

Introduction

Dear customer, thank you for purchasing a Diametral company product. You have obtained a quality product that reflects decades of professional experience and innovation. Thanks to its high performance, together with the strong oxidizing effect of the O₃ ozone generator VirBuster destroys viruses, bacteria, yeasts, fungi and their spores. The VirBuster ozone generator also perfectly eliminates odors, such as the smell of cigarette smoke, rot, animal odor, etc. In order to serve you for many years, please read this manual and keep it for future reference.

Package contents

1x professional ozone generator VirBuster
1x power cord
1x this manual
1x security tag

Safety information

The safety information and warnings in this manual are not an exhaustive description of all conditions and situations that may occur. It is your sole responsibility to act sensibly, carefully and cautiously when using, maintaining and storing the device.

1. Do not use the device if you do not understand part or the entire manual!
2. Ozone is highly toxic in the gaseous state!
3. Do not inhale or allow other people to inhale ozone!
4. Do not use the device in rooms with people, animals and plants!
5. Ozone damages human health!
6. It is dangerous for plants and animals!
7. Ozone causes breathing problems, headaches, nausea, irritation of the mucous membranes, eyes and skin!
8. Ozone causes permanent lung damage.
9. It can cause death in high doses!
10. Do not enter disinfected areas during application and immediately after ozone application! After ozone application, wait at least 90 minutes before entering the disinfected areas!
11. After the application of ozone, the disinfected rooms must be ventilated intensively and thoroughly for at least 1 hour!
12. At elevated temperatures and in the presence of some catalysts (hydrogen, iron, copper, chromium) the process of decomposition of ozone to oxygen can be explosive!
13. At ozone concentrations in the environment above 15%, it can explode on contact with organic substances!
14. This appliance is not intended for use by young children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, without the supervision of a person responsible for the continuous use of the appliance!
15. Use the device only for the purposes for which it is intended and which are listed in this manual.

16. The device is equipped with a detachable power cable and may only be connected to a socket equipped with a protective earth! The socket voltage must correspond to the values stated on the rating plate of the device!
17. In schools and other workplaces, the device may only be operated under the supervision of trained personnel!
18. The device is not intended for games!
19. Do not operate the device unattended!
20. Do not use the device on people or animals!
21. All repairs must only be carried out by the repair shops specified by the manufacturer!
22. Never use a fuse other than that specified in the instructions!
23. Never switch on the appliance immediately after bringing it from a cold environment to a warm one. When switched off, allow it to reach room temperature!
24. Do not cover the ventilation slots with anything! When you observe this can cause damage!
25. Do not insert any objects into the ventilation slots! There is a risk of electric shock!
26. If the device or accessories show a fault or damage, take it out of service and have it repaired by a designated workshop!
27. There are no self-repairing parts inside the machine.
28. Unplug the defective power cord immediately and replace it! It is forbidden to use the device with a defective power cable!
29. Do not use accessories other than those supplied with the device or approved by the manufacturer. Contact the manufacturer to replace a damaged accessory.
30. Do not use the device in a humid environment!
31. Do not use the device in an explosive atmosphere!

First aid for ozone exposure

If inhaled, remove to fresh air immediately and seek medical advice. If breathing has stopped, give artificial respiration and seek medical attention. Inform the doctor that the affected person was affected by ozone and what the exposure was. In case of contact with eyes, rinse immediately with plenty of water for at least 15 minutes. Seek medical attention.

In case of contact with skin, wash thoroughly with soap and water.

About ozone

Ozone is a gas that is composed of three molecules of oxygen (O₃). Oxygen is usually found in the atmosphere in the form of two molecules (O₂). Ozone is naturally found in the stratosphere, where it protects everything living on Earth from UV radiation. It is formed by the action of UV radiation on oxygen O₂ or by electrostatic discharge. Ozone is an unstable gas that decomposes spontaneously into oxygen. Its lifespan in the rooms ranges from 30 to 120 minutes, when it spontaneously decomposes into O₂ oxygen. The rate of disintegration depends on temperature, environment and other factors.

Ozone is the strongest oxidizing element. It works very effectively on bacteria and viruses. Bacteria are single-celled organisms with a simple structure. Ozone impairs their metabolism to lead to rupture the cell walls and thus to destroy the bacteria. Viruses are non-cellular organisms that need a host cell to reproduce. The virus consists of a nucleic acid and

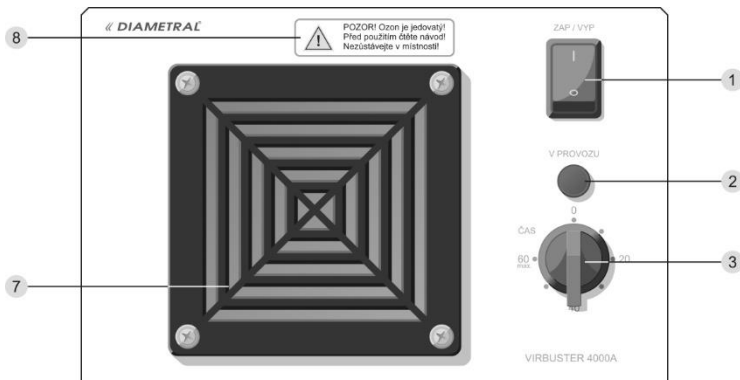
a protein envelope. Ozone disrupts the protein envelope of the virus, destroying the virus. Ozone completely eliminates odors such as the smell of smoke from cigarettes, rot, the stench of animals, etc.

The presence of ozone is detected by smell in the range $0.005 \div 0.02$ ppm. At higher concentrations, it is perceived as a sharply pungent odor. At concentrations above 0.1 ppm it becomes a dangerous toxic gas. Concentrations in the range of $0.5 \div 1.0$ ppm cause respiratory distress, decreased oxygen consumption, lung irritation, severe fatigue, chest pain and dry cough. Coma occurs at ozone concentrations in the range of 1-10 ppm. At a concentration of 10 ppm it becomes dangerous for life and health. When ozone is inhaled, the sensory abilities to perceive it quickly become dull. The sensitivity of the human sense of smell decreases with each breath.

Device description

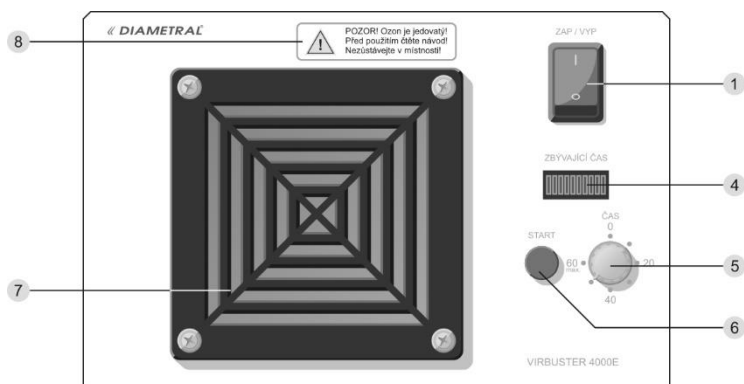
Front panel - models

VirBuster 4000A
VirBuster 8000A
VirBuster 10000A
VirBuster 20000A

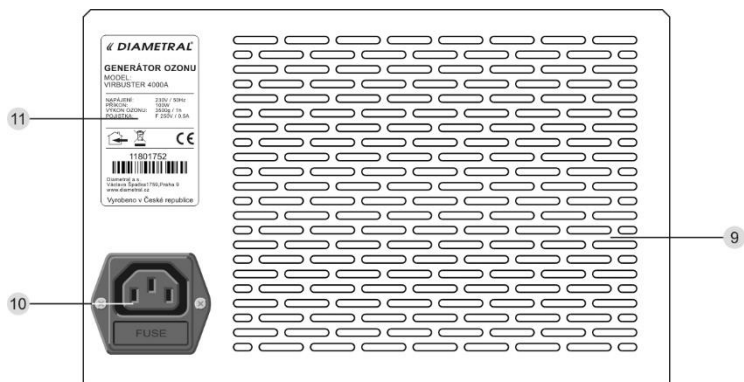


Front panel - models

VirBuster 4000 E
VirBuster 8000 E
VirBuster 10000 E
VirBuster 20000 E



Rear panel - all models



- 1 - Main switch
- 2 - Ozone generation process indicator light
- 3 - Timer with ozone generation switch
- 4 - Bargraph showing the remaining ozone formation time
- 5 - Time setting
- 6 - START button
- 7 - Inlet suction with filter
- 8 - Safety information
- 9 - Ozone output to the surroundings
- 10 - Power connector with fuse
- 11 - Production label

Device installation

After unpacking, check that the device is not damaged and that the package contains all the accessories listed in the chapter Package contents. Do not use the device if it shows signs of damage.



WARNING

Packaging materials can be dangerous for children. Therefore, keep all packaging material (plastic bags, polystyrene, etc.) out of the reach of children.

- The device heats up during operation and radiates heat to the surroundings. When placing the device on a work surface, make sure that there is at least 5 cm of free space between the side walls. There must be a free space of at least 50 cm in front of and behind the rear wall.
- Any ingress of liquids into the device could damage it and cause electric shock. Therefore, do not place it near water taps or other sources of liquids.
- Do not place the device in direct sunlight, in a humid or dusty environment, away from heat sources.
- Do not place the device in explosive atmospheres.
- Ozone has a high oxidizing ability. Long-term exposure to ozone on ferrous metals can affect metal corrosion. Likewise, the long-term effects of ozone on plastics can result in their degradation. Therefore, make sure that the device is not installed near these materials for a long time.
- Position the power cord so that it is not damaged by sharp edges and does not touch hot surfaces.
- Plug the power cord into the fused power connector (10). Check that the main switch (1) is in position 0. Connect the mains plug to the mains.

Switch on the device and disinfect the rooms



SAFETY WARNINGS

There must be no people, animals or plants in the disinfected room!

VirBuster 4000A, VirBuster 8000A, VirBuster 10000A and VirBuster 20000A models

- Make sure that there are no people, animals or plants in the disinfected room!
- Close all windows and doors in the disinfected room.
- Hang a security tag on the outer door handle of the disinfected room.
- Set the timer (3) according to the table in the chapter: "Recommended times and outputs".
- Turn on the main switch (1) and leave the disinfected room immediately!
- The main switch (1) lights up to indicate that the device is switched on and the indicator light for the ozone formation process (2)
- Make a note of the start time of the disinfection process to give you an idea of when the device will switch off.
- At the end of the set time for the disinfection process, the ozone formation indicator light (2) goes out. Wait at least 90 minutes before entering the room!
- Then ventilate the disinfected room intensively and thoroughly for at least 1 hour!
- Switch off the device with the main switch (1).

Models VirBuster 4000E VirBuster 8000E VirBuster 10000E and VirBuster 20000E

- Make sure that there are no people, animals or plants in the disinfected room!
- Close all windows and doors in the disinfected room.
- Hang a security tag on the outer door handle of the disinfected room.
- Turn on the main power switch (1).
- Set the timer (5) according to the table in the chapter Recommended times and outputs.
- Start the countdown for the disinfection process with the button (6) and leave the disinfected room immediately!
- The LED stripe at (4) shows the remaining time of the disinfection process in percent. When the disinfection process is completed, no lights up on the LED stripe (4) and an acoustic signal will sounds.

- Make a note of the start time of the disinfection process to give you an idea of when the device will switch off.
- At the end of the set time, wait at least 90 minutes before entering the room!
- Then ventilate the disinfected room intensively and thoroughly for at least 1 hour!
- Switch off the device with the main switch (1)

Disinfection of car interiors and air conditioners

- Place the car in the shade out of direct sunlight.
- Do not enter the car and make all adjustments to both the car and the device outside the car.
- Adjust the car's air conditioning to the internal air circulation.
- Set the ventilation temperature to the lowest level. High temperatures have a negative effect on disinfection.
- Set the car's air conditioning fan power to maximum power and turn on the air conditioning.
- Make sure that there are no people, animals or plants in the disinfected car!
- Close all windows and doors except those from which you operate the appliance.
- Set the time and switch on the device according to the chapter: "Switching on the device and disinfecting the rooms", according to your device model.
- Close the door from which you operated the appliance.
- After completing the set disinfection time, the time before opening the car door can be reduced to 45 minutes. **DO NOT ENTER THE CAR!**
- Leave all car doors open for at least 1 hour so that the car is thoroughly ventilated!
- Switch off the device with the main switch (1)



SAFETY WARNINGS

Do not inhale or allow other people and animals to inhale ozone! There is a risk of serious damage to health! For more, see the Safety Information chapter.



WARNING

Do not use the device repeatedly without a break of at least 15 minutes. Failure to observe this will lead to excessive overloading of the ozone generator itself, resulting in damage to the device!



WARNING

Do not disinfect the room longer than recommended. With long-term exposure to ozone, in the order of hours, ozone can damage objects in the disinfected room!

Recommendations before starting disinfection

- Thorough mechanical cleaning should first take place before disinfecting the premises.
- Thoroughly vacuum and wipe the floors, remove any deposits and deposits of dust or other dirt.
- For best results when disinfecting, clean surfaces that come into contact with humans with suitable products beforehand.

Recommended times and performances

Model	VirBuster 4000	VirBuster 8000	VirBuster 10000	VirBuster 20000
Space				
Car interior	30	20	15	15
50m3 / 20m2	40	20	15	10
100m3 / 40m2	80	40	25	12
125m3 / 50m2	90	45	30	15
250m3 / 100m2	P	90	60	30
500m3 / 200m2	N	P	120	60
750m3 / 300m2	N	N	P	90

P = use several devices, derive time according to the power of the device (s) and the times related to the size of the space 100m3. N = not recommended. Square meters are calculated at a ceiling height of 2.5 m.

The times can be increased by 20% as required without the risk of damaging the device.

Fuse replacement

- Before replacing the fuse, first disconnect the power supply by unplugging the power cord from the outlet and the power connector (10) in exactly that order.
- Use a screwdriver to slide out the instrument fuse holder (10) and remove the fuse.
- In its place, insert a new fuse corresponding to the data on the nameplate of the device.
- Slide the instrument fuse holder back into the fused power connector (10).
- Plug the power cord into the fused power connector (10).
- Check that the main switch (1) is in position 0 and connect the mains plug to the mains. This completes the fuse replacement.

**NOTICE**

If the fuse blows repeatedly, send the product to a service center for repair.

**WARNING**

Always use the value and type of fuse indicated on the nameplate of the device! Failure to do so may result in property damage and / or electric shock!

**WARNING**

Do not replace the fuse or repair the fuse with a wire or other metal object! Failure to do so may result in property damage and / or electric shock!

Problems and their solutions

In case of problems, first try to solve them yourself according to the instructions below. If the fault cannot be rectified according to these instructions, you can obtain further information from the manufacturer's service department, which we recommend contacting by e-mail at service@diametral.cz.

PROBLEM	SOLUTION
The main switch (1) does not light up.	Check the connection of the power cable or the voltage in the socket. Turn the main switch (1) to the On position.
Even though the power cord connection and the voltage in the socket are OK and the main switch (1) is in position I, the main switch (1) does not light up and the appliance doesn't work.	Check the fuse located in the power connector with the fuse (10) and if it is damaged, proceed according to the chapter "Replacing the fuse".
Even though the fuse in the power connector with the fuse (10), the power cord connection and the voltage in the socket are OK and the main switch (1) in position I, the main switch (1) is still not lit and the device does not work.	Send the entire product, including all accessories, to the manufacturer for inspection. The procedure for sending the product is described in the chapter "Warranty conditions, warranty and post-warranty service".
The main switch (1) lights up after switching on, but the device does not work.	Set the timer (3 or 5 - depending on your model) according to the chapter "Switching on the device and disinfecting the rooms" and continue according to this chapter and according to your device model.

<p>The main switch (1) lights up after switching on, but the device does not work, even though everything has been checked and performed according to the previous solution of the problem.</p>	<p>Send the entire product, including all accessories, to the manufacturer for inspection. The procedure for sending the product is described in the chapter "Warranty conditions, warranty and post-warranty service".</p>
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WARNING

Do not disassemble, repair or modify the product yourself! Damage to property and / or electric shock could result!

Warranty conditions and post-warranty service

The device has been manufactured for you with the utmost care. We are convinced that it will serve you flawlessly for many years, if you follow the instructions in the manual. Despite all our efforts, a defect may appear on the product that we could not detect in the production process. However, before sending the product for service, try to rectify the fault yourself according to the instructions given in the chapter "Problems and solutions". If the defect cannot be eliminated even on the basis of information obtained from the service department, send it to the address given on the website www.diametral.cz. Before shipping, pack the product carefully so that the product cannot be damaged during transport. Damage caused by transport cannot be considered as a warranty defect.



NOTICE

The ozone generator unit is a consumable that wears out over time. Its service life is largely influenced by the intensity of use. If the ozone formation power is significantly lower, it will need to be replaced. The unit cannot be replaced by yourself and must be replaced by an authorized service center.

We provide a 24-month warranty period for the product from the date of sale. The warranty does not cover defects caused by improper handling or use, excessive stress, mechanical damage (impact, fall, exposure to excessive temperature, dust, water, etc.), or if the product was operated contrary to the instructions in the manual. Ozone is a very strong oxidizing agent and therefore when using the product in humid environments, corrosion of the product can occur without affecting its functionality. The damaged product is also not covered by the warranty. The complaint must be accompanied by a duly completed original warranty card or receipt of the seller. Without these documents, the warranty cannot be recognized.

Maintenance and cleaning

The product does not require any specific maintenance. In the event of damage to it, or any part of it, take the product out of service immediately and send it for repair. Carry out cleaning with the power cord disconnected from the electrical outlet and a soft cloth dampened, or using detergent or soap.



WARNING

Under no circumstances use various thinners, petrol, sand or other aggressive or abrasive cleaners for cleaning!

Waste disposal



This symbol on the product and its accessories indicates that this product and its components must not be disposed of with your other household waste and should not be mixed with other commercial wastes for disposal.

The packaging is made of cardboard and 100% recyclable plastic filling. Hand in the paper for collection and hand over the plastic filling to a specialized company for recycling, or hand it in in separate waste. At the end of the product's life, return it to a specialist recycling company.

Specifications

Model	VirBuster 4000A	VirBuster 8000A	VirBuster 10000A	VirBuster 20000 A
Parameter	VirBuster 4000E	VirBuster 8000E	VirBuster 10000E	VirBuster 20000E
Power O3:	3500mg	7000mg	10000mg	20000mg
Power supply:	230V / 50Hz	230V / 50Hz	230V / 50Hz	230V / 50Hz
Settings	analog (A)	analog (A)	analog (A)	analog (A)
time:	electronic (E)	electronic (E)	electronic (E)	electronic (E)
Display	on timer (A)	on timer (A)	on timer (A)	on timer (A)
remaining time:	LED (E)	LED (E)	LED (E)	LED (E)
Power cons.:	70 W	100 W	115 W	210 W
Dimensions:	172 x 244 x 282	172 x 244 x 282	172 x 244 x 282	172 x 244 x 282

(A) - valid for models marked with an A suffix.

(E) - valid for models marked with an E suffix.

Dimensions are given in mm.

Conclusion

Diametral a.s. is constantly improving the properties of this product. Technical parameters are subject to change without notice.

We hope that you will be satisfied with our product. You can send your comments and suggestions to sales@diametral.cz.



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Ozone generators VirBuster
Operating Instructions
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