



**wave** *brite*<sup>TM</sup>

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**SMART**

**INSTALLATION & OPERATING INSTRUCTIONS**

[www.waveinternational.co.uk](http://www.waveinternational.co.uk)

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## Section 1. Introduction

### 1.1 Important

It is important that this product works as described and that you enjoy the extra peace of mind that the Wavebrite™ SMART offers by protecting the environment. If you have any queries that cannot be answered by your supplier or engineer, please contact us direct on +44 (0) 1476 861717 or email [info@waveinternational.co.uk](mailto:info@waveinternational.co.uk)

### 1.2 What it does

The Wavebrite™ SMART filter system removes contaminants from onboard Grey Waste Water before overboard discharge meeting the EU Waste Water Standard. Grey Waste Water is generally produced by onboard showers, hand basins and washing machines. The system is controlled by a level control switch located in the Whale Grey Waste Water Sump which controls the pump. If galley waste water is put through the system cartridge life could be drastically reduced if any solids are present in the water and it is then recommended to install a Wavebrite Grease Trap.

- Wavebrite™ SMART is a fully automated system that displays on a set of screens flow rate, daily and total volumes, system conditions and status of the filters, simply go to the visual display unit and scroll through. They give a clear indication of how many litres of water have been processed daily and over the lifetime of the product, responsibly with due care for the environment.
- Wavebrite™ SMART is designed for use in a wide range of craft from small boats with a single basin to those with multiple sources. The standard Wavebrite™ SMART can process up to 20,000L of grey water before the main module needs to be changed. Flow rate, differential pressure and accumulative volume are automatically monitored and used to indicate when maintenance is required, this is shown on the Pico screen of the unit. The Pico gives all the information required by the operator, it is supplied separate to the main unit, has a piezo warning buzzer and should be located in a convenient position where it can be viewed with ease.

### 1.3 Before you begin

Before you start, please read through these instructions carefully as well as those supplied by WHALE. Fitting a Wavebrite™ SMART involves:

- Cutting into a section of flexible hose or grey waste water discharge pipe. Making electrical connections.
- Installing Wavebrite™ SMART into the grey waste water discharge system requires hose tail clips which **are not provided**. Electrical connections should be made by a qualified electrical installer with reference to the electrical equipment suppliers' instructions.
- The position you mount the Wavebrite™ SMART should allow access for maintenance being on one side which has an opening door.
- The remote Pico should be located in a convenient position where it can be viewed with ease.
- Suction hose length between the Wavebrite™ SMART INLET and the Whale Grey Waste Water Sump, if too long this can reduce pump performance and the head from Wavebrite™ SMART INLET to the Whale Grey Waste Water Sump should be less than 1000 mm
- Hose diameter and type, correct hose is supplied with the Whale Grey Waste Water Sump, hose clips are also supplied.
- Note that bends and fittings in hoses all cause a reduction in pump efficiency.
- The shorter the pipe runs to and from the Wavebrite™ SMART with no extra fittings such as elbows and bends, the better the system will perform.
- Check with Wave International technical department if in doubt.

## Section 2.

### Components

Before you start check that your system kit contains the following components. If you think you are short of any items, please call us immediately.

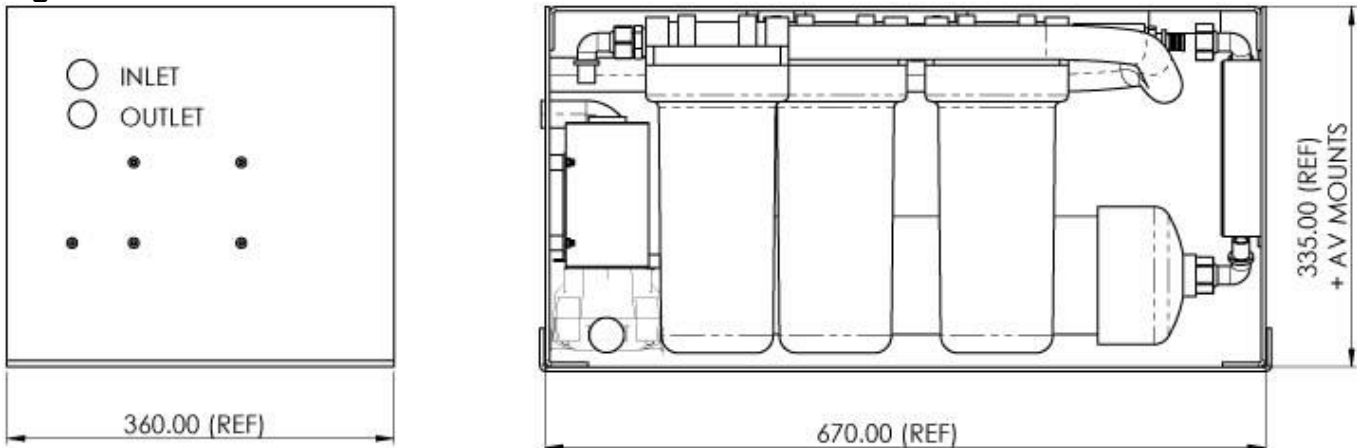
<u>Item</u>	<u>Qty.</u>	<u>Description</u>
1.	1	Wavebrite™ SMART.
2.	1	Pico Display Unit and cable.
3.	1	Deutsche Male Plug.
4.	1	WHALE GREY WASTE WATER SUMP 16L.
5.	1M.	25 mm braided hose.
6.	4	Hose clips.
7.	1	Installation and Operating Manual online. <a href="https://www.waveinternational.co.uk/downloads.html">https://www.waveinternational.co.uk/downloads.html</a>

Refer to Whale Water Systems Catalogue for further information regarding WHALE PUMPS and the WHALE GREY WASTE WATER SUMP +44 (0)28 9127 0531 [info@whalepumps.com](mailto:info@whalepumps.com) [www.whalepumps.com](http://www.whalepumps.com)

## Section 3. Wavebrite™ SMART Grey Waste Water Filter System Specifications and Replacement Part Numbers.

FLOW RATE:	1-15 Liters per min.
POWER:	12 volts DC.
SYSTEM MAX. PRESSURE:	4 bar.
PRE-FILTERS MAX. DIFF. PRESSURE:	2 bar. (@ 2 bar. change cartridges 2&3)
WAVEBRITE SMART MODULE CAPACITY:	20,000L
MAX. TEMP:	45 deg. C
MIN. TEMP:	1 deg. C
WOUND CARTRIDGE:	Part No. WB004 (0,5 micron)
WOUND CARTRIDGE:	Part No. WB005 (5 micron)
FILTER SLEEVE:	Part No. WB006 (100 micron)
WAVEBRITE SMART MODULE:	Part No. WBSLC1
WAVEBRITE SMART WEIGHT	Dry – 30 kgs Wet – 42 kgs
WHALE GREY WASTE WATER SUMP 16L:	Dry – 2 kgs Wet – 18 kgs

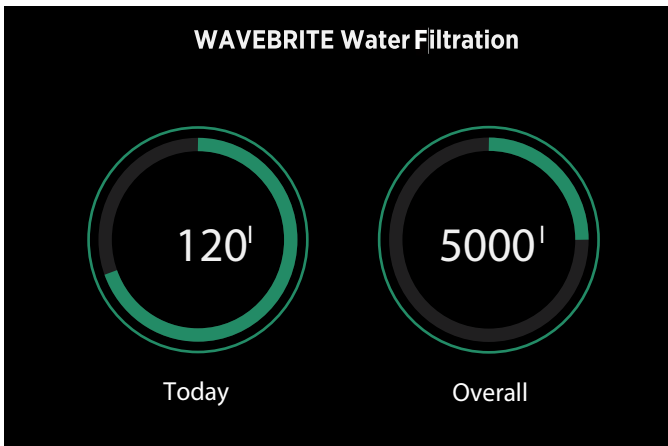
Fig 1.





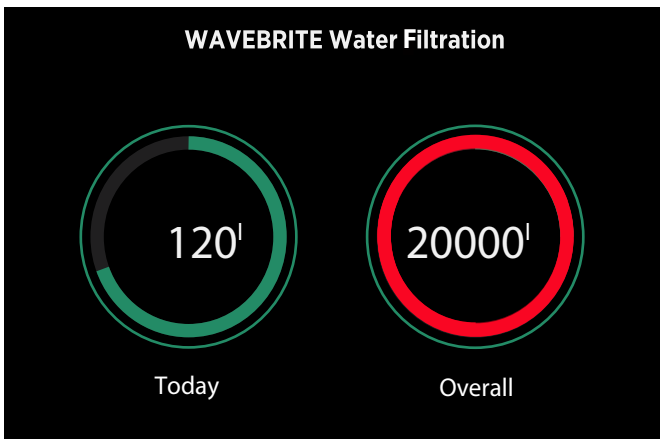






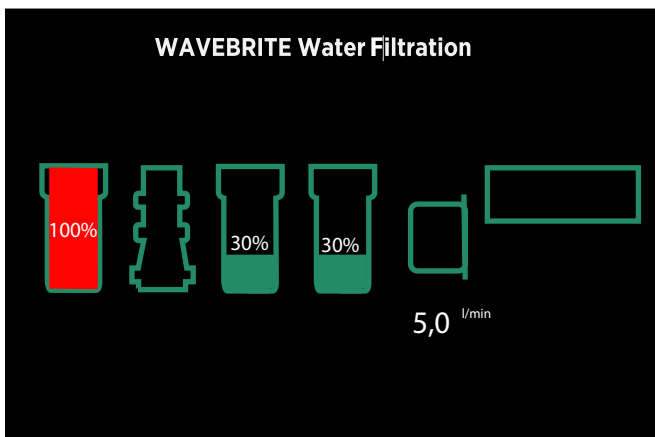
### SYSTEM ONLINE

The Wavebrite SMART stores the daily amount and resets after 24 hours, the overall amount is stored until reset.



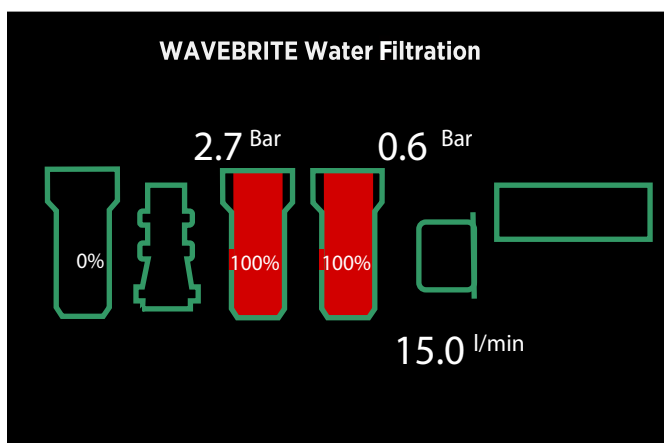
### SYSTEM ALARM

The Wavebrite SMART Main Module 4. has reached capacity and needs replacing with a new module.



### SYSTEM ALARM

The Wavebrite SMART Filter/Strainer 1. has reached capacity and the strainer mesh requires removal and careful cleaning before being replaced.

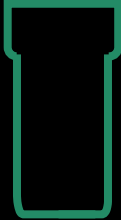


### SYSTEM ALARM

The Wavebrite SMART Filter 2 & 3. have reached capacity and the filter cartridges need replacing.




**WAVEBRITE Water Filtration**



**FILTER 2 & 3**


Scan the QR code and see the video on how to maintain, replace or remove the cartridge.



## SYSTEM MAINTENANCE

Periodically the cartridges will need replacing, instructions with part numbers and a video can be found by scanning the QR code.


**WAVEBRITE Water Filtration**



4

**Wavebrite SMART MAIN MODULE**

Scan the QR code and see the video on how to maintain, replace or remove the cartridge.



## SYSTEM MAINTENANCE

The Wavebrite SMART Main Module 4. needs replacing when it has reached maximum capacity. Instructions with part numbers and a video can be found by scanning the QR code.

