



CAUTION Please turn off the power before any maintenance and keep away from the UV light when operation.

FPA Fst. No 98547-TWN-1

# IMMERSION UV-



Before using Immersion UV-C, please make sure that the quartz sleeve is not broken and all connectors / fittings are tightened. Once leaking is found, please stop using it in case of any accident. Disconnect the power supply before any cleaning or maintenance, and do not pull the UV lamp up with the power cable.

NOTICE When using the product, always connect the power supply with ground fault circuit interrupter (GFCI).



• Before using Immersion UV-C, please make sure that the quartz sleeve and UV lamp are not broken.

 $\bullet$  Use a clean soft cloth or gloves to handle the UV lamp and the quartz sleeve.

NOTICE • Do not cut / manipulate / alter power cable or plug and use extension cable.

Please check the box of Immersion UV-C version contains the components listed here:



IMS-16W/25W/40W/75W/145W										
NO	Parts No.	Parts / Spec.		Q'TY	NO	Parts No.	Parts / Sp	ec.	Q'TY	
	QSE-L16W	Quartz Sleeve (Include a Gasket)	16W	1	3	TUV16W 4P SE	Philips UV Lamp	16W	1	
	QSE-L25W		25W			TUV25W 4P SE		25W		
1	QSE-L40W/75W		40W			TUV36T5 HE 4P SE		40W		
			75W			TUV36T5 HO 4P SE		75W		
	QSE-L145W		145W			TUV64T5 HO 4P SE		145W		
	SS103002	Nut	1" NPT	1	4	BLE-L16W	Ballast Unit	16W		
						BLE-L25W		25W	1	
2						BLE-L40W		40W		
						BLE-L75W		75W		
						BLE-L145W		145W		



IMS-150W										
NO	Parts No.	Parts / Spec.		Q'TY	NO	Parts No.	Parts / Spec.		Q'TY	
1	QSE-L40W/75W	Quartz Sleeve (Include a Gasket)	40W/75W	2	3	TUV36T5 HO 4P SE	Philips UV Lamp	75W	2	
2	SS103002	Nut	1" NPT	1	4	BLE-L150W	Ballast Unit	150W	1	



Replacement Parts

#### ATTENTION READ THIS MANUAL CAREFULLY BEFORE INSTALL AND KEEP IT FOR LATER REFERENCE.

The Immersion UV-C generates UV-C radiation at a wavelength of 254 nm through the PHILIPS T5 UV lamp. The Immersion UV-C ensures clean, fresh and clear pond water in an efficient and environmentally-friendly manner.

Always use protective goggles and wear latex gloves when putting the Immersion UV-C into operation. It is also recommended that you carefully read through the safety regulations.

## APPLICATIONS

#### The Immersion UV-C is a mobile unit that can be used for clear water, such as:

- · Ponds (not in direct contact with fish, fig.1)
- Water-butts / water storage tanks (fig.2)
- Filter systems / relief boxes (fig.3) It should always be installed after a pump or a filter. This helps to clear the water of debris / impurities before it passes through the UV clarifier. It also avoids the breakage of quartz sleeve and UV lamp.
- Swimming pool filters / swimming ponds (not in direct contact with human!)



WARNING Do not submerge the electrical connection and ballast into the water (fig.4)!

#### Advantages of the Immersion UV-C:

- Ensures clear water.
- Includes a special built-in electronic pre-selector.
- Includes a PHILIPS UV-C lamp.
- · Easy installation and maintenance.
- · Can be used for several applications.

#### ATTENTION Make sure the UV lamp is always completely under water.

It is better to mount the unit in such a way that only the quartz sleeve is submerged (see fig.2). This will reduce possibility of water entering quartz sleeve and causing damage to UV lamp and or wiring / electrical connection.

Before removing Immersion UV-C out of water, please disconnect the power supply, and wait for at least 10 minute to cool down the UV lamp. In cold weather area, if the UV unit is taken out from water without waiting cooling, the huge temperature change between the inside and the outside of the quartz sleeve, maybe damage the quartz sleeve.

- Unintended use of the unit may lead to direct exposure to hazardous UV-C radiation. The UV light will hurt the eyes and skin, please keep away from the UV lamp without any defense. Even in small doses, UV-C radiation could cause injury to the eyes and skin.
- Disconnect the power supply before any installation or maintenance. Verify that hands are dry, and keep the plug and electrical connections dry to reduce the risk of electrocution.
- When removing the unit from water, disconnecting the power supply first. Also, it is important to keep the lamp in the water around 10 minutes until it has cooled down, in order to prevent the high temperature of the UV lamp.

- Do not use the unit if any of the components are damaged. This particularly applies to the quartz sleeve / UV lamp. If there is any damage, please disconnect the power supply immediately.
- To ensure the high efficiency with best water quality, please check quartz sleeve regularly (Every 3 months. It depends on the water source quality). If the quartz sleeve is with breakage or water is in, it will be a risk of electrocution. Also, by this way, you can check whether there are substances gathered, it will help you to judge and know how long it should be cleaned next time.
- The quartz sleeve and the connector are joined by glue, so **DO NOT** twist it to avoid any water may enter to the quartz sleeve.
- Do not cut / manipulate / alter power cable or plug. Don't use extension cable. The complete electrical unit of the unit must be replaced if there is any damage to the power cable. Always leave the electrical unit intact.
- Remove the unit if there is any risk that it might freeze during the winter months.
- This product may only be used according to the instructions described in this manual.
- Always connect the power supply to a GFCI (Ground-Fault Circuit Interrupter) fitted with a protective cover.
- Always comply with the electricity company's regulations with regard to any permanent connection to the mains. If there is any doubt regarding the connection, consult a recognized electrician or the electricity company. Always work with a grounded electric panel / circuit breaker (max. 30mA).
- This unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or a lack of experience and know-how, unless they are under supervision or are instructed on the use of the unit by a person responsible for their safety.

Model	IMS-16W	IMS-25W	IMS-40W	IMS-75W	IMS-145W	IMS-150W	
Voltage	110-120V,	60Hz / 220-2	40V, 50Hz	100-240V, 50/60Hz			
UV lamp	16W	25W	40W	75W	145W	75W x2	
Ballast watt	16W	25W	40W	75W	145W	150W	
Max. suggested pond size	2,200 Gal 8,330 L	3,500 Gal 13,250 L	5,500 Gal 21,000 L	10,500 Gal 39,700 L	19,950 Gal 75,520 L	20,500 Gal 77,600 L	
Dimension: L1 (in) (mm)	12.0 306	22.4 568	34.1 867	34.1 867	62.4 1585	34.1 867	
Dimension: L2 (in) (mm)	14.0 356	24.4 619	36.1 917	36.1 917	64.4 1635	36.1 917	

# SPECIFICATIONS

• UV lamp useful life: 9000 hours (source of data from PHILIPS).

• The above specifications are subject to change without prior notice.



#### INSTALLATION

- 1. Mount or place the Immersion UV-C at the desired location in the water. Please refer to the <u>APPLICATIONS</u> (p.2).
- 2. It is suggested to place the ballast in an area where is protected from splashing, flooding or dripping of water. Locate the ballast out of the direct sun and off the ground where it may flood.
- 3. The Immersion UV-C is now ready for use.

#### Replacement of quartz sleeve / UV lamp / ballast

- 1. Remove the plug from the socket and wait for at least 10 minutes until it has cooled down.
- 2. Carefully take the Immersion UV-C out of the water.
- Inspect the quartz sleeve if any cracks or chips. If it is cracked or chipped and water in, please replace the quartz sleeve. If necessary, clean the quartz sleeve with a soft cloth and a non-aggressive cleaning agent.
- 4. Loosen the cable gland E from the connector B.
- 5. Disconnect the UV lamp from the 4-pin UV lamp power connector  $\bigcirc$ .
- For replacing the UV lamp, please carefully remove the UV lamp () from the quartz sleeve. Take a new UV lamp () and carefully slide it into the quartz sleeve ().
- For replacing the quartz sleeve, please carefully remove the UV lamp () from the quartz sleeve. Slide the original UV lamp () into a new quartz sleeve ().
- For replacing the ballast (E), connect the UV lamp to a new ballast.
- 6. Align the UV lamp's 4-pins properly with the 4-pin UV lamp power connector.

**Notice:** The mark on the UV lamp plug must be in the same direction as the parting line on the 4-pin UV lamp power connector. The 4 pins of the UV lamp must align exactly with the rectangular shape of the UV lamp connecter.

- 7. Plug the 4-pin UV lamp power connector to the UV lamp pins first. Use gentle pressure.
- 8. Push the cable and make the UV lamp at the bottom of the quartz sleeve.
- 9. Screw the cable gland back to the quartz sleeve's nut (a) by hand-tighten or by an adjustable wrench.
- Fasten the thread-lock sealing nut by hand-tighten. The inside rubber would be full of the cable gland.
- 11. The Immersion UV-C is now ready for use.





**Tips:** For IMS-75W / 145W / 150W, the ballasts are with a red LED light. When this light is ON, it indicates that the UV lamp and ballast are both working. If the red LED is OFF, it indicates that either the UV lamp is dead or the ballast is not working. Then, please check if the UV lamp and ballast are still working well.

**ATTENTION:** The UV lamp must be disposed of at the civic amenity site of your municipality. The complete electrical unit must be replaced as a whole unit if there is any damage to the power cable.







## WARNINGS

- Only use Immersion UV-C as this manual recommends.
- When placing the Immersion UV-C in the water, please Do not contact with fish, human, plants and aquatic animals directly.
- Frequent starts and stops may shorten the life of UV lamps.
- The ballast should not be located in low spots where water will collect. Protect the ballast from exposure to sun / heavy rain / snow. It is suggested to place the ballast in an area where is protected from splashing, flooding or dripping of water.
- If by accident the ballast falls into the water, unplug the unit from the electrical network immediately before taking it out of the water.
- The Immersion UV-C's electrical plug should be plugged with ground fault circuit interrupter (GFCI).
- Do not operate the unit with damaged plug or power cable.
- In case the Immersion UV-C and / or its ballast are installed above an electric wall outlet, care must be taken that the power cable has a hanging loop below the power connection point (drip loop).
- · Never yank or pull the power cable from an electrical outlet.
- Always disconnect the power cable when it is not operation.
- · Verify that hands are dry, and keep the plug and electrical connections dry to reduce the risk of electrocution.

# LIMITED WARRANTY

# MATALA WATER TECHNOLOGY CO., LTD. Warrants to the original purchaser of its Immersion UV-C under the following limited conditions.

- Ballast: One year from the date of purchase.
- · Contact the nearest authorized Immersion UV-C dealer for warranty service
- The UV lamp and the quartz sleeve are not warranted against breakage due to being made of glass.
- Matala Immersion UV-C shall possess the sole right to determine whether to repair or replace defective equipment, parts or components.
- Any cost incurred for the labor of removing the unit shall be the responsibility of the original purchaser, as will be all shipping charges to and from Matala Water Technology Co., Ltd. representatives. Damage or failure of the UVC unit covered by this warranty, which results from cause, directly or indirectly, connected with the installation, operation, environment, use or willful abuse, including, without limitation, improper packaging and damage incurred during shipping is not covered by this warranty. Otherwise, any implied warranties, which accompany the sale of the goods, are limited to their respective time constraints from the date of purchase. The manufacture will only be responsible for the repair or replacement of any of its products or parts thereof that are found to be defective and will not bear the cost of any incidental or consequential damages arising out of the occurrence of such a defect.

## Anything not covered under warranty will go under a section called limitations:

- To defects or malfunctions resulting from failure to properly install, operate, or maintain the unit in accordance with printed instructions provided.
- Warranty does not cover malfunction from improper installation.
- Warranty does not include UV lamp and quartz sleeve. The parts can be obtained from an authorized dealer.
- Warranty only applies to original end user and is not transferable.
- Warranty does not cover repairs done by any agency not authorized by Matala Water Technology.
- Warranty denies liability for any other loss including but not limited to personal injury, livestock, equipment, property or income.
- · If the unit is used for purposes other than for what it was designed and manufactured for.
- If the unit or components have been tampered with or modified in any way by an unauthorized dealer or repair shop.
- Do not cut / manipulate / alter power cable or plug and use extension cable.
- · Locate the ballast out of the direct sun and off the ground where it may flood.

# SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AFTER THE TERMINATION OF THE WARRANTY PERIOD.

#### DISTRIBUTED BY





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