



Virtus[®]
Group

Service



Virtus s.r.l.

via Milano 95/e
27045 Casteggio (PV) / Italy

☎ +39 0383 89 06 12
📠 +39 0383 80 96 01

www.virtusnet.eu

Virtus Group GmbH

Hüserstraße 53
59075 Hamm / Germany

☎ +49 (0) 23 81 / 973 71- 0
📠 +49 (0) 23 81 / 973 71- 88

www.virtusnet.de

UV KNIFE STERILIZER

Art. 7502
Art. 7504



Art. 7502

Contents

Declaration of Conformity..... page 2

Introduction and Warranty page 2

Safety warnings..... page 3

Environmental Notes page 3

Purpose of the Product..... page 3

Technical features page 4

Installation page 4

Operation and use..... page 4

Plate Data..... page 6

Maintenance and cleaning page 6

Diagnostics and troubleshooting page 6

Wiring diagram page 7

Spare parts page.8

EC Declaration of Conformity

The EC Declaration of Conformity attached to this manual refers to the serial number of the appliance. Its content complies with what is indicated below.

EC Declaration of Conformity

The company Metalcarrelli S.r.l., based in Via A. Gagliani 10/A, 47814 - Bellaria I.M. (RN) - Italy, VAT no. 03249750401, declares under the sole responsibility of its legal representative, that the following appliance:

Denomination	UV KNIFE STERILIZER
Model	_____
Serial number	_____
Year of manufacture	_____

complies, where applicable, with the essential safety and health requirements of the following European Directives:

2014/35/EU	Directive on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits
2011/65/EU	Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS2 directive)
2014/30/EU	Directive on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast)

Harmonized standards applied to meet safety and health requirements:

EN 60335-1:2013	Safety of Household and similar electrical appliances - Part 1: General requirements
EN 62233:2009	Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure
EN 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction

Introduction and Warranty

We thank you for purchasing one of our products manufactured in compliance with the strictest standards and according to technical principles aiming at ensuring an easy and safe use in professional work environments.

The manufacturer guarantees its products for 12 months, in compliance with the legislation in force.

Electrical parts and consumables are not covered under the warranty.

All interventions under warranty will be carried out at Manufacturer's premises only.

Any transport and delivery costs will be at the Customer's charge.

In order to activate the warranty, the original purchasing invoice or any other mandatory document shall be produced.

Safety warnings



Carefully read the warnings contained in this USE AND MAINTENANCE MANUAL, as they provide important information for safe installation, use and maintenance.

Keep this manual for future reference by the operators. The manual must be kept throughout the lifetime of the appliance and must be made available to users for any reference. It is necessary to read it for any information on the installation, operation and maintenance of the appliance.

Before connecting the appliance, make sure that the data on the plate correspond to those of the electric power supply available in the place where the appliance is installed.

- Do not disable the safety and protection system consisting of the door open sensor.
- Do not use extension cords, unless you make sure the wattage is adequate for the appliance.
- Do not fit the plug into a power strip.
- Periodically check the appliance for safety.
- The appliance must be connected to an electric socket with efficient earth connection.
- Any intervention on the appliance must be performed by qualified technicians.
- Do not touch any electric parts before disconnecting the appliance from the power supply.
- Do not spill any liquids on the outer surface of the appliance and in particular on the control panel.
- Do not use the appliance with wet hands or when barefoot and standing on a wet floor.
- Do not use the appliance if the power cord is damaged.
- Do not remove the power plug by pulling the cord.
- Do not use acids or strong chemical detergents to clean the appliance.
- Children should be supervised to be sure that they do not play with the appliance.

Environmental Notes

NOISE:

The LEP,d of the appliance is less than 70 dB(A).

If positioned in areas with a noise exposure value of more than 80 dB(A), the employer must inform and train the operator about the risks due to noise exposure and must take the necessary measures together with the competent doctor.

PACKAGING:

The packaging materials (plastic bags, polystyrene, cardboard, etc.) must be kept away from children, because they may be dangerous. Collect and sort the materials per type (e.g. cardboard, wood, plastic materials, etc.) and dispose of them in compliance with the regulation in force.

OUT OF SERVICE:

At the end of the appliance lifetime, disassemble and sort the components (electric board, metal frame, etc.) and dispose of them according to any local and national regulations.

DISPOSAL:



Pursuant to art. 13 of the Legislative Decree no. 151 of June 25, 2005, "Enforcement of the Directives 2002/95/EC and 2003/108/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment, and on waste disposal", the appliance is considered as a "Waste Electrical and Electronic Equipment" (WEEE). The symbol shown on the left and applied on the appliance or packaging, indicates that the product cannot be disposed of as an urban waste, at the end of its lifetime, but it must be disposed separately through authorized collection centres.

The proper separate collection for further recycling, treatment and environmentally-friendly disposal of the appliance contributes to avoid any negative impact on the environment and human health and at the same time it allows to re-use and/or recycle the materials the appliance is made of.

In case of illegal disposal of the product by the owner, administrative sanctions will apply in compliance with the regulation in force.

Purpose of the Product

The appliances this manual refers to, have been designed and manufactured in compliance with the directives and technical regulations applicable to the sterilisation of knives and maintenance of sterility, after a first washing and cleaning operation, after use, by respecting hygiene and safety conditions.

The Manufacturer does not guarantee sterilisation for uses other than the one the appliance is intended for. It is forbidden to put in the cabinet any items other than the ones for which it has been designed.

Technical features

- Stainless steel structure
- Door in anti UV dispersion methacrylate with magnetic closure
- Methacrylate rack
- Safety microswitch that automatically turns OFF the lamp at the door's opening
- ON/OFF switch
- Timer: 0-60 minutes

Technical Data		
Model	7502	7504
Knife rack	14 knives	20 knives
Timer limit	60 min	60 min.
Power	16 W	16 W
Mains supply	230V / 1N / 50Hz	
Dimensions	400 x 130 x 680 mm	510 x 130 x 680 mm

Installation

Fix the appliance to the wall and check that the pull out knife holder is properly installed.
The appliance must be connected to a power supply system complying with the safety regulation in force.

Operation in safe condition

Before use, verify that the appliance is in good condition and has not been damaged. Check the outlet for proper grounding and verify that the power supply voltage corresponds to the voltage marked on the appliance.

Warning: UVC rays are harmful to eyes and skin. Do not force the appliance and use it with the front door open or in any way other than the one indicated in this manual.

Operation and Use

IMPORTANT: The appliance can accommodate knives with up to 15cm-handle and 35cm-blade.

- Open the front door from the handle; put the knives inside and close the door.
- Turn the switch to ON and set the timer for the time needed; verify that the lamp inside the cabinet switches on.
- As soon as the set time is over, the work cycle will stop automatically.
- If the door is opened during the sterilisation process, the appliance will stop automatically. As the door is closed, the set sterilisation cycle will resume. It is however possible to stop the sterilisation cycle at any time by pressing the ON/OFF button on the control panel.
- Once the sterilisation cycle has been completed, turn the switch to OFF.

STORAGE

- Disconnect the power cable and fit it inside the cabinet.
- Thoroughly clean the inside of the appliance and put it in the packaging.
- Store in a safe and dry place.

Minimum exposure times

The amount of radiation needed to destroy a microorganism depends on the types of microorganisms and environmental conditions. As such, the amount of UV radiation needed to kill a microorganism depends on the source intensity, exposure time and other factors like temperature, humidity and rays' reflection techniques.

Our appliance has been specially designed and manufactured to maximise the effect of radiations and ensure the best performances in all uses. It is also ideal to maintain the knives sterile after the sterilisation process.

The reference table below shows the times needed to kill 90% of microbial cells; the values are taken from the document prepared by Philips Lighting B.V. "Ultraviolet purification application information".

MICROORGANISMS	Sec.	MICROORGANISMS	Sec.
Bacteria		Moulds	
<i>Bacillus subtilis</i> (spores)	111	<i>Aspergillus flavus</i>	556
<i>Bacillus subtilis</i> (vegetative cells)	66	<i>Aspergillus glaucus</i>	407
<i>Clostridium tetani</i>	111	<i>Aspergillus niger</i>	1.222
<i>Escherichia coli</i>	28	<i>Mucor racemosus A</i>	157
<i>Mycobacterium tuberculosis</i>	56	<i>Mucor racemosus B</i>	157
<i>Proteus vulgaris</i>	24	<i>Oospora lactis (Geotrichum candidum)</i>	46
<i>Pseudomonas aeruginosa</i>	51	<i>Penicillium expansum</i>	120
<i>Pseudomonas fluorescens</i>	32	<i>Penicillium roqueforti</i>	120
<i>Salmonella enteritidis</i>	37	<i>Penicillium digitatum</i>	407
<i>Salmonella paratyphi</i>	30	<i>Rhizopus nigricans</i>	1.028
<i>Salmonella typhimurium</i>	74	Protozoa	
<i>Sarcina lutea (Micrococcus luteus)</i>	182	<i>Chlorella Vulgaris</i>	111
<i>Serratia marcescens</i>	22	<i>Cryptosporidium parvum</i>	23
<i>Sighella sonnei</i>	28	Viruses	
<i>Sighella paradysenteriae</i>	15	Hepatitis A virus	68
<i>Staphylococcus aureus</i>	24	Flu virus	33
<i>Staphylococcus haemolyticus</i>	20	Yeasts	
<i>Streptococcus viridans</i>	19	<i>Saccharomyces cerevisiae</i>	56
		<i>Saccharomyces ellipsoideus</i>	56

Transport

The appliance is fragile: handle with care, do not hit or drop it. To store the appliance, put it in its packaging and store it in a dry place, avoiding exposure to too high temperatures.

Every appliance is supplied with the operation manual, EC certification, power cable and knife holder.

Plate Data

 			
Codice/Code			
Matricola/Serial Nr.		Anno/Year	
V	ph	Hz	W
			A

Maintenance and cleaning

Before carrying out any maintenance or cleaning activity, disconnect the appliance from the electricity supply and allow it to cool down.

Any maintenance on electric components must be carried out by qualified technicians only.

CLEANING:



Use a soft cloth and a neutral detergent. Never use products like chlorine, bleach, etc., that may corrode or damage stainless steel.

Do not clean the surfaces using a steel scouring pad, a brush or a steel scraper.

Do not use jets of water to clean the trolley.

When cleaning parts of the trolley close to the electric system, avoid water splashes.

For a more accurate cleaning, the knife holder can be removed.

MAINTENANCE:

Before switching on the appliance, check the power cord for damage. If necessary, replace the cable with a similar one.

MALFUNCTIONING:

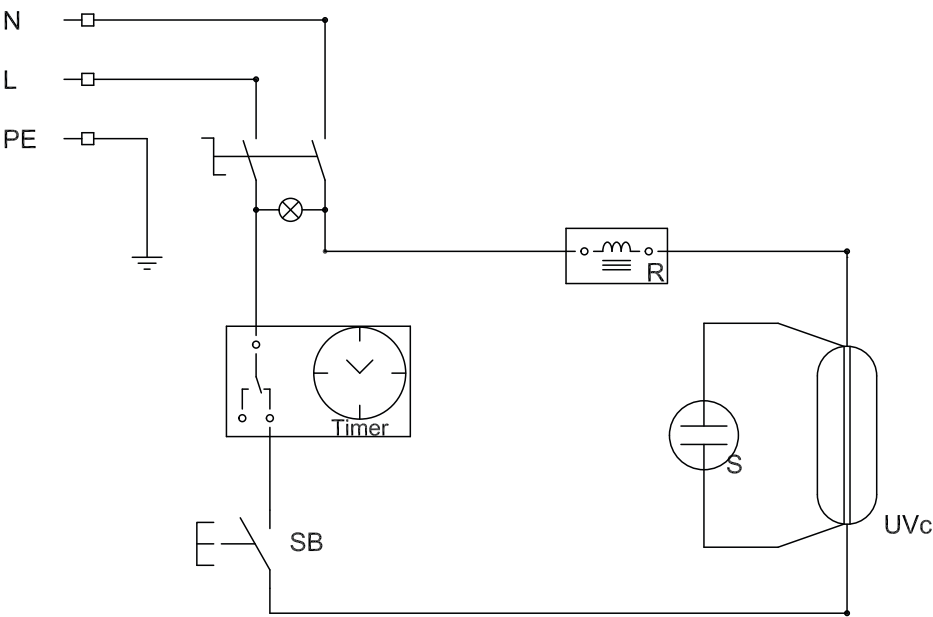
In case of failure, malfunctioning or poor performances, contact the Dealer's Technical Assistance.

In the event of any interventions to the door, or the door open sensor, check for the proper operation of both the door and the sensor before restarting the appliance.

Diagnostics and troubleshooting

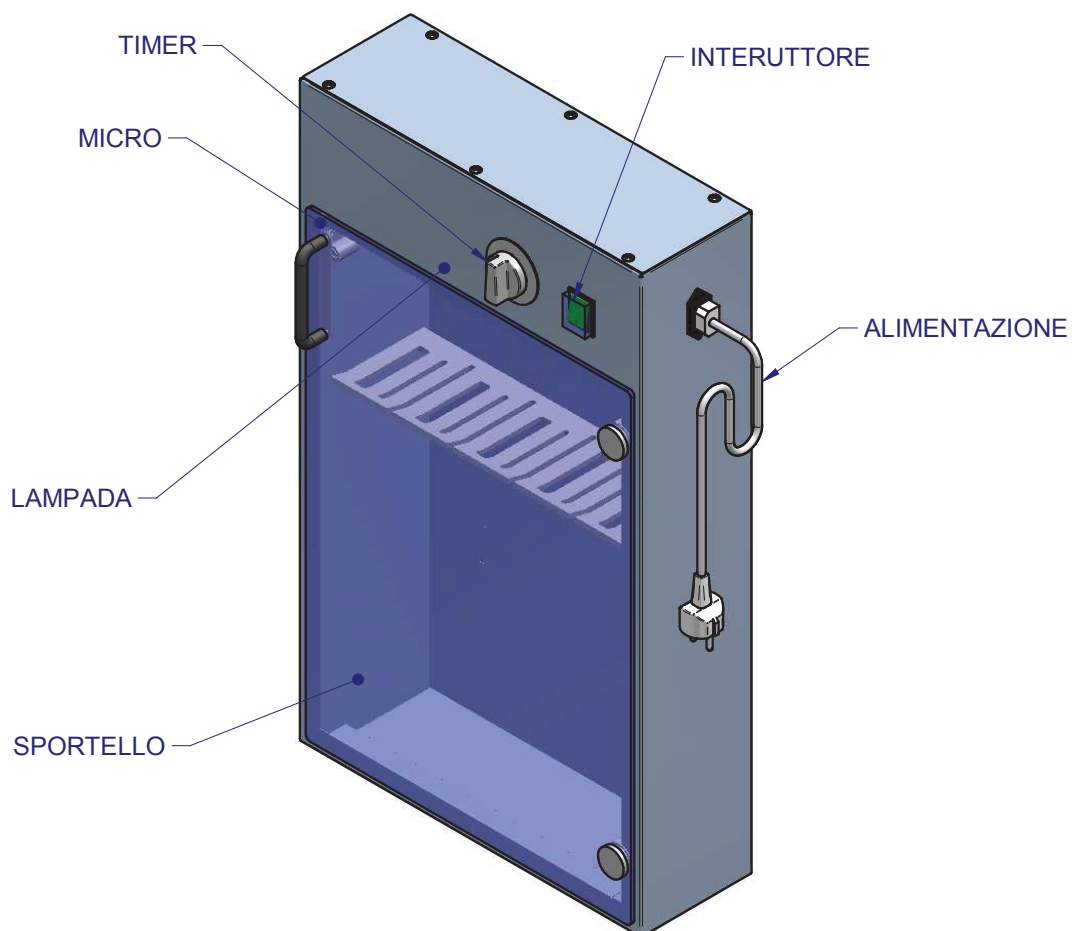
PROBLEM	LIKELY CAUSE	POSSIBLE SOLUTION
THE INTERNAL LAMP DOES NOT SWITCH ON	Power cord disconnected or damaged	Connect or replace the power cord
	Door micro-switch is damaged	Replace the micro-switch
	UVc light bulb is burnt out	Replace the lamp
	Timer is broken	Replace the timer

Wiring diagram



Spare parts

Pos.	Code	Description	7502	7504
4	003252060001	Switch	X	X
5	003252060002	Protezione interruttore	X	X
1	231500840021	Plexiglass door	X	
1	231500840022	Plexiglass door		X
2	001402900002	Handle	X	X
3	009201820008	Timer	X	X
6	231501680002	Rack in Methacrylate for knife		X
6	231501680003	Rack in Methacrylate for knife	X	
7	003151620005	Bactericidal fluorescent lamp 16W	X	X
8	003458000004	Starter 65W	X	X



Drawings

