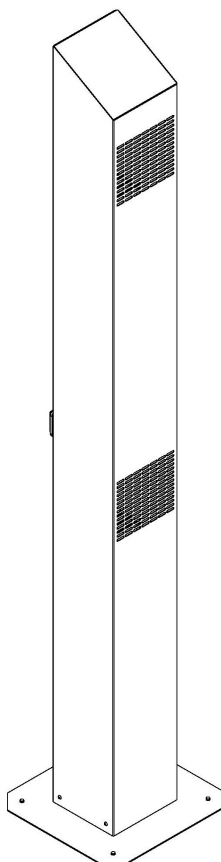


03/2022

Mod: OZONE/112MCT

Production code: 61051172

MANUALE DI ISTRUZIONI, PER USO E MANUTENZIONE
OPERATING AND MAINTENANCE MANUAL
BEDIENUNGS UND WARTUNGSANLEITUNG
MODE D'EMPLOI ET D'ENTRETIEN
MANUAL DE INSTRUCCIONES, PARA EL USO Y MANTENIMIENTO



Italiano

English

Deutsch

Français

Español



Diamond
Sani Ozone

+ SANITISATION

FOREWORD

- *This manual provides the Customer with information on the machine and the applicable regulations, as well as the user and maintenance instructions required to use the machine optimally and keep it in good working order.*
- ***This manual must be made available to all the device's users and maintenance technicians.***

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CH. 1 - INFORMATION ON THE DEVICE

1.1 - General precautions

- The ozone generator must be used only by trained staff, who must be entirely familiar with the contents of this manual.
- New staff must be trained in advance on how to use the machine.
- Strictly avoid using the device when other people or animals are present; ventilate the area thoroughly before allowing them to spend time in it again.
- When programming the device for use, concentrate on the job in hand.
- Periodically check the condition of the power cable; a damaged or worn power cable poses a serious electrical hazard.
- If the device is or appears to be malfunctioning, do not use it and contact the Support Centre immediately.
- Do not attempt to perform repairs yourself but always contact the Service Centre.
- The user is not authorised to tamper with the machine for any reason whatsoever. Contact the Service Centre if you encounter any anomalies.
- Any attempt to dismantle, modify or tamper with any part of the machine by the user or unauthorised personnel will immediately void the **Declaration of Conformity**, invalidate the warranty and relieve the Manufacturer of any liability. The manufacturer is also relieved of all liability for the consequences of:
 - ⇒ improper use or tampering with the machine by inadequately trained personnel;
 - ⇒ lack of or poor maintenance;
 - ⇒ use of **non-original** spare parts not specifically designed for the model;
 - ⇒ total or partial failure to follow the instructions given in this manual;
 - ⇒ treatment of the device's surfaces with unsuitable products.

1.2 - Safety devices installed on the device

The safety devices against electrical risks conform to EU Directive **2014/35** and the **60335/1** standard.

The ozone generator is therefore equipped with electrical safety devices both when operating and when being cleaned or serviced.

Nonetheless, there are certain “**RESIDUAL RISKS**” that cannot be eliminated entirely; they are referred to herein with the word “**WARNING**” and concern use, cleaning and maintenance of the device when there is a risk of electrocution, fire and ozone (O₃) inhalation due to the presence of people or animals during use. The ozone (O₃) generated can also cause damage such as oxidation of the materials, objects and devices present in the treated environments.

1.3 - Description

1.3.1 - General description

The ozone generator is designed and built by our company with the precise aim of generating ozone from oxygen that is normally found in the air inside premises. It is built to ensure that:

- all its parts are sturdy and stable;
- the circulation fan favours excellent air/ozone exchange.

If any accident occurs, the manufacturer shall not be held liable if the machine has been modified, tampered with, deprived of its safety guards or used for purposes other than the intended uses specified by the manufacturer.

1.3.2 - Construction features

The ozone generator features:

- Made of AISI 304 stainless steel.
- Materials that guarantee excellent resistance to oxidation.
- An ABS handle for to facilitate transport operations.
- The internal generator consists of a single-piece unit which raises the voltage to about 2,400 V and generates ozone (O₃) through ceramic plates, due to the corona effect created by the powerful electric field.

1.4 - Intended use

The generators are designed to generate and introduce ozone (O₃) into medium-sized business settings (see tables on page 11).

It is a mere aid and cannot be used as a substitute for proper and thorough cleaning and sanitisation of rooms, objects and surfaces.

1.5 - Improper use

The equipment must only be used for its intended purposes; in particular:

- It was **not** designed specifically for use in healthcare facilities and IS NOT A MEDICAL DEVICE.
- Do **not** use it to sanitise water or liquids.
- Do **not** use the equipment as a machine for generating ozone intended for other purposes.
- Do **not** use the device unless it has been properly positioned with all its guards in good working order, to prevent the risk of serious personal injury.
- Do **not** access the components to avoid the **risk of electrocution**.
- Do **not** start up the equipment if it is clearly or presumably faulty.
- Before using the device, make sure that any potentially hazardous conditions have been properly eliminated. If you notice anything unusual in its operation, shut down the device and inform the Support Centre.
- Do **not** allow any unauthorised personnel to intervene on the device.

1.6 - Technical data

Giving precise details of the “**Model**” and “**Serial No.**” of the device will enable our Support Service to provide you with a rapid and effective response.

We recommend specifying the device model and serial number whenever you contact the Support Service.

This information appears on the rating plate shown in Fig. 1.

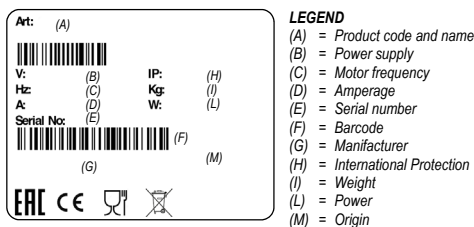


Fig. n°1

1.7 - Composition of the generator

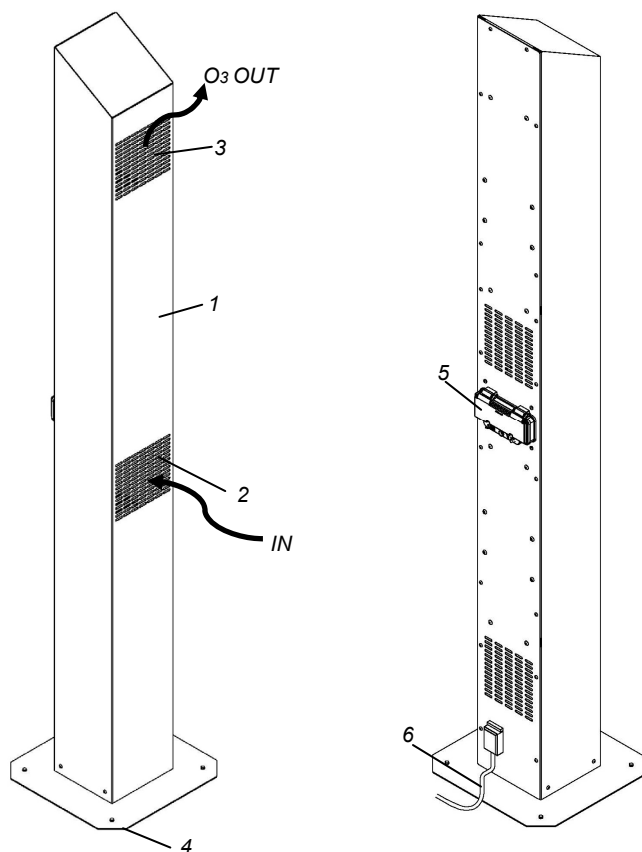


Fig. n°2

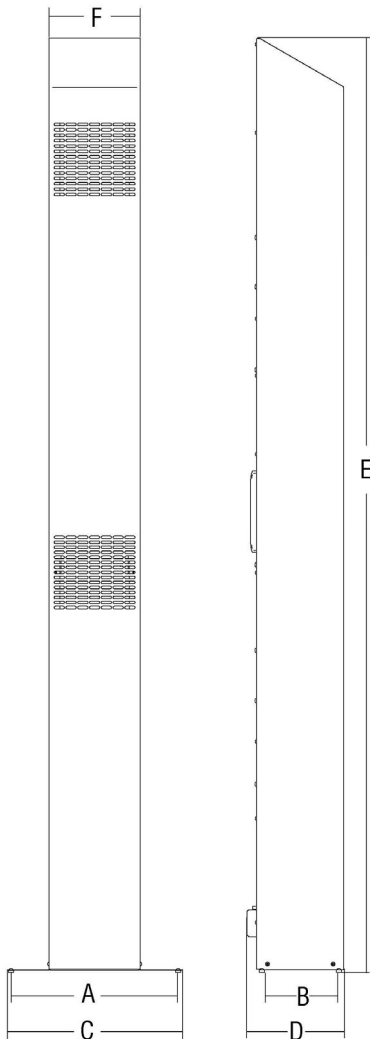
Key			
1	Telaio	4	Piedini
2	Aspirazione (IN)	5	Comandi
3	Emissione (O ₃ OUT)	6	Cavo di alimentazione

LE CARATTERISTICHE ELETTRICHE PER LE QUALI E' PREDISPOSTA L'APPARECCHIO SONO INDICATE IN UNA TARGHETTA APPLICATA SUL RETRO DELLA STESSA; PRIMA DI ESEGUIRE L'ALLACCIAMENTO VEDERE PUNTO "ALLACCIAMENTO ELETTRICO."

CH. 2 - TECHNICAL DATA

2.1 - Overall dimensions, weight, specifications

Fig. 3 - Dimensions and maximum overall dimensions



Model	u.m.	OZONE/112MC
Power	watt	740
Power supply		220-240V / 50 Hz
Rated O ₃ production (*)	g/h	112
Timer	min.	60
Fan	m ³ /h.	165x2
A x B	mm	322x145
C x D	mm	336x186
E	mm	1806
F	mm	176
Net weight	kg	14.5
* the rated data refers to tests conducted in a room with 100% oxygen. The actual production is therefore proportional to the percentage of oxygen in the air, which is generally around 20–22%.		

Fig. n°3

CH. 3 - RECEIVING THE DEVICE

3.1 - Shipping

The devices leave our warehouses carefully packed.

The packaging consists of:

- a sturdy external cardboard box [Ref. (A) Fig. 4] and cardboard and/or polystyrene or polyurethane foam internal supports;
- the machine [Ref. (b) or Ref. (c) Fig. 4];
- this manual [Ref. (d) Fig. 4].

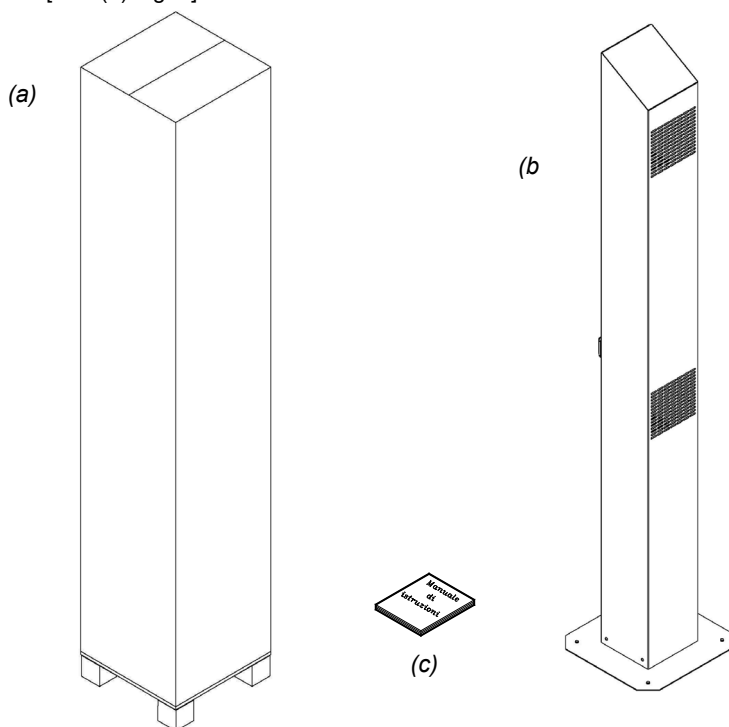


Fig. n°4

3.2 - Checks on delivery

When you receive the package containing the equipment, carefully check the packaging for signs of damage during shipping.

If the packaging shows signs of mishandling, impacts or dropping, report the damage to the shipping agent within three days of the date of delivery indicated on the documents and draw up a detailed report on any damage to the machine.

3.3 - Disposal of the packaging

The packaging materials (cardboard box, plastic strap and polystyrene or polyurethane foam) can be disposed of together with normal household waste, so their disposal does not pose any particular difficulties.

If the machine is installed in a country where special regulations apply, dispose of the material in accordance with the relevant provisions.

CH. 4 - INSTALLATION

4.1 - Positioning

Place the device on the ground away from walls, furniture, furnishings and, generally speaking, away from anything that might hinder the correct flow of air entering the device and of the ozone (O_3) emitted by it (see Fig. 2). Position the generator in such a way that the emitted flow is directed towards the open space to be treated, and never towards walls, objects or any obstacles lying in between (Fig. 5).

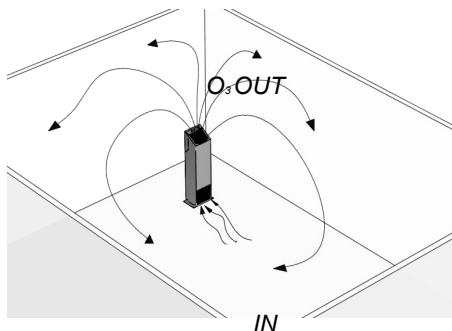


Fig. n°5

4.2 - Connection to the power supply

The device comes with a power cable having a cross-sectional size of 3x1.5 mm², a length of 1.5 m and a Schuko plug. Connect the device to the 220–240 V, 50 Hz power supply, while making sure that the system complies perfectly with the standards and includes a 0.03 A / 10 A residual-current circuit breaker.

Moreover, check that the information on the machine's rating plate matches the specifications shown on the delivery and shipping documents, and that both the master switch and cable are easily accessible while the machine is in use.

4.3 - Wiring diagram

4.3.1 - 220–240 V / 50 Hz

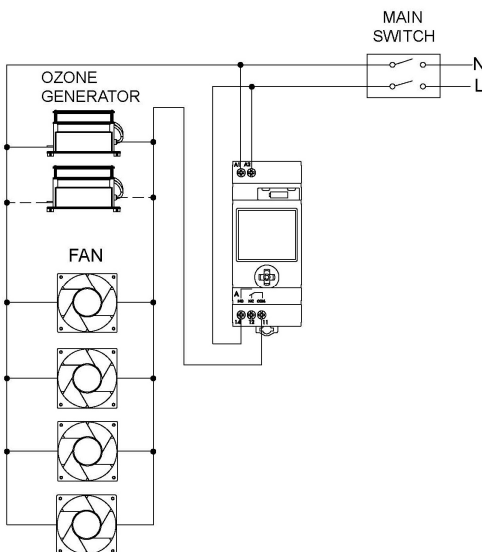


Fig. n°6

CH. 5 - USING THE DEVICE

5.1 - Controls

The controls are protected by a flap that prevents them from being touched by unauthorised operators; use a suitable screwdriver to access them.

The smartphone can interface with the controls even when the flap is closed.

Main switch (Ref. 1 - Fig. 7): shift it to ON to power the appliance.

(Shift it to OFF to disconnect the power supply to the appliance, before handling it, or to interrupt programmed operation without having to intervene on the weekly clock).

Finder programmer model 12.61.8.230 (Ref. 2 - Fig. 7): can be used for adjusting the appliance for cyclical weekly programming.

To programme the clock on a weekly basis, refer to the enclosed instructions (from page 12).

The Finder programmer model 12.61.8.230 is also equipped with a handy app-based programming system for Android and iOS smartphones with NFC connection.

Download the dedicated “Finder Toolbox” app from the most popular stores.

The device is designed to interface with a single smartphone at a time.



- 1 Main switch
- 2 FINDER NFC programmer



FINDER Toolbox

Fig. n°7

5.2 - Operation

WARNING!

The device is specially designed for working on a programmed basis, thus for activating after it has been programmed and activated. The device, therefore, does not require the direct intervention of an operator to physically start, but activates automatically on the basis of the set programme.

The programming and subsequent activation of the device are thus very important phases and must be carried out by qualified personnel possessing an in-depth knowledge of this manual and also of ozone's effects on people, animals and the environment.

The chosen person must have a hierarchical role within the organisation and must have the power to organise, arrange and check to ensure that:

- no people or animals are present while the appliance is running and in the hours immediately afterwards;
- the appliance cannot be tampered with or re-programmed by people not directly instructed by him/her;
- internal protocols are drawn up and adequate information is provided (for example, warning and hazard signs, etc.).

Ozone has a high oxidising power, which makes it effective in destroying germs, bacteria and mould and in passivating viral loads on surfaces, objects and in the air.

To sanitise the environments correctly, programme the device on the basis of the respective programming table shown on page 11.

The actual O₃ production capacity of the device is shown in the technical data table (see page 6) and the production is expressed in g/h (grams per hour).

All the devices we manufacture are suitable for use in medium-sized open-space environments. The layout of the environments and the equipment present in them may prevent or limit the correct and uniform diffusion of O₃ throughout the room.

Due to its intrinsic properties, ozone will tend to dissipate naturally once the device stops working. We nonetheless recommend not returning to the treated rooms unless at least 6 hours have elapsed from the end of the cycle, after ventilating them thoroughly and leaving the area for at least a further 15 minutes to allow a total change of air, before the area is used again permanently.

Remove the plug from the power outlet and store the device in a place accessible only to the person responsible for its use.

WARNING!

Ozone has a strong oxidising effect that is hazardous to health.

Prolonged exposure to ozone causes oxidation and therefore ageing of surfaces and materials (in particular plastic or rubber materials, non-treated steels, etc.) or electrical or electronic equipment.

5.3 - Parameters for using the ozone generator

The parameters to be considered are:

a) the dimensions of the environment in cubic metres

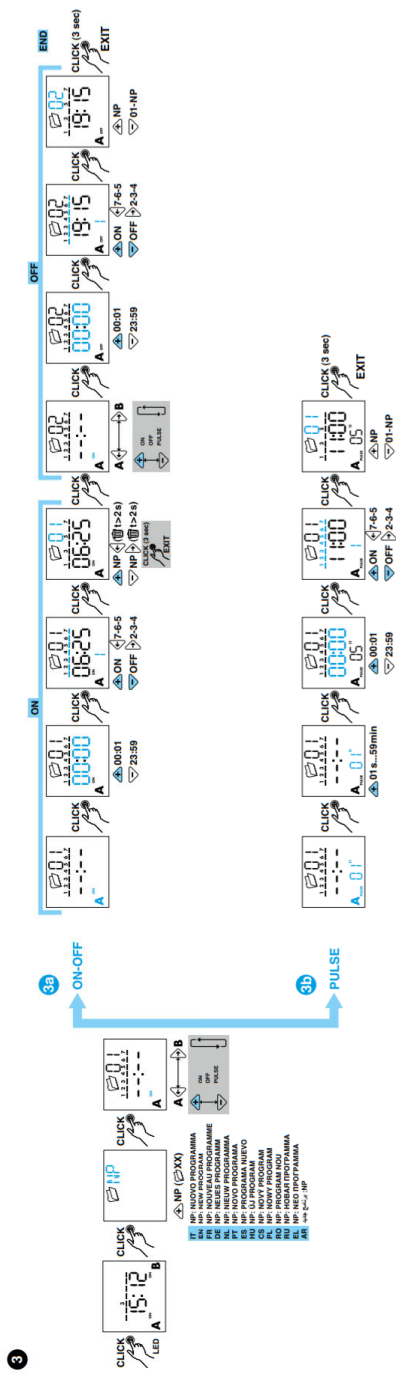
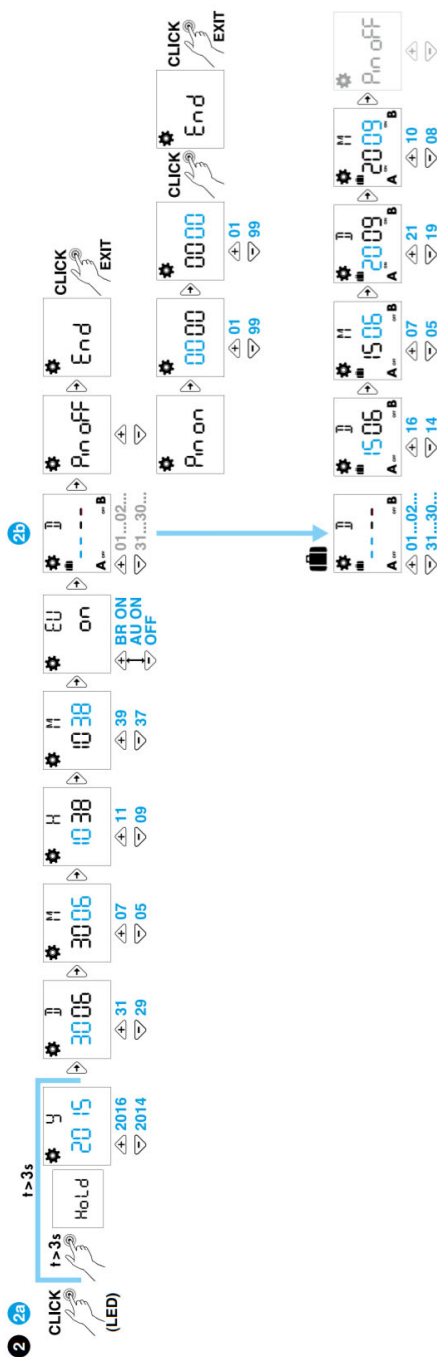
b) the desired concentration in ppm (parts per million)

1 ppm: medium sanitisation, bacteria 70%, viruses 80%, fungi, animal parasites, environmental odours

2 ppm: strong sanitisation, bacteria 99%, viruses and mites 95%, moulds, animal parasites, environmental odours

Programming table O₃ 112

Nominal production	Concentration	Timer 20 min.		Timer 40 min.		Timer 60 min.	
	Ppm mc	mc	mq	mc	Mq	mc	Mq
112 g/h	1 ppm	600	200	1080	360	1320	440
	2 ppm	360	120	600	200	1080	240



4

4a

4b

4c

4d

5

5a

5b

5c

5d

6

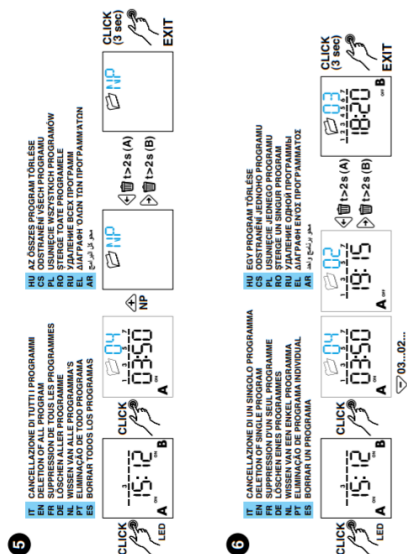
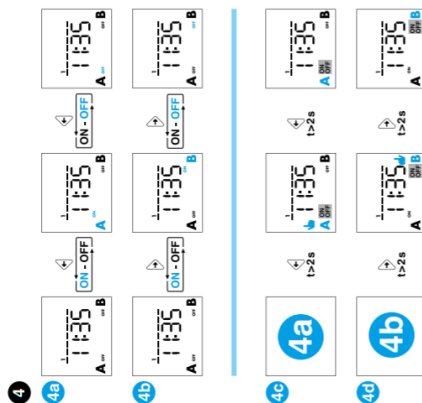
6a

6b

6c

6d





CH. 6 - CLEANING THE DEVICE

WARNING! *Before carrying out any cleaning operations, disconnect the product's power plug from the mains to isolate the product completely from the power supply.*

6.1 - General information

- The device does not require ordinary cleaning.
- Regularly check that moisture and air impurities have not obstructed the intake or exhaust grilles.
- Visually inspect whether no obstructions have formed inside the machine due to dust, spider webs, etc.
- If there is any small build-up of dust, make sure it is removed. Do not use high-pressure water jet cleaners, water jets or detergents.
- Do not use tools, scrubbing brushes or anything that may damage the surface of the device.
- Do not introduce tools or brushes inside the device.
- Do not wet the machine or any of its parts nor wash it in a dishwasher.

6.2 - Maintenance

To protect the device against dust build-up, we recommend storing it in a dry and dust-free place (for example, in its original packaging, in a cabinet, etc.).

CH. 7 - MAINTENANCE

7.1 - General information

Before servicing the product, disconnect its power plug from the mains to isolate the product completely from the rest of the system. For any maintenance requirements, contact the "SUPPORT CENTRE".

7.2 - Power cable

Check the condition of the cable regularly and call the SERVICE CENTRE if it needs replacing.

7.3 - Fans

Periodically check that the fans works properly (check for clogging due to dust, spider webs, etc.).





***CENTRO DI ASSISTENZA
RIVENDITORE AUTORIZZATO***

***SERVICE CENTRE
AUTHORISED DEALER***

***KUNDENDIENSTSTELLE
AUTORISIERTER HÄNDLER***

***CENTRE DE SERVICE APRE-VENTE
REVENDEUR AUTORISE***

***CENTRO DE ASISTENCIA
VENDEDOR AUTORIZADO***

CH. 8 - DISMANTLING

8.1 - Decommissioning

If you decide to put the device out of service for any reason, make sure that it cannot be used by other persons: **disconnect and cut the electrical connections.**

8.2 - Disposal

Once the device has been decommissioned, it can be disposed of. For correct disposal, contact a waste management company and carefully sort the device's constituent materials.

8.3 - WEEE (Waste Electrical and Electronic Equipment) regulations



Pursuant to Art. 13 of Italian Legislative Decree No. 151 of 25 July 2005 "Implementation of Directives 2002/95/EC, 2002/96/EC and 2003/108/EC relating to the reduced use of hazardous substances in electrical and electronic devices, and to waste disposal".

The crossed-out wheeled bin symbol on the equipment or on its packaging indicates that the product must be disposed of separately from other waste at the end of its useful life.

The separate waste collection of this device at the end of its life is organised and managed by the manufacturer. The user who wishes to dispose of this device must contact the manufacturer and follow the given instructions to ensure that the separate waste collection procedure is observed at the end of the equipment's useful life.

The correct disposal of the device for the subsequent recycling, management and treatment of its parts in an environment-friendly way helps to prevent possible adverse effects on the environment and promotes the reuse and/or recycling of its constituent materials.

Unlawful disposal of the product by the user shall imply the application of administrative penalties under current law.