

STREAMLINE® | INSTRUCTION MANUAL

FILTERPLUS®

STREAMLINE®

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Responsibilities

General Responsibilities

These operating instructions allows you to use the Filterplus® filtration system safely and efficiently. The instructional booklet must be read before setting up, starting or using your Filterplus® equipment. It is an integral part of the product itself.

Please read the warning and instructions contained in this booklet carefully. They provide important information on the safe use and maintenance of the equipment. Pay particular attention to general safety instructions.

Please keep this booklet in a safe place near your Filterplus® filtration system for future consultation.

Your Filterplus® filtration system is constructed according to current safety standard and regulations. The latest and current edition is illustrated in this manual.

The contents of this booklet should be bought to the attention of all users.

Manufactures Responsibilities

Varitech Systems Ltd, the manufacture of Filterplus® filtration system, holds 12-months warranty on all machines and equipment from the date of purchased (see Warranty section 2)

Varitech Systems Ltd, the manufacture of Streamflo®, is in no case responsible for failures or errors caused by modifications to the unit by customer or other persons.

Personnel Responsibilities

The Filterplus® filtration system equipment is designed and manufactured to be operated in industrial applications. It is important that the operator(s) of the Filterplus® filtration system equipment have read through these operating instructions thoroughly, and understand all safety instructions and regulations.

The Filterplus® filtration system is not intended for use by children, adolescents, persons under the influence of alcohol / drugs or simply lacking experience and knowledge.

These operating instructions are designed to educate the user, informing the operator how to carry out the task at hand successfully, whilst avoiding potential dangers that might occur.

Technical Specifications

Specification Data

Description	Mini RO	Maxi RO
Country of Origin	United Kingdom	United Kingdom
Maximum Height	780mm	1180mm
Maximum Length	370mm	500mm
Maximum Width	520mm	520mm
Dry Weight	39.5kg	76.5kg
Inlet Pressure Requirement	50psi	50psi
Inlet Water Flow Requirement	15Lpm	20lpm
Optimum Operating Pressure	95psi	95psi
Standard Water Inlet Connection	1/2 inch	1/2inch
Electrical Power Supply	230v	230v
Power Consumption	245w	550w
Optimum Water Quality	5ppm	5ppm
Pure Water Flow Range	6.5lpm	9.5lpm
Water Rejection Ratio	50ppm - 500ppm	50ppm - 500ppm
Waste Rejection Ration (Recommended)	50%	50%
Operating Time	Constant	Constant

Parts & Accessories

1x Reverse Osmosis System

1x Filter Spanner

1x Valve Assembly

1x Power Lead

1x Coil of tubing for plumbing

1x Optional DI filter

Safety Regulations

The Filterplus® filtration system is intended solely for the production of pure water used for cleaning windows, vehicles, solar panels and other hard washable surfaces typically through standard and optional accessories provided by Streamline®.

The water cannot be used for human consumption.

Personal Safety

Stay alert, watch what you are doing and use common sense when operating the Streamline® Filtration System. Do not use the filtration system while you are tires or under the influence of alcohol, drugs or medication. A moment of inattention while operating the Filteration System result in serious personal injury.

Use personal protective equipment to avoid personal injury:



Protective Gloves



Saftey Goggles



Protective Footware

Additional protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection may be required depending on the safety regulations in the operator surroundings.

System Safety

The Filterplus® filtration system is manufactured with the safety of the operator in mind, including some key features such as;



Over Pressure

- If the water pressure in the system exceeds maximium pressure, the unit will cut out automatically and stop the pump from over pressurizing.
- It is important to never open the unit during operation or whilst under pressure.



Overheating

- If the pump overheats on the Streamilne filtration system, an activation switch is triggered and the system will automatically switch off.



Eletrical Hazards

- As the Filterplus® filtration system is powered by an electrical source, never use the equipment in the rain, snow or strong winds.
- Never use the filtration system to clean people and/or animals.
- Before each use, undertake a visual check on all electrical cables for damage. Never use the filtration system with a damaged cable.



Mehcanical Hazards

- To avoid all mechanical hazards, place the Streamline® Fitration System on an even surface only, and ensure sufficient stability.

Use only original accessories that come with the Filtration system, offering maximum quality and security. Failure to use original accessories absolves Varitech Systems Ltd, the manufacturer from all liability.

Electrical specifications & safety

This applies to all Filterplus® RO systems.

Electrical connections must be carried out in respect of current legislation (in compliance with the provisions of the IEC 60364-1 standard) and in accordance with the manufacturer's instructions.

Please check that the installation and sockets are adequate for the maximum power of the appliance indicated on the rating plate. If in doubt, consult a qualified electrician. The correct plug should be fitted by a qualified electrician.

- Varitech Systems Ltd, the manufacture of Streamline® declines all liability for damage to persons, animals or things caused by faulty or incorrect connection.
- Before connecting the equipment, check that the specification given on the rating plate corresponds to that of the mains electrical supply.
- If the equipment is connected via an extension, use cables with an adequate cross section, never less than 1,5 mmq. The plug and socket must be watertight.
- The electrical safety of the equipment is guaranteed only when correctly and efficiently earthed as specified in current electrical safety legislation (in compliance with the provisions of the IEC 60364-1 standard). This fundamental safety requisite should be verified. If in doubt, ask a professionally qualified electrician to check the system thoroughly. It is recommended that the electric supply to this machine should include a residual current device that will interrupt the supply if the leakage current to earth exceeds 30 mA for 30ms or a device that will prove the earth circuit.

Varitech Systems Ltd, the manufactures of Streamline®, declines all liability for damage caused by faulty earthing of the appliance.

- The equipment can be disconnected from the mains only by unplugging the plug from the mains socket.

When using any electrical appliance, certain fundamental rules should be respected:

- Do not touch the appliance with wet hands or feet.
- Do not touch the appliance with bare feet or unsuitable clothing.
- Do not pull the power cable or appliance itself to unplug the plug from the mains.

W: www.streamline.systems E: sales@streamline.systems T: +44 (0)1626 830 830

Operating The Filterplus® Trolley Systems

When purchasing the product, make sure it has an identification plate. If this is missing, notify the distributor / manufacturer where you purchased the unit from.

Use of an appliance without an identification plate absolves the manufacturer from all liability. Products without an identification plate should be considered as anonymous and potentially dangerous.



Important

The unit must be protected from freezing.

The Streamline® Filtration System should always be transported securely and in upright position

Only use the Streamline® parts supplied with your fitration system, if parts are misplaced or missing contact your Streamline® dealer immediately.

Unpacking The Filterplus® System

Your Filterplus® filtration System has been carefully manufactured, checked through QC and packaged as a kit.

Carefully unpack your new Filterplus® filtration system and carry out a thorough visual check on all parts. If in doubt, do not use the system. Contact your dealer and/or manufacturer.

Packaging (bags, boxes, nails, tape etc.) should be kept out of reach of children as they may represent a potential hazard. Packaging can be recycled according to your local legislation.

Storage Of The Filterplus® System

Short term and long term storage is an important issue. The Streamline® Filtration system must be protected from algae and bacteria growth in the pressure vessels caused by stagnant water. The de-ionising (DI) resin must not dry out wither.

About Your System



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Assembling the System

i. Ensure your unit is on a stable floor and dry location.

ii. Identify and the water pipe ports on side of the filtration system.

iii. Connect the Water inlet pipe to the the mains water supply, ensure you are using Check Valve supplied

iv. Connect Pure Water Oulte to pure water tank via DI Vessel if required.

v. Connect Water Water Outlet to Drain - ensure this pipe is no longer than 5 metres.

vi. Fit Float Switch into side of Pure Water Tank using 20mm holes saw (if hole is not drilled in tank) - set thie 100mm form top of tank. The white part of float switch should be horizantal once fitted, not hanging down.

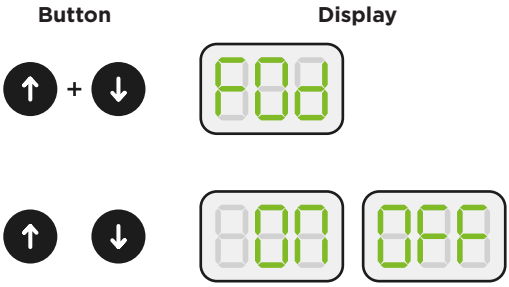
vii. Plug in Mains plug into rear of machine and into 230v mains plug (do not turn mains on)

Controller Settings

The controller has two filling modes:

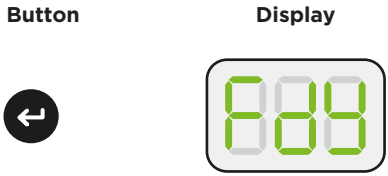
1. One time fill (stops when the level switch activates/lifts)
2. Fill on demand (refills every time the level switch drops)

To select the required filling mode press and hold the down and enter buttons to enter the menu, then press enter until FOd (fill on demand) is displayed.



Press up or down to change between on and off. Off will set the controller to 'one-time fill'. ON will set controller to 'fill on demand'.

Press enter to display the next setting. Fill Delay will only appear when 'Fod' is set to on.



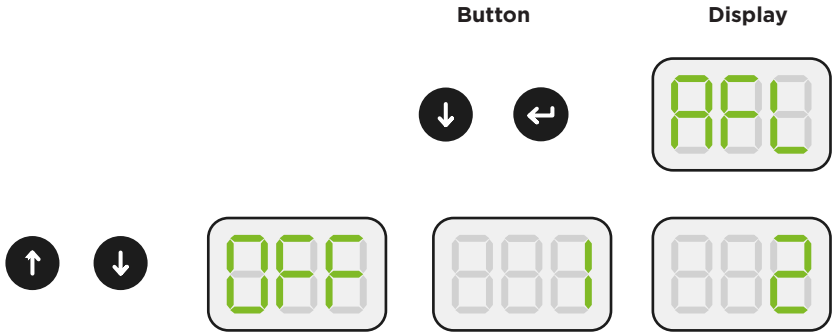
Fdy is the time delay in minutes from the tank reaching full and the filling re-starting should the water level drop. You can set this delay from 0-10 minutes with the up and down buttons. Setting to '-' turns the delay off. Press enter to display the next setting



Auto Flush

The controller has 3 automatic flush modes

1. Off Autoflush is off completely - not recomended to run filtration with this on.
2. Whilst filling repeat Autoflush every hour (first flush default 30 seconds)
3. Autoflush just once a start of every fill for 300 seconds - Default setting



Select the required Autoflush mode with up and down button. The press enter to move to next setting.

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Turning Your Filterplus® Filtration System ON

i. Open Waste Tap up fully (Anticlockwise)

ii. Switch on water supply

iii. Switch on power supply

Button	Display
F	FIL

iv. Once machine is running, slowly adjust the pressure up to 50psi by adjusting the waste valve, run this for 15 mins

v. While the tank is filling, the display will flash FIL and the TDS

Operating Your Streamline® Filtration System

i. It may take some time for your Filtration System to settle down and produce the satisfied TDS level - approx 95% of incoming TDS water quality

ii. When water level in pure water tank reaches float switch the Filtration Sytstem will automatically switch off

iii. When the water is drained off the Filtration System will automatically switch on

iv. When it restarts it will flush automatically for a period of time before going into production

To manual stop the filling process press the 'F' button again. This display will stop showing 'FIL' display

Button	Display
F	

Manual Flush Operation

	Button	Display
Press and hold the 'F' button to perform a mnual flush	F	

This will flush the system with defaul flush time set

5 Malfunctions & Troubleshooting

Malfunctions & Troubleshooting

To switch off the Filterplus® fitration systems after completing the cleaning task, simply:

i. **Low water pressure or poor water production**
   a. Check water supply in is good and consistant
   b. Check Prefilters are not blocked or require changing
   c. Replace Prefilters and Revese Osmosis filters

ii. **High pure water TDS**
   a. Check water supply in is good and consistant
   b. Check Waste tap is not closed/ pressure is set within operating pressure
   c. Replace Prefilters and Revese Osmosis filters

iii. **Pump will not start**
   a. Check mains power supply is stable
   b. Check float level switch is position correct way (horizontal in tank, not hanging down)
   c. Check F button has been pressed

Service & Maintenance

Filters & Membranes

It is recommended to run a weekly examination on the filtration system to ensure the filters and connections are adequate and effective for producing pure 000ppm water quality.

The DI resin filter is the last polishing filter that the RO pure water will pass through.

Prefilters to be changed either 3 monthly or approx. 2,000ltrs* of pure water or if they change to dark colour.



1x T-DF20-F



1x T-CF20-F

Membranes to be changed when TDS is higher than 25ppm

1x S-MRO4040-F

* with starting TDS of 250ppm.



Weekly Inspection

- Check TDS level is acceptable - change filters when reqired. Streamline recommends not using water for cleaning higher than 3ppm
- Check for any leaks and retify
- Check Prefilters don't look soiled and require chaning - always change both prefilters at same time

Disposal Of Filters & Machine

The Filterplus® filtration system is classified as special waste. It must be taken apart and divided into uniform sections which should be disposed of according to current legislation.

- Do not use the components removed as spare parts.
- All filters are disposable as unharmful general waste..

Important
Disposing of resin beads can create a slippery surface. Care needed to dispose of resin beads effectively. Remove all over spill immediately.

9 Declaration of Conformity

Declaration Of Conformity

EC Declaration of Conformity according to the, RoHS Directive 2011/65/EC. The Filterplus® filtration system has been designed and produced by Steamline® in accordance with the above mentioned EC Directives. The technical documents are complete. The complete EC Declaration of Conformity with all standards applied can be requested on the Steamline® Website or directly from Steamline®.



Dean Scott
Development Director

Why Streamline®?

Flexibility

- Steamline® systems can be built according to customers' exact requirements
- For non-standard systems, the user's needs or specifications are listened to and turned into reality.

Quality

- Whilst price is important, quality is remembered long after price is forgotten
- We insist on sourcing brand name products from around the world, only of a reputable quality, and bring them together under the Steamline® name
- All Steamline® products carry a full one year's warranty, according to the manufacturers' standard terms and conditions of sale.

Service

- We have an in-house technical helpline able to answer most of your questions relating to the capabilities and functionalities of all Steamline® products
- If we get it wrong, we will put it right. If you are sent a wrong item, we will immediately attend to sending you the correct item and arrange a collection of the wrong item without any quibbles.
- Steamline® is backed by a comprehensive range with massive stocks providing you with a 'one stop shop' for all your requirements.



Manufactured In The United Kingdom

STREAMLINE

Checked & Tested By Quality Control

Streamline® Warranty

The warranty on all Machines and Equipment is for 1 year (12-months) from RECORDED DATE OF PURCHASE.

THIS WARRANTY EXCLUDES NORMAL MAINTENANCE ITEMS, including but not limited to HOSES, FILTERS, O-RINGS, DIAPHRAGMS, VALVES, GASKETS, CARBON BRUSHES and damage to motors and other components as a result of failure to replace normal maintenance items. THIS LIST IS NOT EXHAUSTIVE.

If Steamline® receives notice of such defects during the warranty period, Streamline® will either, at its opinion, repair or replace components which prove to be defective.

Replacement parts will only be supplied under warranty, upon the inspection and approval of the defective parts by Steamline®.

Should it be necessary to supply replacement parts before the opportunity to inspect, these will be charged at current prices and credit will only be issued upon subsequent inspection and warranty approval by Steamline®.

The customer is responsible for the cost of return of the defective part. If warranty is approved, Steamline® will pay for the cost of the repaired or replacement part.

This warranty excludes the following conditions and circumstances which are at the discretion of Steamline®.

Wear and tear, misuse, abuse improper maintenance, frost damage, the use of chemicals other than those supplied or approved by Steamline®, improper installation or repair, unauthorised modification, incidental or consequential costs, loss or damage, service, labour or third party charges, the cost of returning defective parts to Steamline®.

This warranty constitutes the exclusive remedy of any purchaser of a Steamline® unit and is in lieu of all other warranties, express or implied, including without limitation any implied warranty of merchantability or fitness for use, to the fullest extent permitted by law. In no event shall any implied warranty of merchantability or fitness for use exceed the term of the applicable warranty stated above and Steamline® shall have no other obligation or liability.

Important

Unfortunately these rights cannot be transferred to a third party.

Notes

STREAMLINE®

FILTERPLUS®

Mini Maxi Static RO Systems

INSTR-MINI-MAXI-RO