

Billi®

User Guide

Billi Luxgarde™ UVC Inline Module



LUXGARDE™
UVC WATER TREATMENT
CERTIFIED PURIFICATION DEVICE

Product Introduction

The LUXAGARDE™ UVC Module is a UVC LED-based water disinfection product that delivers reliable drinking water for consumers. This product offers mercury-free, environmentally friendly disinfection that does not alter the taste or smell of drinking water. This system is intended for use by professional installers of drinking water dispensing systems. The LUXAGARDE™ UVC Module has no serviceable parts. The LUXAGARDE™ UVC Module should not be modified or disassembled in any way. Doing so may result in damage, hazardous operation conditions, and Ultraviolet (UV) light exposure hazards.

Warnings & Important Information

- For continued safety of this appliance, it must be installed, operated, and maintained in accordance with the manufacturer's instructions.
- Your appliance should be installed by a suitably qualified tradesperson.
- For correct operation of this appliance, it is essential to observe the instructions as outlined in this booklet.
- Do not use this appliance with water that is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.
- This appliance is not intended for use by persons (Including children) with reduced physical, sensory or mental capability, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid creation of a hazard.
- The LUXGARDE UVC contains microelectronic components sensitive to shock, moisture, and operation in conditions beyond stated maximums. Care should be taken in handling the LUXGARDE UVC Module during shipping, handling, installation, and operation. The LUXGARDE UVC is ESD (electrostatic discharge) sensitive; static electricity and surge voltages seriously damage internal components and can result in product failure.
- Dropping the product may cause damage. Drops from over 30 cm will cause permanent damage.
- The LUXGARDE UVC must be filled with water during LED ON operation. The LUXGARDE UVC system should not be operated for a period greater than 1 minute if the water supply is not flowing through the reactor. Operating the LUXGARDE UVC dry or for extended periods without water flow may cause permanent damage.
- If operating the LUXGARDE UVC module for extended periods of no water flow, the water in your chamber can become hot and potentially lead to scalding. It is recommended to run water until hot water has been purged from the system. Do not allow water to contact your body during this time.
- After connecting input power (including after power interruptions), wait minimum 5 seconds before pass water through the UV system to avoid passing under-treated water that may, in rare instances, pose health hazards.
- Do not operate the LUXGARDE UVC at flow rates below 0.5 Litres Per Minute, doing so may cause the unit to operate improperly.
- This appliance contains a UV-C emitter.
- Unintended use of the appliance or damage to the housing may result in the escape of dangerous UV-C radiation. UV-C radiation may, even in little doses, cause harm to the eyes and skin.

- Appliances that are obviously damaged must not be operated.
- Non-replaceable UV-C emitter present in the appliance.
- Models with AC/DC power supplies are to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.
- This system is not intended to be submerged or used outdoors.
- This appliance is to be used in line with a Billi Unit.
- WARNING: Do not operate the UV-C emitter when it is removed from the appliance enclosure.

LUXGARDE™ UVC Unit Characteristics

MAJOR DIMENSION: 145 x 130 x 80 mm

WEIGHT: 80g

ELECTRICAL INPUT: 24V DC 15W MAX

PRESSURE DROP 0.145PSI (4kPA)

TOTAL INTERNAL WATER VOLUME: 38 cm³

MAX PRESSURE: 100PSI (0.7MPa)

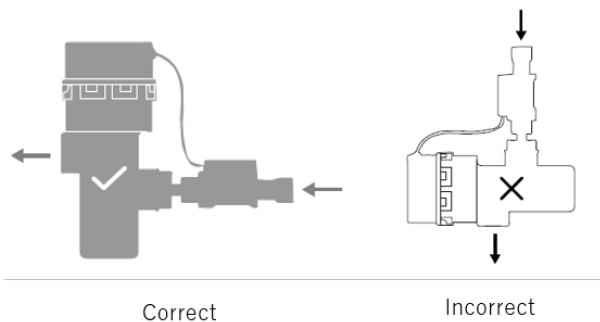
MAX WATER TEMPERATURE: 40°C

MIN WATER TEMPERATURE: 5°C

PH RANGE: 6.0-8.5

Installation precaution

The LUXGARDE™ UVC module must be oriented in one position to operate as intended. Mounting the unit in a different orientation shown below will result in reduced performance and permanent damage to the unit.



Operation

When connected to water lines and operating power, the LUXGARDE™ UVC unit monitors for water flow using an integrated sensor. When the flow sensor detects a flow rate of over 0.5 liters per minute, the UV LEDs are enabled to accomplish UV treatment. UV LEDs are disabled once the flow sensor detects a flow rate of under 0.5 litres per minute. Under some operating conditions, filtered water resident in the UV chamber may contain microbial contaminants. In normal operation, LUXGARDE™ UVC should remain powered in standby mode, to permit the unit to operate LED ON for a minimum of one (1) minute every 12 cumulative hours of inactivity to prevent the growth of microbial colonies and potential for biofilm formation. The LUXGARDE™ UVC will perform this operation independently under normal operating conditions and correct installation.

The LED indicator will display the unit status of a properly installed and powered LUXGARDE™ UVC unit.

The LED indicates the status of the LUXGARDE™ UVC using the following indication logic:

| Status | Indicator LED Output |
|---|------------------------------------|
| UVC Disinfection Off | LED Off |
| UVC Disinfection On | LED On |
| End of Service Life, Replacement Required | LED Blinking On Once per second |
| Fault, restart required | LED Blinking On 5 times per second |

Thank you for choosing to install a Billi LUXGARDE™ UVC Module. Your LUXGARDE™ UVC is manufactured to exacting standards using high-quality materials and with proper maintenance and care, should function for many years.



CONTACT DETAILS:
Please scan the QR code
for all support information.

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