Oase Filtral UVC 400 Improved All-In-One Pump and Filter Unit Instruction Manual

Contents

Oase Filtral UVC 400 Improved All-In-One Pump and Filter Unit

IMPORTANT SAFETY INSTRUCTIONS

- READ ALL INSTRUCTIONS BEFORE USING (THIS UNIT).
- SAVE THESE INSTRUCTIONS.

  Only connect the unit if the electrical data of the unit and the power supply match.
- Do not use the unit as a toy. Close attention is necessary when the product is used by or near children.
- Do not use the unit, if electrical lines or the housing are damaged.
- A damaged connection cable cannot be replaced. Dispose of the unit.
- Do not carry or pull the unit by its power cable.
- Route lines in such a way that they are protected from damage and do not present a tripping hazard.
- Protect the plug connections from moisture.
- Do not handle plug with wet hands.
- Grasp the plug to unplug it. Do not grasp on the cable.
- Never carry out technical changes to the unit.
- Only carry out work on the unit that is described in this manual.
- Always unplug the unit before working on it.
- Only use original spare parts and accessories.
- Should problems occur, please contact the authorised customer service or OASE.

WARNING
Serious injury or death due to dangerous electrical voltage is possible with an electrical device in water operated with a voltage U > 12 V AC or U > 30 V DC.

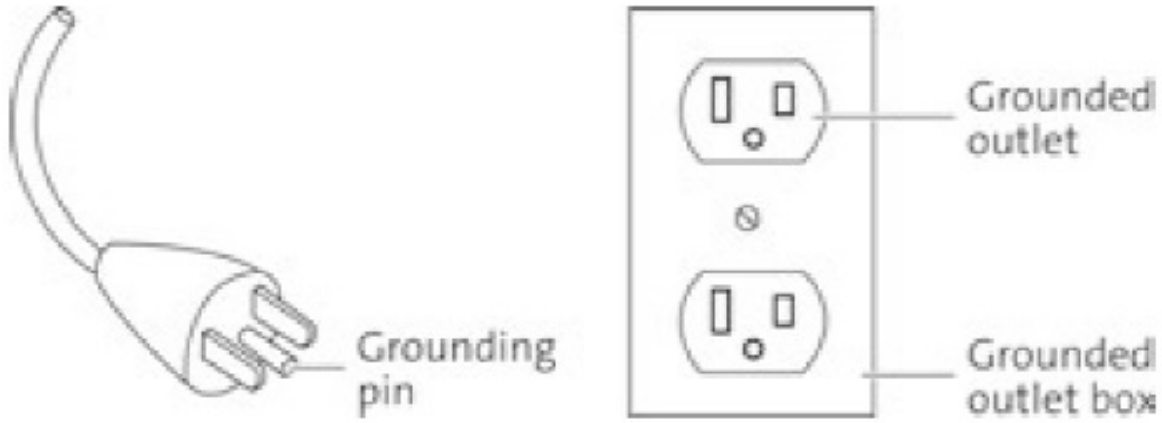
- Disconnect the unit from the mains before reaching into the water.
- Disconnect the unit from the mains before you start working on it.

WARNING

There is a risk of electric shock if the unit's grounding conductor is not connected properly.
The unit must be grounded to ensure that in the event of a malfunction or break-down, the electric current is discharged through the grounding and the risk of electric shock is reduced.

Grounding instructions:

- The unit is equipped with a power cord with a grounding conductor and a plug with a grounding pin. The plug must be plugged into a appropriate outlet that is installed and grounded in accordance with local codes and ordinances and is protected by a ground circuit interrupter (GFCI).
- Do not modify the plug. If the plug does not fit into the outlet, consult a qualified electrician for installation of a proper outlet.
- Check with a qualified electrician if you are in doubt as to whether the unit is properly grounded.

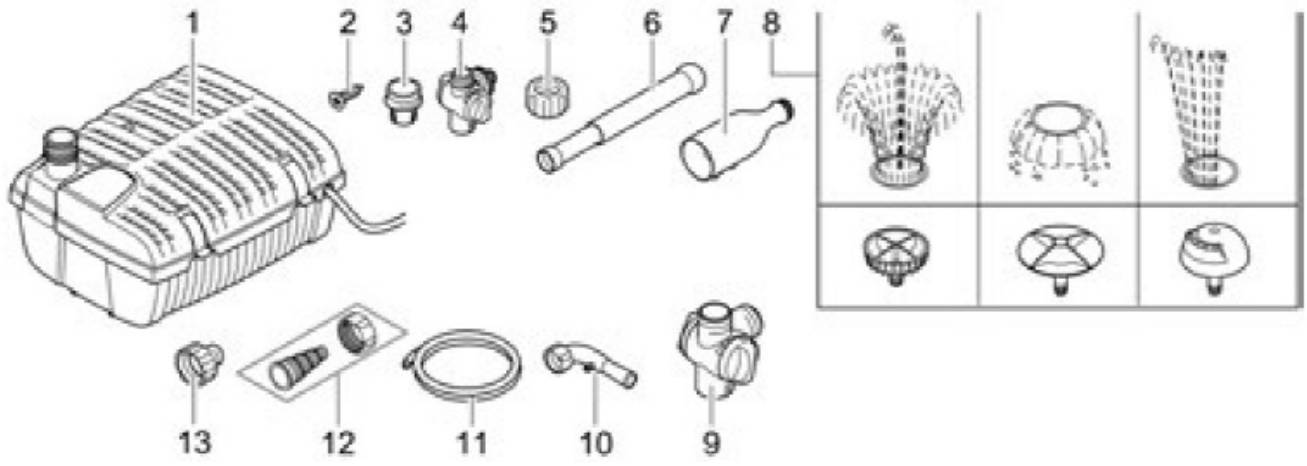


CAUTION
The quartz glass and UVC lamp could break and result in cuts.

- Carry out all work on the UVC clarifier carefully to avoid cutting injuries.
- Avoid vibrations, impacts and hectic movements to prevent the breaking of glass.

Product Description

Overview



	Filtral UVC 400	Filtral UVC 800, 1600	Description
1	●	●	Underwater filter
2	●	●	2 × screws • For hanging the underwater filter to a side of the pond.
3	●	–	Connection fitting for ball joint
4	●	–	Branch valve with flow-rate regulators • Possible connection for water course/water feature, ½ in.
5	●	●	Union nut • For securing the upright position of the nozzle pipe.
6	●	●	Nozzle pipe
7	●	●	Nozzle connection with hose bracket
8	●	●	Nozzle inserts (Vulkan, Lava, Magma) • Creates different water features.
9	–	●	Branch valve with flow-rate regulators • Possible connection for Venturi nozzle or watercourse/water feature, 1 in.
10	–	●	Venturi nozzle for pond aeration.
11	–	●	Hose • Sucks air into the Venturi nozzle.
12	–	●	Stepped hose adapter with union nut
13	–	●	Reduction element • Spacer ring for use with the Venturi nozzle or the secondoutput on the branch valve.

Symbols on the unit

IP68 6.6 ft 2 m	The unit is dust-tight and water-tight down to 6.6 ft (2 m).
	Dangerous UVC radiation
	Remove the unit in the event of freezing temperatures.
	Danger for persons with pacemakers. The unit contains a strong magnet.
	Fragile, handle with care. Danger of cut injuries.
	Do not dispose of the unit with the normal household waste.
	Read the operating instructions.

Intended use

Only use the product described in this manual as follows:

- For cleaning garden ponds.
- For operation with clean water.
- For household use only.
- Operate in accordance with instructions. (→ Technical data)

  The following restrictions apply to the unit:
- Do not use in swimming ponds.
- The UVC clarifier installed in the device kills algae and bacteria in the pond water. The UVC lamp may never be used for any other purpose or outside of the housing.
- Never use the unit with fluids other than water.
- Never run the unit without water.
- Do not use for commercial or industrial purposes.
- Do not use in conjunction with chemicals, foodstuff, easily flammable or explosive substances.

Assembly

Operation with water feature
For operation with water feature, the device must be set up horizontally. (→ Installation)

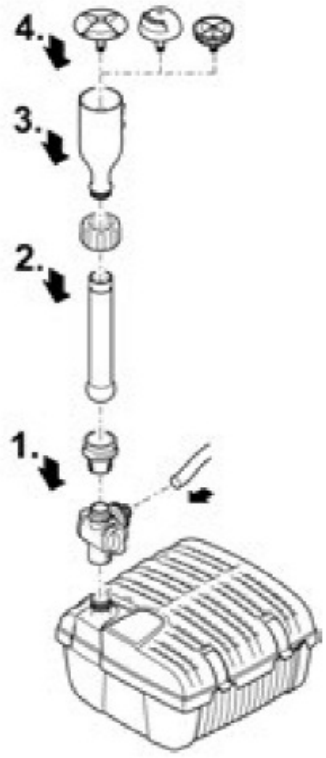
- At the side outlet of the branch valve you can additionally connect the hose of a stream/water feature.
- Tighten the screw connections hand-tight.

  Filtral UVC 400:
- Instead of a water feature, you can operate the device with a Venturi nozzle (optionally available, 70364).

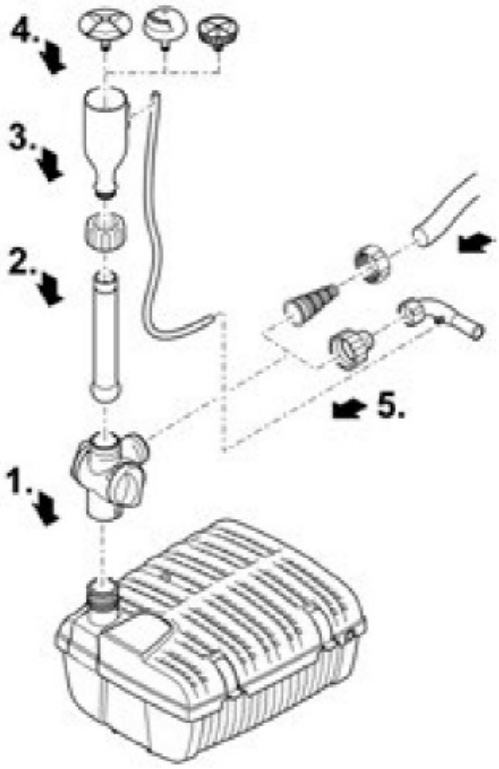
  Filtral UVC 800, 1600:
- If you use the Venturi nozzle, guide the air hose along the nozzle tube and fix it in the holder on the nozzle holder.

  The air hose must be able to suck in air, water must not penetrate.

Filtral UVC 400



Filtral UVC 800, 1600



Operation without water feature

For operation without water feature you can place or hang up the device horizon-tally. (→ Installation)

- Tighten screw connections hand-tight.

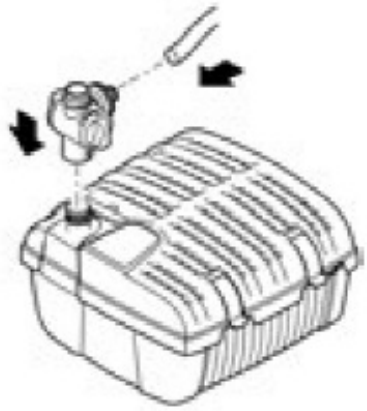
  Filtral UVC 400:

- Connect the hose of a watercourse/water spout to the side outlet of the branch valve. The other outlet either remains free or you connect a Venturi nozzle (option-ally available, 70364) using a reduction element (1 in on ½ in).

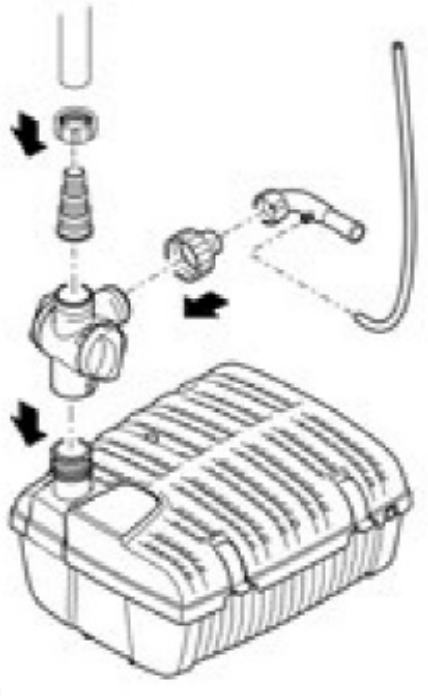
  Filtral UVC 800, 1600:

- Connect the Venturi nozzle to the side outlet of the branch valve. At the other out-let connect the hose of a watercourse/water spout using the stepped hose adapter.

Filtral UVC 400



Filtral UVC 800, 1600



Installation

WARNING
Severe injuries or death due to operation of this unit in a swimming pond. Defective electrical components will electrify the water with dangerous electrical voltage.

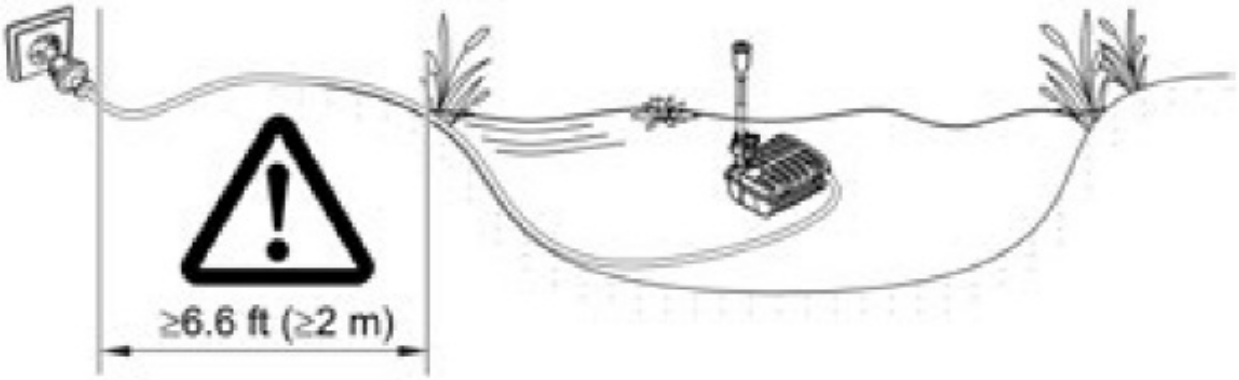
- Never operate the unit in a swimming pond.

WARNING
The unit is subject to dangerous voltage and must not be installed directly adjacent to the water. Otherwise there is a risk of severe injuries or death by electrocution.

- Install the unit at a distance of at least 2 m from the water to ensure that it is protected against flooding.

Set up the device horizontally
Observe the following conditions:

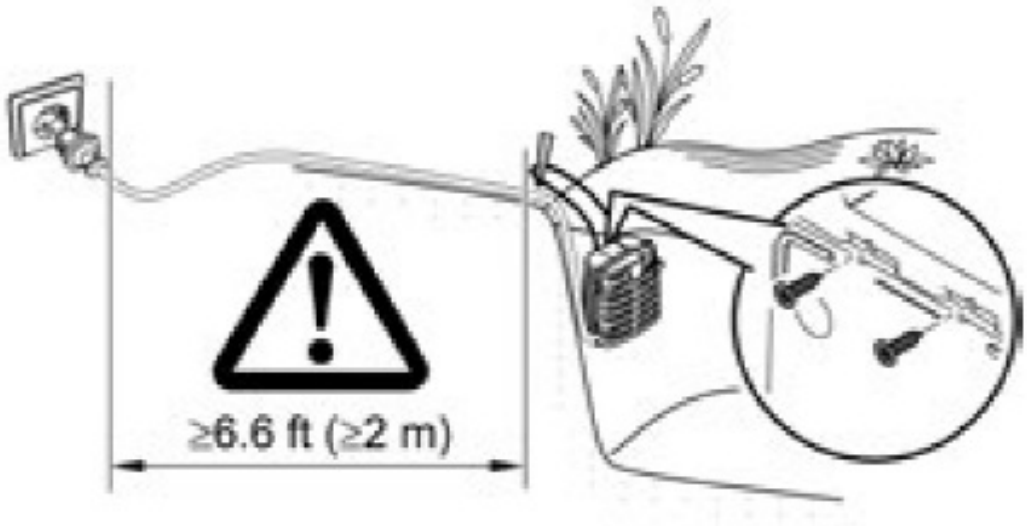
- Make sure that the mains connection is at least 6.6 ft (2 m) from the pond.
- Place the device so that the filter housing is always below the water level.
- Place the device horizontally on a firm, mud-free surface.
- Position the device so that the nozzle insert is above the water level.



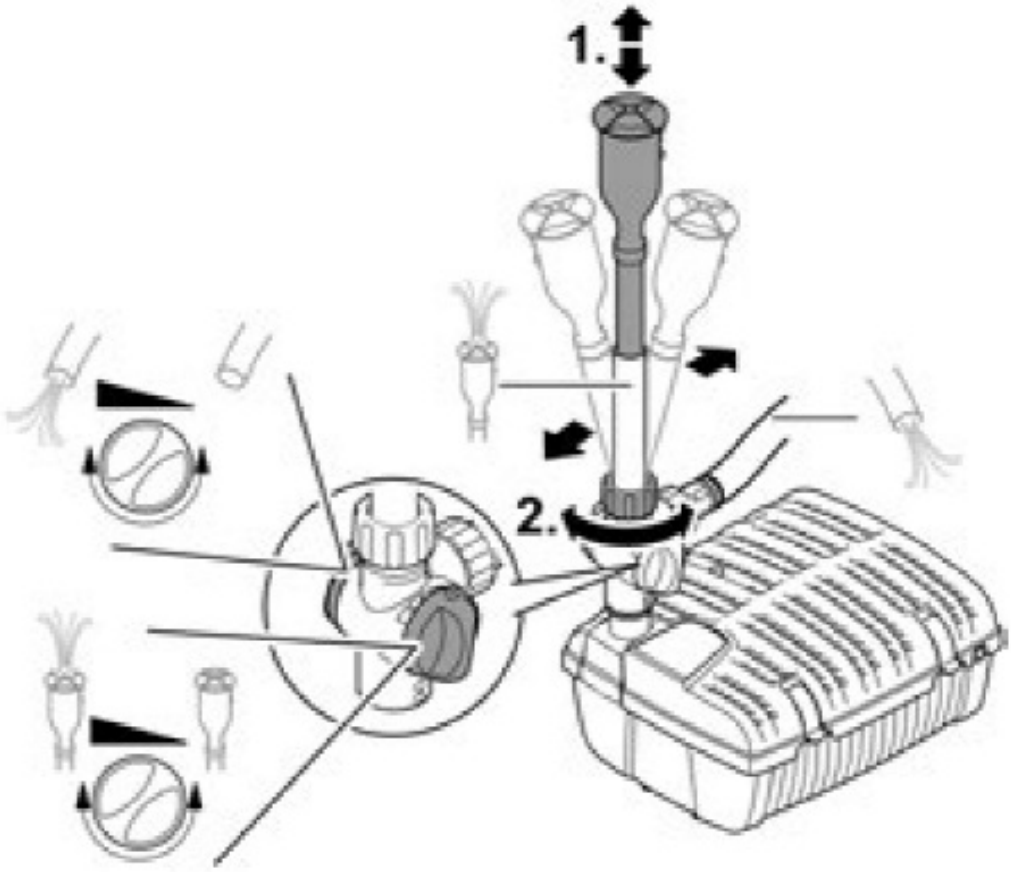
Hang up the device

Observe the following conditions:

- Make sure that the mains connection is at least 6.6 ft (2 m) from the pond.
- Place the device so that the filter housing is always below the water level.
- Only operate the device without water feature.Screw the two screws into the filter base and hang the device on the two screws with a cord. Fasten the cord on the side of the pond.



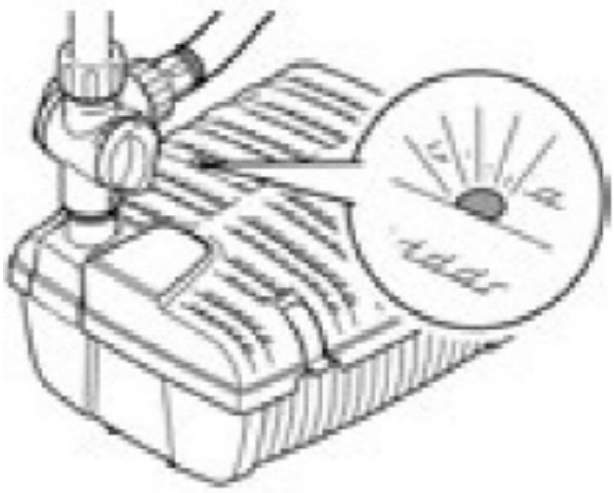
Set-up fountain/feature



Commissioning/start-up

NOTE
Never connect the pump to a dimmer. Otherwise the pump will be destroyed.

- **Switching on:** Plug the power plug into the outlet.
  – The unit switches on immediately.
- **Switching off:** Pull the power plug from the outlet.
  The viewing window shows that the UVC lamp in the device is working.



Maintenance and cleaning

NOTE

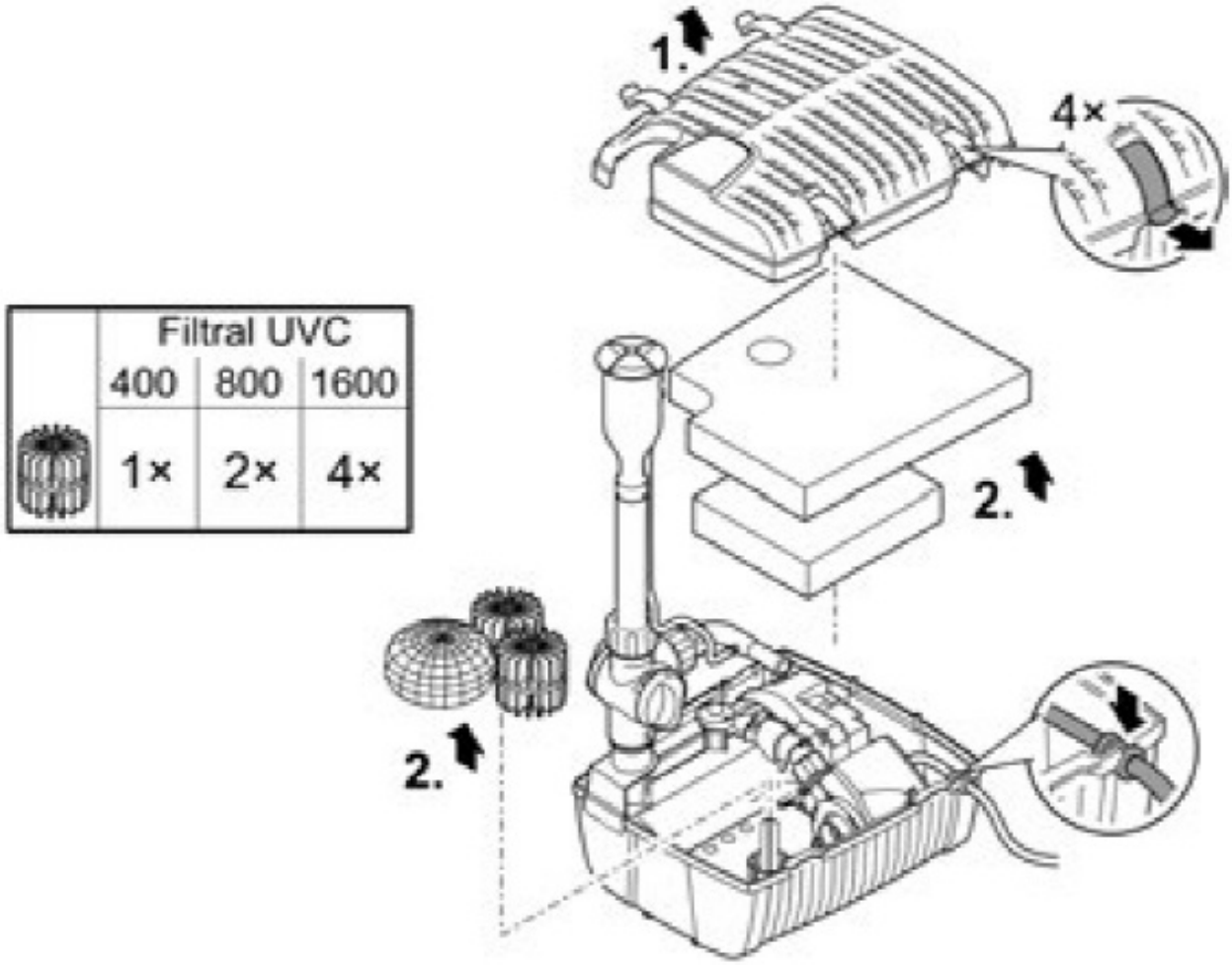
Never use chemical cleaning agents. These are hazardous to animals, plants and the environment.

- Only use clear water and a soft brush to clean the unit.

Recommendation regarding cleaning:

- Clean the unit as required, but at least twice a year.
- Keep the device straight when removing it from the pond. The bottom section of the filter may contain dirt.
- When cleaning the pump, pay particular attention to the impeller unit and the pump housing.
- Clean the inspection window with cotton swabs.

Opening/closing the housing
To clean and maintain the filter media, filter pump and UVC clarifier, you must open the device.
Before closing the housing, place the power cable in the recess in the housing to pre-vent it from being crushed.



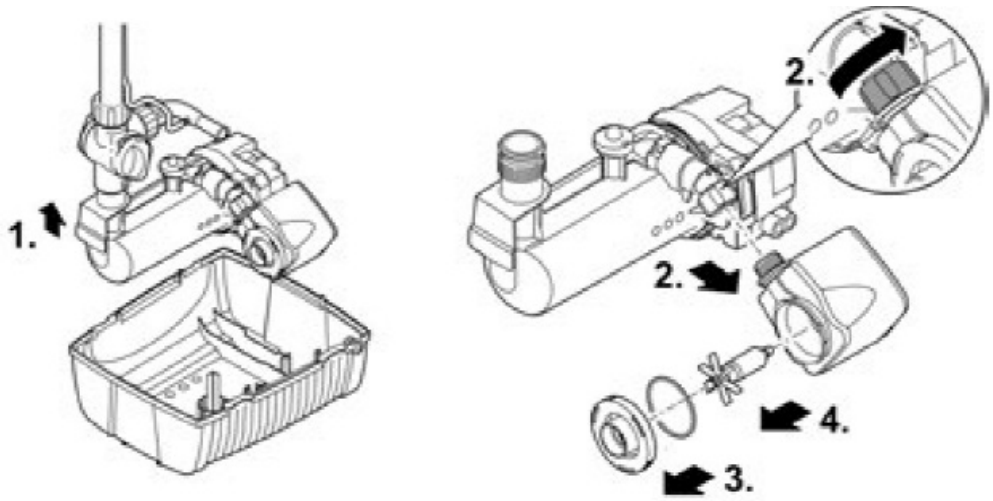
	Filtral UVC		
	400	800	1600
	1×	2×	4×

Clean filter media
How to proceed:

1. Carefully clean the removed filter media using clean tap water.
2. Also clean the upper filter shell and the filter subshell carefully with clean tap wa-ter.
3. Reassemble the unit in the reverse order.

Cleaning/replacing the impeller unit

- Remove the pump cover or pump housing from the motor housing by turning it counter-clockwise (bayonet catch).
- After removing the impeller unit, clean all parts under running tap water.
- Replace a worn or damaged impeller unit.
- Assemble in the reverse order.



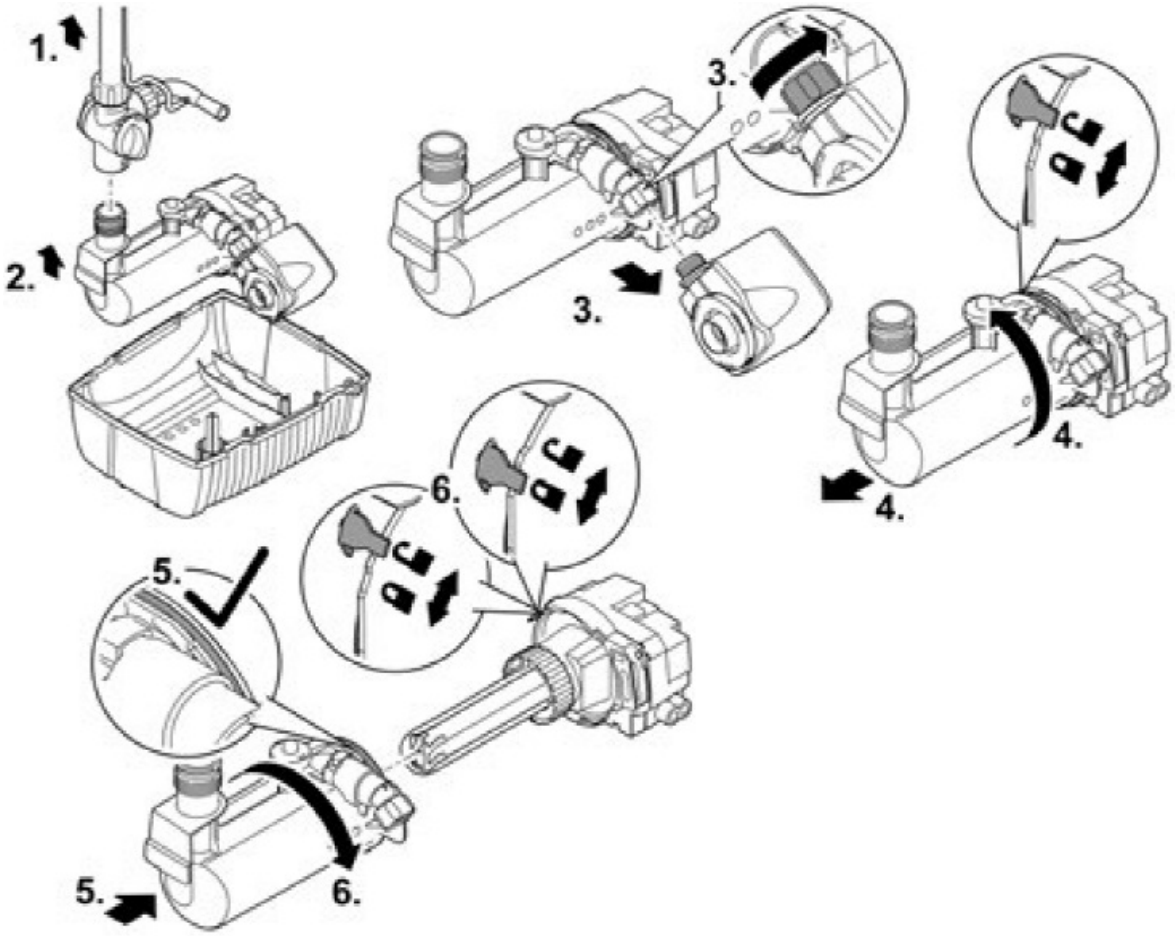
Clean UVC clarifier

CAUTION: The quartz glass and UVC lamp could break and result in cuts.

- Carry out all work on the UVC clarifier carefully to avoid cutting injuries.
- Avoid vibrations, impacts and hectic movements to prevent the breaking of glass.

NOTE For safety reasons, the UVC lamp can only be turned on when the UVC clarifier is properly installed into the device.

- Check the quartz glass for visible damage. Replace a damaged quartz glass.
- Clean the outside of the quartz glass with a damp cloth, clean the water housing with clear water and a brush.
- Check that the large O-ring is correctly inserted in the water housing. This ensures that the water housing is watertight.
- When installing, turn the device head clockwise until the marking points to the locked lock.



Exchange the UVC lamp

CAUTION: The ultra-violet radiation of the UVC lamp can burn your eyes and skin.

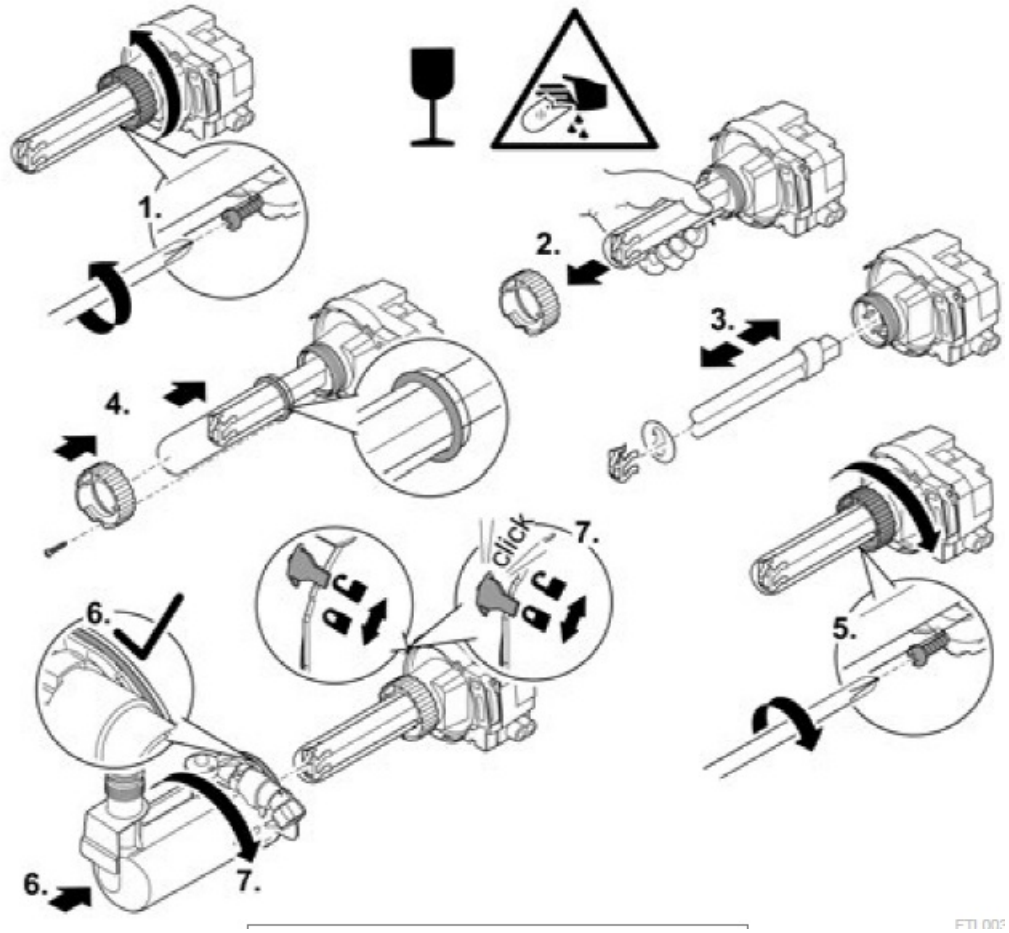
- Never operate the UVC lamp outside its housing.
- Disconnect the unit from the mains before starting maintenance or before replacing the UVC lamp.

CAUTION: The quartz glass and UVC lamp could break and result in cuts.

- Carry out all work on the UVC clarifier carefully to avoid cutting injuries.
- Avoid vibrations, impacts and hectic movements to prevent the breaking of glass.

NOTE For safety reasons, the UVC lamp can only be turned on when the UVC clarifier is properly installed into the device.
NOTE For optimum filter performance, replace the UVC lamp after approx. 8000 operating hours.

- Only use UVC lamps that correspond with the technical data of the (→ **Technical data)**
- Make sure that the O-ring on the quartz glass is positioned between the union nut and the thread on the UVC clarifier so that the quartz glass is
- Tighten the union nut clockwise until it stops and fix the union nut with the locking
- Check that the large O-ring is correctly inserted in the water This ensures that the water housing is watertight.
- During installation, rotate the device head clockwise until the marking points to the locked



Storage/winter protection

The unit is not frost-proof and has to be removed and put into storage if minus temperatures are expected.
How to correctly store the unit:

- Thoroughly clean the unit, check it for damage and replace any damaged parts.
- Store the pump submerged and in a frost-free environment.
- Protect electrical connections from moisture and dirt.

Malfunction remedy

Malfunction	Possible cause	Remedy
Unit is not operating	No mains voltage	Check the mains voltage.
	Water housing is open (safety switch in water housing automatically switches off the pump)	Turn the head of the unit clockwise until the mark points toward the locked lock
Delivery or fountain height insufficient or not consistent, Cloudy water	Nozzle blocked	Unscrew and clean the nozzle insert
	The loss of pressure on the pipe to the watercourse/water feature is too high	Reduce hose length and connecting parts to a minimum, route hoses as straight as possible
	Intake openings blocked	Clean housing
	Filter media clogged	Clean filter media
	Impeller unit blocked	Clean the running unit
	Pond extremely dirty	Remove algae and leaves from the pond, change the water
	Quartz glass tube soiled	Clean the quartz glass tube
	Flow regulator excessively throttled	Set flow regulator
The UVC lamp is not lit	The UVC lamp overheats. The temperature monitor turned off the UVC lamp	After cooling down, the UVC lamp switches on again automatically
	The UVC lamp is defective	Replace the UVC lamp.
	The UVC lamp is not inserted into the socket properly	Insert the UVC lamp correctly into the socket
Unit switches off after a	Water temperature too high	Observe the maximum water

Technical data

Unit data

Filtral			400	800	1600
Rated voltage		V AC	120	120	120
Rated frequency		Hz	60	60	60
Power consumption		W	20	22	50
Performance of UVC lamp TC-S		W	5	9	13
Hose connection for branch valve		in	½	–	–
		mm	13	–	–
	Stepped hose adapter	in	–	½, ¾, 1	½, ¾, 1
		mm	–	13, 19, 25	13, 19, 25
Max. conveying performance		gph	195	235	410
		l/h	740	900	1560
Max. water column		m	1,3	1.3	1.9
Filter surface		cm^2	301	440	697
Filter foam (blue)	Quantity		1	1	1
	Pore size	ppi	10	10	10
Filter foam (red)	Quantity		1	1	1
	Pore size	ppi	30	30	30
Number of bio surface elements			1	2	4
Number of bags of filter ceramic			1	1	1
Pond size (without fish)		gal	400	800	1600
		m^3	1500	3000	6000
Pond size (with fish)		gal	200	400	800
		m^3	750	1500	3000
Dimensions	Length	in	8.15	10.6	13,7
		mm	207	269	347
	Width	in	9.0	9.6	10,9
		mm	228	245	276
	Height	in	5.1	5.5	6,2
		mm	130	140	157
Weight		kg	2,7	3.4	4.9
Length of the connection cable		ft	15	15	15
		m	4,5	4,5	4,5

Filtral			400	800	1600
Air conveying performance of the Venturi nozzle with a 1.5 m hose with a submerged depth of	0.1 m	l/h	80 [1]	83	244
	0.2 m	l/h	35 [1]	70	184
	0.3 m	l/h	32 [1]	34	176
	0.4 m	l/h	–	29	140
	0.6 m	l/h	–	–	136
	0.8 m	l/h	–	–	113
	1.0 m	l/h	–	–	95
Max. immersion depth for Venturi nozzle and water feature with 1.5 m air hose		m	–	0.3	0.4

[1] With optionally available Venturi nozzle

Permissible water values

		Fresh water, pond water
pH value		6.8 ... 8.5
Hardness	ppm	0.45 ... 0.48
	°dH	8 ... 15
Free chlorine	moz/gal	<0.04
	mg/l	<0.3
Chloride content	moz/gal	<33.4
	mg/l	<250
Salt content	%	<0.4
Overall dry residue	moz/gal	<6.67
	mg/l	<50
Temperature	°F	+39 ... +77
	°C	+4 ... +35

Wear parts

- Filter media
- Impeller unit
- UVC lamp, quartz glass and O ring for quartz glass

Disposal

NOTE
Do not dispose of this unit with household waste.

- Dispose of the unit by using the return system provided for this purpose.
- Render the unit unusable by cutting the cables.

www.atlantic-oase.com

Documents / Resources

	Oase Filtral UVC 400 Improved All-In-One Pump and Filter Unit [pdf] Instruction Manual Filtral UVC 400, Improved All-In-One Pump and Filter Unit, Filtral UVC 400 Improved All-In-One Pump and Filter Unit, Filtral UVC 800, Filtral UVC 1600