



 **STREAMLINE** | INSTRUCTION MANUAL

# **MOBI<sup>®</sup> MAXI**

**Contents**

- 1. Responsibilities**
  - General responsibilities for the Mobi® filtration system ..... 4
  - Manufacture responsibilities for the Mobi® filtration system ..... 4
  - Personnel responsibilities for the Mobi® filtration system ..... 4
  
- 2. Technical Specifications**
  - Technical data ..... 5
  - Parts & accessories ..... 5
  
- 3. Safety Regulations**
  - Personal safety ..... 6
  - System safety ..... 7
  - Electrical specifications & safety ..... 8
  
- 4. Operating the Mobi® Maxi system**
  - Unpacking your system ..... 9
  - Storage of your system ..... 9 - 10
  - About your system ..... 11 - 12
  - How to assemble your system ..... 13 - 14
  - How to turn your system on ..... 15 - 16
  - How to turn your system off ..... 16 - 17
  
- 5. Malfunctions & Troubleshooting** ..... 18
- 6. Maintenance & Replacing Filters** ..... 19
  - Prefilters - usage & replacing ..... 20
  - De-ionising (DI) resin filter ..... 20
  - Reverse osmosis (RO) membrane - usage & replacing ..... 21
- 7. Disposing Of Filters & Machine** ..... 21
- 8. Why Streamline®?** ..... 22
- 9. Warranty Information** ..... 23



**1 Responsibilities**

**Responsibilities**

**General Responsibilities**

These operating instructions allows you to use the Filterplus® Mobi® filtration system safely and efficiently. The instructional booklet must be read before setting up, starting or using your Streamline® 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® Mobi® filtration system for future consultation.

Your Filterplus® Mobi® 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.

**Manufacturer Responsibilities**

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

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

**Personnel Responsibilities**

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

The Filterplus® Mobi® filtration equipment 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.

**Important**

If needed, training videos can be found on the Streamline® website: [www.streamline.systems](http://www.streamline.systems)

**2 Technical Specifications**

**Technical Specifications**

**Specification Data**

| Description                                      | Mobi® Maxi Single RO (FP-TR2000-03) | Mobi Maxi Double RO (FP-TR3000-03) |
|--------------------------------------------------|-------------------------------------|------------------------------------|
| Country of Origin                                | United Kingdom                      | United Kingdom                     |
| Maximum Height                                   | 1340mm                              | 1340mm                             |
| Maximum Length                                   | 600mm                               | 600mm                              |
| Maximum Width                                    | 450mm                               | 450mm                              |
| Dry Weight                                       | 54kg                                | 62kg                               |
| Wet Weight                                       | 56kg                                | 64kg                               |
| Inlet Pressure Requirement                       | 2.8 bar / 40 psi                    | 2.8 bar / 40 psi                   |
| Optimum Operating Pressure                       | 8.2 bar / 120 psi                   | 8.2 bar / 120 psi                  |
| Standard Water Inlet Connection (Male hose lock) | 3/4 inch                            | 3/4 inch                           |
| Waste Water Outlet Connection (Male hose lock)   | 3/4 inch                            | 3/4 inch                           |
| Pure Water Outlet Connection (Male hose lock)    | 3/4 inch                            | 3/4 inch                           |
| Electrical Power Supply                          | 230V mains                          | 230V mains                         |
| Power Consumption                                | 1.2W                                | 1.2W                               |
| Water Quality Range                              | 000ppm - 1000ppm                    | 000ppm - 1000ppm                   |
| Pure Water Flow (optimum output)                 | 6.8 Lpm                             | 9.6 lpm                            |
| Waste Water Flow                                 | 4.5 Lpm                             | 6.4 Lpm                            |

**Parts and Accessories**

The Filterplus® Mobi® filtration system will include the following parts:

- 1x 3mtr length of black standard water Inlet hose with stainless steel connections
- 1x 3mtr length of red Waste Water Outlet hose with stainless steel connections
- 2x 3mtr length of blue pure water outlet hose with stainless steel connections
- SPAN3 filter spanner for changing filters



**3 Safety Regulations**

**Safety Regulations**

**Electrical Specifications & Safety**

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 mm. 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.

**Personal Safety**

Stay alert, watch what you are doing and use common sense when operating the Filterplus® Mobi® filtration system. Do not use the filtration system while you are tired or under the influence of alcohol, drugs or medication. A moment of inattention while operating the filtration trolley may result in serious personal injury.

**Use personal protective equipment to avoid personal injury:**

|                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |
| <b>Protective Gloves</b>                                                            | <b>Safety Goggles</b>                                                               | <b>Protective Footwear</b>                                                          |

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.

The water cannot be used for human consumption.

**4 Operating the Mobi® Maxi Filtration System**

**System Safety**

The Filterplus® Mobi® filtration trolley is manufactured with the safety of the operator in mind, including some key features such as result in serious personal injury.



**Over Pressure**

- If the water pressure in the Filterplus® Mobi® filtration system is above the standard 10bar pressure, the pressure relief valve opens on the pump allowing a greater flow through the waste water outlet, reducing the pressure in the system and through the pure water outlet
- It is important to never open the filter vessels or membrane housings during operation or whilst under pressure.



**Over Heating**

- If the powerful booster pump overheats on the Filterplus® Mobi® filtration system, an activation switch is triggered and the system will automatically switch off.



**Electrical Hazards**

- As the Filterplus® Mobi® 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.



**Mechanical Hazards**

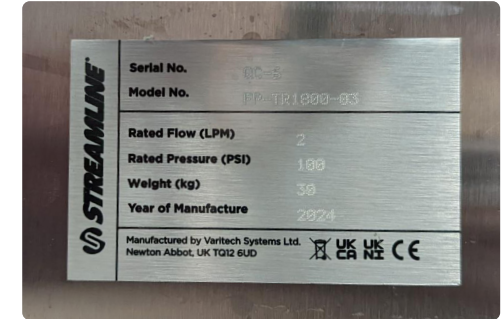
- To avoid all mechanical hazards, place the Filterplus® Mobi® filtration trolley on an even surface only, and ensure sufficient stability.

**Operating the Mobi® Maxi Filtration System**

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

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.



**Unpacking of the Filterplus® Mobi® filtration system**

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

Carefully unpack your new Filterplus® Mobi® 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® Mobi® filtration system**

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

**Important**  
The unit must be protected from freezing.

The following procedures should be followed to protect the unit from bacteria fouling and damage from freezing;

**Storage of your system**

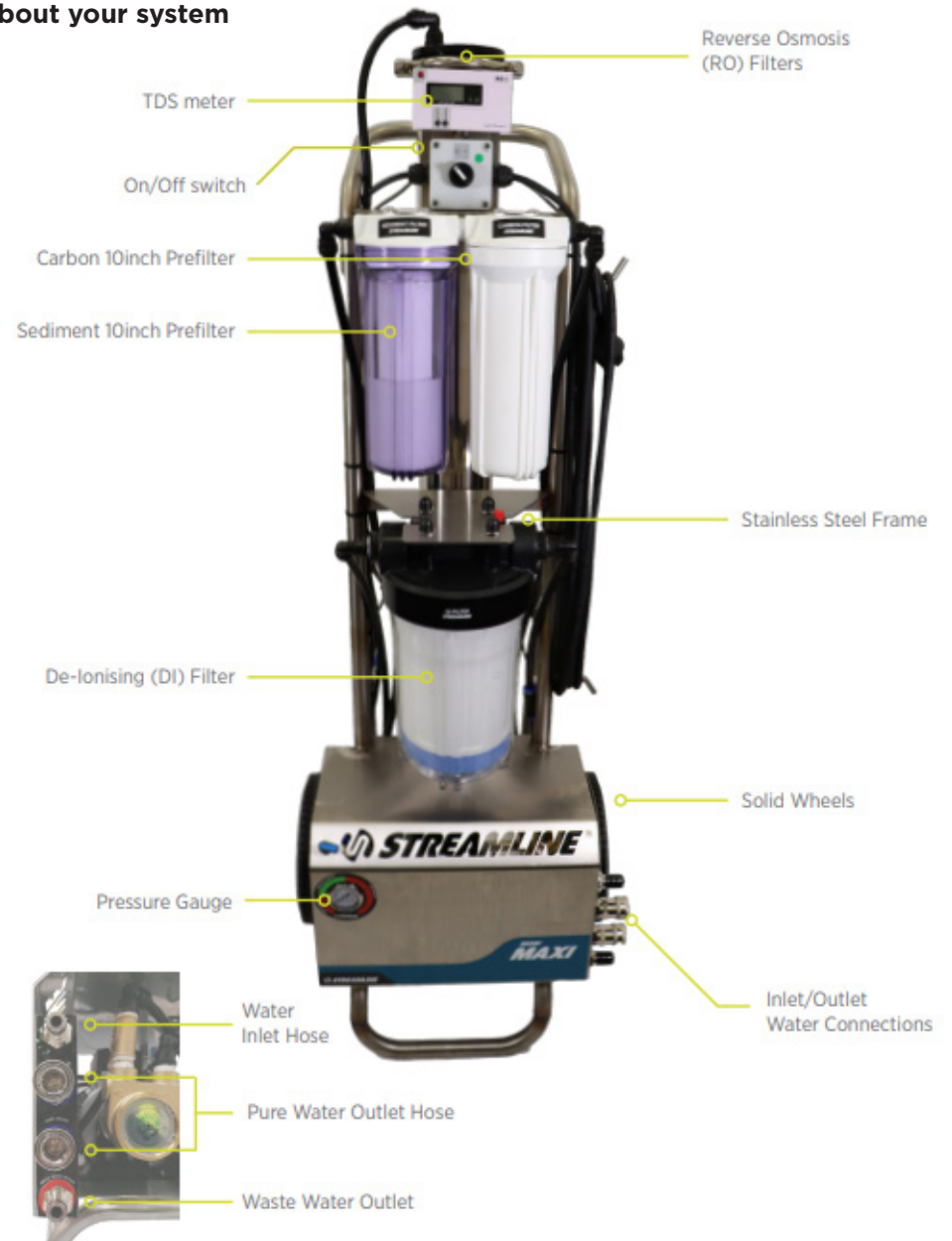
**Short term storage: 2-4 weeks of no use**

- i. Remove the prefilter housing and pour out the excess water.
- ii. Remove the DI resin cartridge housing and pour out the excess water.
- iii. Remove the RO membrane caps and lay down the trolley unit for the excess water to drain from the membranes.
- iv. Ensure you reinstall the top caps on RO pressure vessels. Do not allow them to dry out.
- v. Ensure you reinstall the prefilters and DI resin cartridge. Do not allow them to dry out.

**Long term storage: 4 weeks plus of no use**

- vi. Remove the prefilter housing and pour out the excess water.
- vii. Remove the DI resin cartridge housing and pour out the excess water.
- viii. Remove the RO membrane caps and lay down the trolley unit for the excess water to drain from the membranes.
- ix. Remove all filters from the trolley system, wrap in individual plastic bags and seal.
- x. Replace all filter housings and membrane caps without any filters inside.
- xi. It is important to store the trolley system where it cannot freeze.
- xii. It is important for all filters to not be allowed to dry out when not in use.

**About your system**



To operate the Filterplus® Mobi® filtration system, there needs to be access to a water supply and mains electricity.

The water enters the Filterplus® Mobi® filtration trolley system through the water inlet connection, and then passes through the carbon block prefilter removing the largest particles in the water before the water enters the membrane.

The reverse osmosis (RO) membrane filters remove up to 98% of the impurities in the water, before it reaches the de-ionising (DI) resin filter where the water is polished and reaches a 000ppm result.

From the RO membrane filters, waste water is discharged through the waste water outlet. This water is not harmful to the environment or skin, however full of impurities therefore not suitable for cleaning.

The Filterplus® Mobi® filtration trolley system you have purchased, the booster pump is powered by 230V mains electricity.



### Assembling the System

All main parts and safety devices are assembled by the manufacture. Some other secondary parts may be supplied separately.

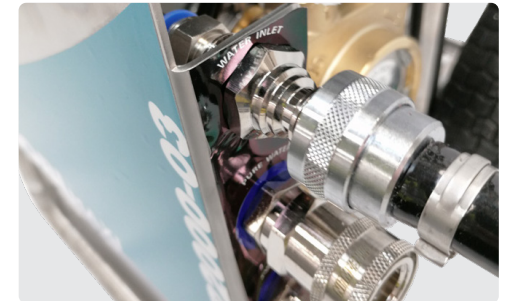
These parts must be assembled by the user following the assembly instructions.

### To use your Filterplus® Mobi® filtration system:

- i. Ensure the trolley system is safely secure and stable on a level surface.



- ii. Connect the **BLACK** hose from the mains water supply to the water inlet.



- iii. Connect the **RED** hose from the waste water outlet and direct to a drain or nearby soakaway.



- iv. Connect the 2x **BLUE** hose from the pure water outlet to your waterfed poles (it is possible to add a Streamline® 100mtr hose reel)



- v. Plug in the system to the mains power supply.



**Turning your Filterplus® Mobi® Filtration System ON:**

Once the final position of the Filterplus® Mobi® filtration system has been reached, you are now ready to switch on the water supply and power up the booster pump.

- i. Switch on the water supply at the mains water tap and allow the Filterplus® Mobi® filtration trolley to pressurised.



- ii. Inlet Pressure will show on the Pressure Gauge, when the Mobi Maxi is running, this should be registering 100-120psi. Do not exceed 125psi.



- iii. When pure water is following from the waterfed brush, switch on the booster pump by turning the 'POWER' switch to the ON position.





iv. The pressure gauge should now be around 120 - 150 psi (8-10 bar)



You are now good to use your Filterplus® Mobi® filtration trolley system.

**Important:**

Please ensure you regularly check the water quality with the inline TDS meter.

**Turning your Filterplus® Mobi® Filtration System OFF**

To switch off the Filterplus® Mobi® filtration system after completing the cleaning task, simply:

i. turn the 'POWER' switch to the OFF position, switching off the booster pump.



ii. Disconnect the mains power supply before disconnecting the mains water supply.



iii. Remove all hoses and safely store in storage box.



**Important:**

As with all technical appliances, your equipment should always be used according to the instructions.

**5 Malfunctions & Troubleshooting**

**Malfunctions & Troubleshooting**

During the usage of the Filterplus® Mobi® filtration system, there may be some small troubleshooting to undertake:

- i. Low water pressure or water supply at waterfed brush
  - a. Check for any blockages or kinks in hose.
  - b. Disconnect all extension hose reels and connect the Filterplus® Mobi® filtration system directly to the telescopic pole.
  - c. Clean or replace the sediment filter.
  - d. Contact service centre.
  
- ii. High waste water flow and low pure water flow
  - a. Check if membrane has the plug installed – if so, replace membrane.
  - b. Contact service centre.
  
- iii. High pure water TDS
  - a. Check membrane quality – replace membrane.
  - b. Check DI filter – replace resin beads in DI cartridge.
  - c. Contact service centre.
  
- iv. Booster pump will not start
  - a. Check fuse on mains power.
  - b. Contact service centre.

**6 Maintenance & Replacing Filters**

**Maintenance & Replacing Filters**

Care and maintenance of your Filterplus® Mobi® filtration system will ensure it is well looked after and running smoothly every time.

It is recommended to run a weekly, monthly and quarterly examination on the Filterplus® Mobi® filtration system to ensure all filters are adequate and effective for producing pure 000ppm water quality.

**Weekly inspection**

- Keep a check on the pure water TDS by using the inline TDS meter. This measures in parts per million (ppm). If the output reads higher than 10ppm, it is recommended to change the de-ionising (DI) filter, and make a note in the back of the inspection booklet.

**Monthly inspections**

- Each month it is recommended to flush through the reverse osmosis (RO) membranes and reset the ratio between pure water output and waste water output.
- The waste water valve should be opened 100% to allow waste water to flow out for approx. 5mins. Gradually reset to 60% pure and 40% waste water.

**Quarterly inspections**

- Depending on the usage, however, it is advised to change the carbon pre-filter at least 1x a quarter.
- Complete a check on all membranes to ensure performance is still acceptable.

**Prefilters - usage & replacing**

The sediment and carbon block 10inch prefilter are the first initial filters the feed water will pass through.

**Usage**

Either quarterly replacement or approx. 25,000ltrs of mains water running through, whichever comes quickest.

**How do I change the carbon prefilter?**

With the use of the spanner which comes with the Filterplus® Mobi® filtration system, simply unscrew the clear prefilter housing and dispose of the used carbon prefilter. Slide in the new CF10-F-001 Streamline® 5micron prefilter into the prefilter housing and reattach to the filtration system. Ensure you safely and securing tighten up the housing to ensure the system is safe under operating pressure.



**Reverse Osmosis (RO) Membrane Filters - usage and replacing**

The sediment and carbon block 10inch prefilter are the first initial filters the feed water will pass through.

**Usage**

Either quarterly replacement or approx. 25,000ltrs of mains water running through, whichever comes quickest.

**How do I change the carbon prefilter?**

With the use of the spanner which comes with the Filterplus® Mobi® filtration system, simply unscrew the clear prefilter housing and dispose of the used carbon prefilter. Slide in the new CF10-F-001 Streamline® 5micron prefilter into the prefilter housing and reattach to the filtration system. Ensure you safely and securing tighten up the housing to ensure the system is safe under operating pressure.



**De-ionising (DI) resin filter**

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

**Usage**

Either quarterly replacement or approx. 25,000ltrs of mains water running through, whichever comes quickest.

**How do I change the carbon prefilter?**

With the use of the spanner which comes with the Filterplus® Mobi® filtration system, simply unscrew the membrane housing caps and remove the membranes one by one.

Replace the 1x (or 2x) membrane with the V-MRO-4040-F from Streamline®.

Please pay special attention to the flow direction on the membrane housings and on the membranes themselves.



**WARNING**

Don't lose the RO membrane plugs! Carefully insert 2x in the water inlet side. If in doubt speak to your Streamline® technician

Ensure the Filterplus® Mobi® filtration system is not operating or under pressure when maintenance or filter replacements are being undertaken.

**7: Disposing Of Filters & Machine**

The Filterplus® Mobi® 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 classified and disposable as unarmful general waste.



**WARNING**

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

**8 Why Streamline®?**

**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



Checked & Tested  
By Quality Control

**9 Streamline® Warranty**

**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, Steamline® 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.



 **STREAMLINE**<sup>®</sup>  
**MOBI**<sup>®</sup> **MAXI**