

# Oase FiltoClear 8000 Pond Pressure Filter with UV-C Clarifier **Instruction Manual**

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FiltoClear 3000/4000/8000 Operating instructions

REMINDER
CALL 1-888-627-3435
BEFORE RETURNING TO STORE.

## Information about these operating instructions

Welcome to OASE Living Water. You made a great choice with the purchase of this product FiltoClear 3000 / 4000 / 8000. Prior to operating the unit, please read the instructions of use carefully and fully familiarise yourself with the unit. Ensure that all work on and with this unit is only carried out in accordance with these instructions. Please strictly follow the enclosed instructions to ensure the safe and correct handling of the product. Keep these instructions in a safe place. Please also hand over the instructions when passing the unit on to a new owner.



Symbols used in these instructions

The symbols used in this operating manual have the following meanings:

Risk of injury to persons due to dangerous electrical voltage.

This symbol indicates an imminent danger which can lead to dea

This symbol indicates an imminent danger, which can lead to death or severe injuries if the appropriate measures are not taken.



#### Risk of personal injury caused by a general source of danger.

This symbol indicates an imminent danger, which can lead to death or severe injuries if the appropriate measures are not taken.



# Risk of injury to persons due to broken glass.

This symbol indicates danger, which can lead to severe injuries if the appropriate measures are not taken.



Important information for trouble-free operation.

#### Intended use

FiltoClear 3000 / 4000 / 8000, referred to in the following as "unit", may only be used as specified in the following:

- · For mechanical and biological cleaning of garden ponds
- Operation under observance of the technical data.

The UVC lamp installed in the unit is intended to kill algae and bacteria in the pond water. Even in small doses, its radiationis harmful for the eyes and skin. Never use the UVC lamp in a defective housing or outside the housing, or any other purpose other than that intended.

The following restrictions apply to the unit:

- · Never use the unit to filter fluids other than water.
- · Never run the unit without water.
- Do not use it for commercial or industrial purposes.
- Do not use in conjunction with chemicals, foodstuff, easily flammable or explosive substances.

Important! Ensure that the filter will not overflow. The danger of emptying the pond.

#### Use other than that intended

This unit can be dangerous and cause harm if not used in accordance with these instructions. Any use not in accordance with these instructions or modification(s) to the unit will void the limited warranty.

P ar t	Description		
1	-	0 %	Water return socket, for the return of fiterecl pond water

2	Water inlet socket, for the inlet of soled pond water				
3	Cleaning handle the foam filters are compressed by puling the handle up				
4	UVC unit head with temperature monitor, holder and control window for UVC lamp. The UVC lamp switches off automatically when overheated and on again once cooled down.				
	Function switch to change the water flow. Turn counter-clockwise. 3 positions are available.				
5	I: Water filtering and UV				
	II: Foam cleaning ("Easy-Clean Technology)				
	III: Flushing the UVC unit and the UVC water housing				
6	Bypass optimises the UVC radiation effect at a high flow rate				
7	Soiled water drain socket, to drain the soiled water				
8	Filter lid				
9	Cover cap, with black flat sealing ring inserted				
10	Clamping ring to hold filter lid and container together				

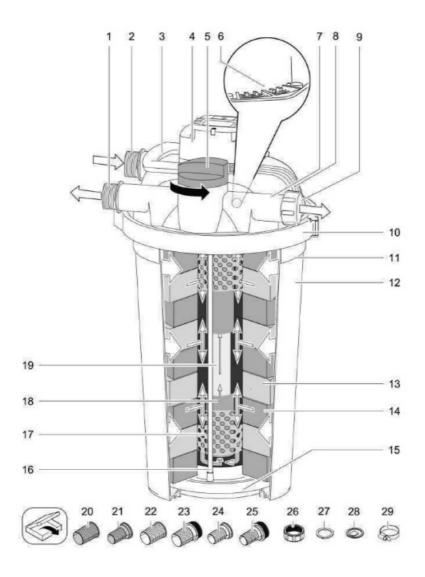
11	Step, marking the maximum installation depth		
12	Container. pressurised when the unit is in operation (max. 2.9 psi / 0.2 bar)		
13	Fine foam filter for nitrification and denitrification		
14	Coarse foam filter for nitrification		
15	Fixing disk, holding foam filters On Cleaning rods		
16	Cleaning rod, connecting deaning handle and filterdisk		
17	Meshed tube, maintaining the foam filter spacing to the UVC water housing		
18	UVC water housing, conveying water to the UVC unit		
19	Quartz glass tube with UVC lamp		
20	2' transparent hose connector		
21	1-1/2' transparent hose connector		
22	2' black hose connector		
23	2' black hose connector		
24	1-1/2' black hose connector		
25	1-1/2' hose connector with 2' thread		
26	union nut		
27	flat sealing ring		

28	flow indicator flap
29	hose clamp

#### **Contents**

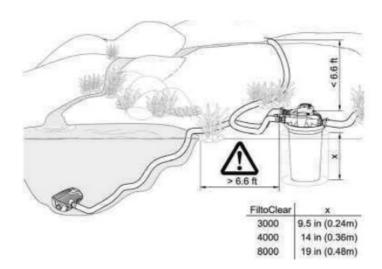
- 1 Unit configuration
- 2 Function description
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# **Unit configuration**



Cleaning stage "filtering": The water flows through the foam filters. Mechanical soiling is retained by the foam filters. Suspended matter and bio sludge settle on the container bottom. Useful bacteria settle on the foam filters, cleaning the water biologically. Their effect starts at a water temperature of 50 °F (+ 10 °C).

A filter pump presses the water into a pressure-tight container, where it passes several cleaning stages before returning to the pond. The soiled water resulting from cleaning the unit can be used to fertilize the garden.



Coarse foam filters (blue)	Fine foam filters (red)	
high flow rate	low flow rate	
Bacteria for nitrification	Bacteria for nitrification and denitrification	
Ammonia -> nitrite -> nitrate reaction	Nitrate -> nitrogen reaction	

Cleaning stage "radiation": The water is radiated with the ultra-violet light from a UV-C lamp. Green algae die, pathogenic agents are killed.

Bypass: A bypass ensures that only part of the returning water (approx. 25 %) is radiated. In this manner, a sufficient radiation duration is obtained even at a high circulation rate.

Filter starter: The unit only reaches its full biological cleaning effect after a few weeks. The formation of a bacterial community on the foam filters can be notably accelerated by adding a filter starting bacteria product (not included).

#### **OASE** recommends:

- as a reference value for the fish population in the pond: approx. 2 ft (60 cm) fish length in 260 gal (1 m3) pond water.
- as a pond pump for FiltoClear 3000: pump max. 2100 GPH (8000 l/h).
- as a pond pump for FiltoClear 4000: pump max. 2600 GPH (10000 l/h).
- as a pond pump for FiltoClear 8000: pump max. 4200 GPH (16000 l/h)

## Symbols on the unit

The warning symbols on the unit have the following meaning:



first.

# Risk of personal injury if used incorrectly.

Incorrect use of the unit can cause injury or damage to assets. Always read the instructions for use



#### Risk of personal injury caused by a general source of danger.

Dangerous UVC radiation. Health hazard for eyes and skin caused by light flash. Only operate the UV-Clamp inside the housing.

The symbols on the unit relating to its use have the following meaning:

IP 24 Protected against touching dangerous components. Splash water protected.



Protect from direct sun radiation.



Dismantle at temperatures of 32°F and below

#### Installation

- Spacing between unit and water: min. 6.6 ft (2 m) (safety spacing!).
- Do not expose the unit to direct sun radiation.
- Water return point. OASE recommend: Route the return hose such that the clean water is indirectly returned to the pond, e.g. through a waterfall. In this manner, it will be additionally enriched with oxygen.
- Height difference between filter lid and water return point: max. 6.6 ft (2 m).

## Installation possibility 1: Bury close to the pond.

Dig a hole close to the pond and place the container into the hole up to the mark. (See Function description diagram)

#### Installation possibility 2: Placement close to the pond.

Place the unit close to the pond where it is flood protected (e.g. hidden behind shrubs). The ground must be firm and level.

## Connecting a filter pump

A filter pump is required to operate the pressure filter. Only connect to the pump by means of pressure hoses approved for at least 2.9 psi (0.2 bar) or the maximum pump pressure.

Hoses with an internal diameter of 1 1/2" or 2" can be connected to the unit.

#### Installation

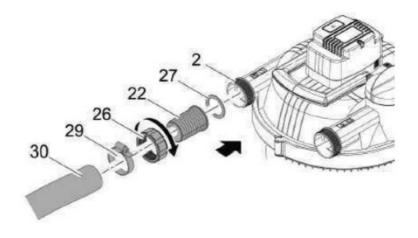
1 1/2" hoses or 2" hoses can be connected to the unit. The respective hose connectors are part of our scope of delivery.

Recommendation: Use 2" hoses to convey the water through the lines at a minimum pressure loss.

If you use a filter starter, fill the product into the container prior to carrying out the following installation steps (See Commissioning/Start-up).

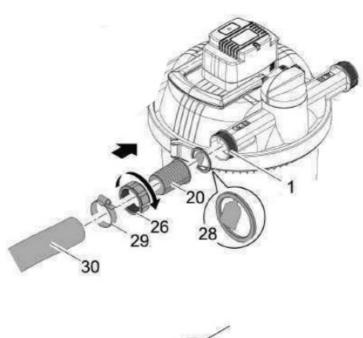
# Fitting the water inlet

- Push the union nut (26) over the black hose connector (22).
- Insert the flat sealing ring (27) in the union nut (26).
- Screw tighten the hose connector to the water inlet socket (2) using the union nut.
- Push the hose clamp (29) over the hose (30).
- Push the hose over the hose connector (up to the stop) and secure using the hose clamp.



#### Fitting the water return

- Push the union nut (26) over the transparent hose connector (20).
- Place the flow indicator flap (28) into the union nut.
- Screw tighten the hose connector to the water return socket (1) using the union nut.
- Push the hose clamp (29) over the hose (30).
- Push the hose over the hose connector and secure it with the hose clamp. Leave the last segment free for use as a window to control flow and soiling. (As shown)



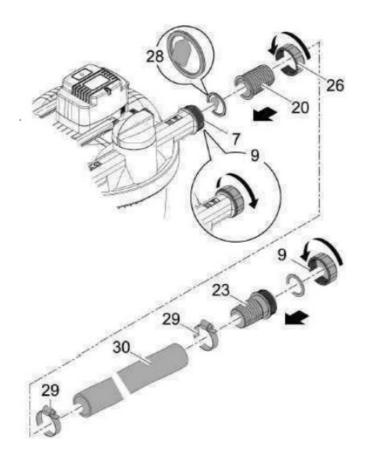


# Fitting the soiled water drain

The soiled water resulting from cleaning the unit can be used for fertilization purposes. Recommendation: Connect and route a drain hose (not included in our scope of delivery) up to a suitable point (e.g. plant bed)

- Unscrew the cover cap (9) from the soiled water drain socket (7).
- Push the union nut (26) over the transparent hose connector (20).

- Place the flow indicator flap (28) into the union nut.
- Screw tighten the hose connector to the socket using the union nut.
- Push the hose clamp (29) over the hose (30).
- Push the hose over the hose connector and secure it with the hose clamp. Leave the last segment free for use
  as a window to control flow and soiling.



#### Closing the soiled water drain

Note!

During filter operation, ensure that the soiled water socket (7) or a drain hose (30) connected to it is always closed with a cover cap (9) with the flat sealing ring inserted. This prevents unintended emptying of

always closed with a cover cap (9) with the flat sealing ring inserted. This prevents unintended emptying of the pond.

- Push the hose clamp (29) over the hose (30).
- Push the hose connector (23) into the hose and secure it with the hose clamp.
- Close the hose connector using the cover cap with the flat sealing ring (9) inserted.

## Commissioning/Start-up

A

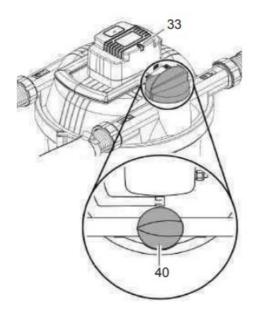
Attention! Sensitive electrical components.

**Possible consequences:** The unit will be destroyed.

Protective measures: Do not connect the unit to a dimmable power supply.

- Fit the connections (See Installation).
- Check the firm seating of hoses, cover cap for soiled water drain, clamping ring with safety latch.
- Turn the function switch to water filtering (40), if it is not already in this position.
- Switch on the pond pump.
- Only switch on the UVC unit when water is flowing through it. You may have to wait for 24 hours. Connect

socket. The UVC unit switches on immediately, the blue LED (33) is lit.



# Operation

The unit is no longer biologically active at water temperatures below 50 °F (10 °C). Take the unit out of operation at water temperatures below 46 °F (8 °C) or, at the latest, when freezing temperatures are to be expected. Normal operating condition: The UVC unit is switched on. The UV-C lamp must be replaced after approx. 8000 operating hours.

## Maintenance and cleaning

4

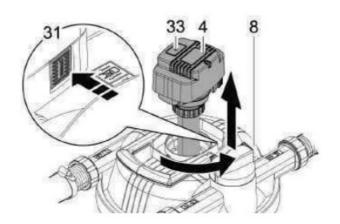
Attention! Dangerous electrical voltage.

**Possible consequences:** Death or serious injuries.

Protective measures: Switch off the mains voltage prior to carrying out work on the unit

## Removing the UVC unit head

- Unplug UVC unit.
- Press the blue "Press" button (31) at the UVC unit head (4).
- Slightly turn the UVC unit head counter-clockwise.
- Carefully pull the UVC unit head out of the filter lid (8).

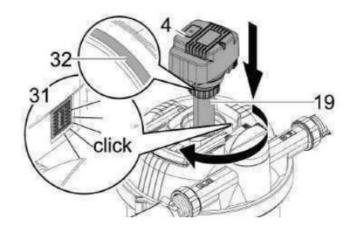


## Inserting the UVC unit head

Note!

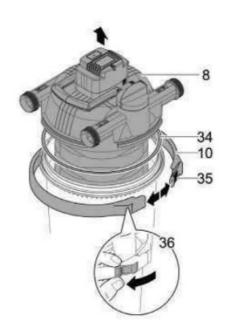
The O ring (32) on the closure of the UVC water housing (4) is firmly clamped on. Only remove the O ring when it must be replaced (e.g. when the O ring is porous).

- Carefully insert the UVC unit head (4) into the filter lid.
- Turn the UVC unit head clockwise up to the stop. The blue "Press" button engages (31).



#### Opening the container

- Push back safety latch (36).
- Press the closing hook (35) inwards.
- Open and remove the clamping ring (10).

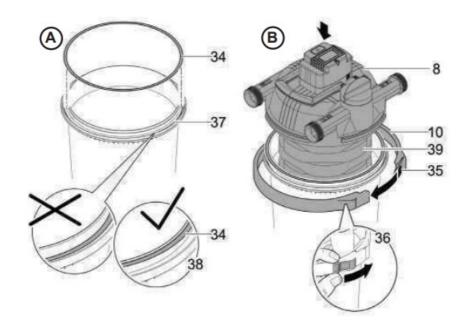


# Closing the container

- A. Clean the channel (37) around the container rim.
- Grease the lid sealing ring (34) and place flush around the container (38) top edge.
- B. Press the filter lid (8) including the stack of foam filters on the container, if necessary, assist with your own body

weight.

- Place the clamping ring (10) around the container top edge (do not pinch the power cable) and assemble.
- Engage the closing hook (35).
- Push in the safety latch (36).

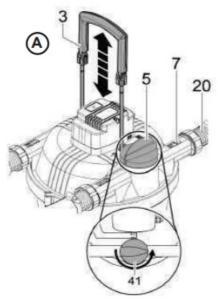


# Cleaning the foam filters

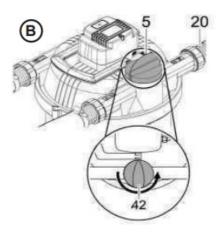
The Easy-Clean function (actuate the cleaning handle and flush with water) allows easy cleaning of foam filters, UVC unit and UVC water housing.

**A.** Remove the closing cap from the drain hose or the dirty water drain socket (7). Attention: Do not lose the sealing ring in the cap!

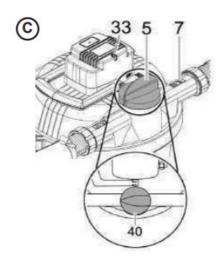
- Turn the function switch (5) counterclockwise to "Cleaning foam filters" (41).
- Vigorously pull up the cleaning handle (3) several times, then push the handle down against the stop ("pumping" action).
- The foam filters will be rinsed by this action.



- **B.** As soon as only clean water appears in the transparent hose connector (20), turn the function switch (5) counter-clockwise to "Cleaning UVC" (42).
- The UVC unit and the UVC water housing are flushed.



- **C.** As soon as only clean water appears in the transparent hose connector **(20)**, turn the function switch **(5)** counter-clockwise to "Filter water" **(40)**.
- The unit filters the pond water.
- Close the drain hose or the soiled water drain socket (7) using the closing cap (insert sealing ring!) (See Installation).



Cleaning the quartz glass tube manually

★ Attention! Ultra-violet radiation.

Possible consequences: Eye or skin injury from burns

**Protective measures:** 

· Never operate the UVC lamp outside its housing.

Never operate the UVC lamp in a housing that is defective



Danger: Ultraviolet radiation.

Do not expose your eyes to lamp rays.

Disconnect power before servicing or replacing the lamp.

**Warning:** To reduce the risk of electric shock – Connect only to a circuit that is protected by a ground-fault circuit interrupter (GFCI)

#### For indoor and outdoor household use



Attention! Breakable glass

Possible consequences: Injury to your hands caused by cuts

**Protective measures:** Handle the quartz glass and UVC lamp with care.

- Switch off the filter pump and UVC unit.
- Remove the UVC unit head (See Cleaning and maintenance\Removing/inserting the UVC unit head).
- Check the quartz glass tube and O ring for damage. Replace, if necessary.
- Clean the quartz glass tube externally using a moist cloth.
- Insert the UVC unit head (See Cleaning and maintenance\Removing/inserting the UVC unit head).
- Switch on the filter pump.
- · Switch on the UVC unit.



**Attention!** Dangerous electrical voltage.

Possible consequences: Death or serious injuries.

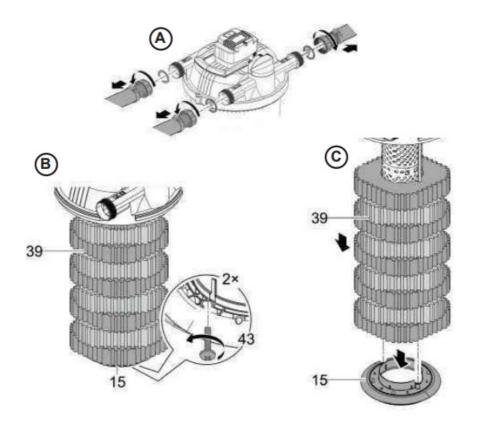
Protective measures: Switch off the mains voltage prior to carrying out work on the unit

## Cleaning the unit and washing or replacing the foam filters

Wear of the foam filters is caused by mechanical stress and normal aging. OASE recommend: Replace old foam filters with new ones at the beginning of the new season.

• Switch off the filter pump. A. Remove all hoses, hose connections.

- Remove the UVC unit head (See Cleaning and maintenance\Removing/ inserting the UVC unit head).
- Open the container (See Cleaning and maintenance\Opening the container). Disassembling the foam filters
- Check the foam filters, and either wash or replace. Remove the filter disk (15) after loosening and removing the two screws (43). C. Remove the lid including the stack of foam filters (39).
- Place the foam filters on a soft clean surface such that the fixing disk (15) of the stack of foam filters faces
  upward.



## Cleaning the parts

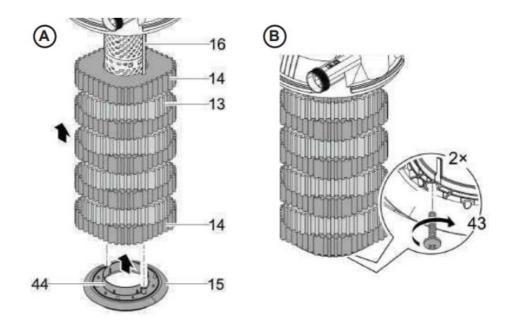
(Refer to Unit configuration)

- Clean the container, clamping ring, lid (remove UVC unit head!) including UVC water housing and the meshed tube from all angles with a strong water jet.
- If necessary, wash the foam filters individually by vigorously compressing and releasing the filters under running water.

#### Assembling the foam filters

A. Alternately push the blue (14) and then the red (13) foam filter onto the cleaning rods (16), so that the cleaning rods rest in the two cut-outs.

- Place the fixing disk (15) on the last foam filter such that the end collar (44) points to the foam filters.
  - B. Fasten the fixing disk on the cleaning rods using the two screws (43).
- Reinstate all connections (See Installation).



#### Replacing the UVC lamp

**Attention!** Ultra-violet radiation.

Possible consequences: Eye or skin injury from burns

#### **Protective measures:**

• Never operate the UVC lamp outside its housing.

• Never operate the UVC lamp in a housing that is defective

Danger: Ultraviolet radiation.

Do not expose your eyes to lamp rays.

Disconnect power before servicing or replacing the lamp.

**Warning:** To reduce the risk of electric shock – Connect only to a circuit that is protected by a ground-fault circuit interrupter (GFCI)





Attention! Breakable glass

Possible consequences: Injury to your hands caused by cuts

Protective measures: Handle the quartz glass and UVC lamp with care.



## Note!

- Condensate forms in the quartz glass tube. This condensate cannot be avoided, however, it does not im-pair function and safety.
- The quartz glass tube can become scratched or blind over time. In this case, sufficient cleaning performance of the UVC lamp is no longer guaranteed. The quartz glass tube must be replaced.
- The UVC lamp must be replaced after approx. 8000 operating hours. Only use UVC lamps the designation and rating of which match the information on the type plate.

#### Replacing the UVC lamp

- Remove the UVC unit head (See **Removing/inserting the UVC unit head). A.** Clean the quartz glass tube (19) externally using a moist cloth.
- Undo the fastening screw (46) from the retaining ring (45), and unscrew the retaining ring.
- Remove the quartz glass tube including the O ring (47). B. Pull the UVC lamp (49) out of the lamp base.
- Pull the transport securing elements (48 and 50) from the UVC lamp and push over the new UVC lamp.
- Insert the new UVC lamp. C. Place the quartz glass tube (19) over the UVC lamp (49) again.
- Push the O ring (47) and the retaining ring (45) over the quartz glass tube. D. Tighten the retaining ring by

turning it up against the stop (50).

- Tighten the fastening screw (46) for the retaining ring.
- Reinsert the UVC unit head (See Removing/inserting the UVC unit head).
- Switch on the pond pump.
- Connect the power plug of the UVC unit.

## Storage/Winterization

- Disconnect power cord from UVC unit
- Disconnect hoses from inlet and outlet connections
- Empty/drain container by tipping unit on its side to let water drain out of inlet and outlet connection area
- If bypassing filter connect inlet and outlet hoses together to continue running pump in pond

## Wear parts

The UVC lamp, the quartz glass, and the foam filters are worn parts and are excluded from the warranty.

#### Disposal of UVC unit and UVC lamp



Do not dispose of this unit with domestic waste! Disable the unit beforehand by cutting off the cables. Further information about the recycling of this product can be obtained from your local municipal authority.

#### Disposal of Packaging, Worn foam filters, sealing rings and Filter container

You may dispose of these components with domestic waste! Further information about the recycling of this product can be obtained from your local municipal authority.

## **Troubleshooting**

Issue	Cause	Solution
No water flow th	Filter pump not switched on.	Switch on the filter pump
rough the	Supply lines blocked.	Check supply lines
return socket.	Function switch not turned to "Filter water"	Turn function switch to "Filter water"
UVC lamp displ	Power supply of the UVC not connected or Connection defective	Check connection (power plug, power f use)
ay is not lit	UVC lamp defective	Replace UVC lamp
	Quartz glass tube not fitted	Fit quartz glass tube
	Function switch not turned to "Filter water"	I urn function switch to "Filter water
	Unit has not been in operation long enough	Wait a few days/weeks
Filtering perfor	Water extremely soiled	Wait a few days/weeks
mance not satis	Excessive fish and animal population	Adhere to the reference value
factory	Foam filters clogged	Clean foam filters
	Quartz glass tube soiled	Cleaning the quartz glass tube
	UVC lamp is in operation for more than 8000 hours	Replace UVC lamp

# **Spare parts**

The use of original parts from OASE ensures the continued safe and reliable operation of the unit. Please visit our website for spare parts drawings and spare parts. <a href="https://www.oase-livingwater.com">www.oase-livingwater.com</a>



OASE North America INC. · www.oase-livingwater.com

40358/10-18

Questions, problems, missing parts?

Before returning to your retailer, call us at 1-866-627-3435, 8 a.m.-6 p.m., EST, Monday-Friday, or email us at <a href="mailto:customercare@oase-livingwater.com">customercare@oase-livingwater.com</a>. Or visit our website at <a href="mailto:www.oase-livingwater.com">www.oase-livingwater.com</a>.

#### **Documents / Resources**



Oase FiltoClear 8000 Pond Pressure Filter with UV-C Clarifier [pdf] Instruction Manual FiltoClear 3000, FiltoClear 4000, FiltoClear 8000, Pond Pressure Filter with UV-C Clarifier

Manuals+, home privacy