Disinfection:

  Between 30 and 80 minutes

- Automotive treatment:

  Between 30 and 80 minutes

6. After the end of the treatment period

Do not enter the treatment room/object until at least 30 minutes after the end of the ozone generation phase. Immediately check whether the unit is also no longer producing ozone, switch it off completely and disconnect the mains plug.
Ensure that the room/object is sufficiently ventilated with fresh air from outside. In this context, we recommend that you ventilate the room for approx. 20 minutes before people or animals enter the room again!
If the ozone-treated room cannot be ventilated with fresh air from outside (e.g. due to its construction) and the ozone treatment phase lasted longer than 80 minutes, we do not recommend that humans and animals stay in this room for approx. 60 minutes.
In case of an ozone treatment phase longer than 400 minutes, we recommend no stay of humans and animals in this room for the duration of approx. 2 hours.

7. Cleaning

Only clean the housing !

- Please disconnect the mains plug before cleaning the ozone generator.
- Only use mild cleaning agents to clean your ozone generator.
- NEVER hose down your ozone generator (e.g. with water or similar).

Technical data

Model name:	WDH-AP005
Voltage:	220-240V ~ 50Hz
Maximum power consumption:	130 W (0.6 A)
Ozone output (optimal):	5,000 mg/h (5 g/h)
Max. Ozone concentration:	7-21 mg/l
Waterproofness:	IPx0
Dimension (H/W/D):	590 x 380 x 220 mm
Weight:	12.7 kg
Application range:	5°C - 40°C / max. 75 % r. humidity

Other

Warranty statement:

Notwithstanding the statutory warranty claims, the manufacturer grants a warranty in accordance with the laws of your country, but at least 1 year (in Germany 2 years for private individuals). The warranty begins on the date of sale of the appliance to the end user.
The guarantee only covers defects that are due to material or manufacturing faults.
Warranty repairs may only be carried out by an authorised customer service. To make a warranty claim, please enclose the original sales receipt (with date of sale).
Excluded from the guarantee are:

- Normal wear
- Improper applications, such as overloading the appliance or non-approved accessories.
- Damage due to external influences, use of force or foreign objects
- Damage caused by non-observance of the operating instructions, e.g. connection to an incorrect mains voltage or non-observance of the assembly instructions.
- Completely or partially dismantled units

Conformity:

The ozone generator has been tested and itself and/or parts thereof have been manufactured under the following (safety) standards:

CE (LVD) conformity and EMC conformity, of course.

CE (LVD) conformity tested according to:	EN 60335-1:2012+A11:2014+A13:2017 +A1:2019+A14:2019+A2:2019+A15:2021+A16:2023 EN 60335-2-65:2003+A12:2022 EN 62233:2008+AC:2008
EMC conformity tested according to:	EN IEC 55014-1:2024 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021

Correct disposal of this product:

Within the EU, this symbol indicates that this product should not be disposed of with household waste. Waste equipment contains valuable recyclable materials that should be recycled. Furthermore, the environment or human health should not be polluted by uncontrolled waste disposal. Therefore, please dispose of old appliances via suitable collection systems or send the appliance for disposal to the place where you purchased it. They will then recycle the appliance.

We hope you enjoy using this device:

Your Aktobis AG

Keep these instructions for use in a safe place !

Aktobis AG, Borsigstr. 20, D-63110 Rodgau / Germany
www.AKTOBIS.de
Email: Info@Aktobis.de