Salamander Pumps

Installation and warranty guide for TapBoost



This document should be given to the end user and retained for future reference. Should you need to contact Salamander Pumps you will need the below information.



Safety, installation & warranty guide

Important – read this first!

Safety in Operation

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

The installation must be carried out to comply with the latest Water Supply Regulations, Wiring/Electrical Regulations, Building Regulations and local byelaws.

Correct installation is essential for safe operation and a trouble free system. It is therefore important to read these instructions thoroughly and ensure you comply with them. Incorrect fitting will invalidate the warranty.

If your installation is complicated or you have any questions please consult Pumpwise Technical Helpline on 0191 516 2002.

We encourage that all Salamander products are installed by a fully competent/qualified person.

Please complete the warranty registration on our website: www.salamanderpumps.co.uk or scan the QR code to complete the online warranty registration.



Do not unpack until ready to use. Store product upright and in a dry, frost free location.

The end user needs to keep this installation guide for reference to maintenance and safety information.

Thank you for choosing Salamander Pumps

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Please read these instruction details carefully as they are intended to ensure this product provides long, trouble-free service. Failure to install the unit in accordance with the installation instructions will lead to invalidation of the warranty.

1. Product Description

TapBoost is an intelligent domestic inline clean water pump intended to improve the flow to a single outlet/point of use (such as a tap, shower, toilet cistern) which suffers with a poor natural flow. It is suitable for use with mains water and tank fed water systems, with water up to 60°C . TapBoost operates at 12VDC which is supplied via a 240VAC power supply unit.

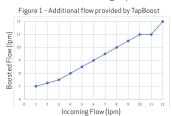
TapBoost is not suitable for boosting multiple outlets. If multiple outlets suffer from poor natural flow, Salamander Pumps have a range of products that are suitable. Please visit **www.salamanderpumps.co.uk** for details of our full range of products.

TapBoost will increase the water to a single outlet to between 7 and 11 litres per minute (lpm), depending on the incoming flow A minimum natural flow rate of 1.2lpm is required for TapBoost to activate. Details of how to measure the natural flow rate from the outlet can be found at www.salamanderpumps.co.uk or scan the QR code to learn how to measure the flow rate.



At the minimum natural flow rate of $1.2\ lpm$, TapBoost will increase the flow up to 7 lpm (provided there are no restrictions in the pipework/outlet). If the natural flow rate is greater than $1.2\ lpm$, TapBoost will increase your outlet flow rate by a varying amount depending on the natural flow coming into the pump. Refer to Figure 1 below to see how much additional flow TapBoost will provide to the natural flow rate at the outlet. TapBoost constantly monitors the flow rate and will react accordingly. If the flow rate reaches $11\ lpm$, TapBoost will enter idle mode so as not to pump more than $12\ lpm$ to comply with the Water Supply (Water Fittings) Regulations 1999.

TapBoost cannot overcome restricted incoming pipework and replacement water pipes should be installed in this scenario. Some outlets are naturally restrictive and TapBoost may not be able to add additional flow to these types of outlet. NOTE: some combi boilers may be restrictive. The specification should be checked before installing TapBoost.

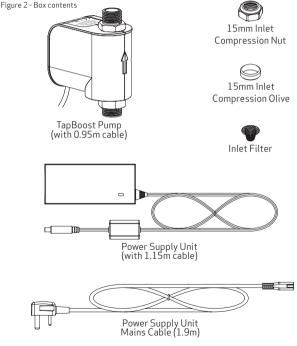




2. Box Contents

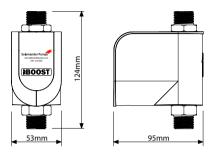
- 1x TapBoost Pump (with 0.95m cable)
- 1x Power Supply Unit (with 1.15m cable)
- 1x Power Supply Unit Mains Cable (1.9m)
- 1 x 15 mm Inlet Compression Nut
- 1x 15mm Inlet Compression Olive
- 1x Spare Inlet Filter (one is pre-fitted to the pump inlet)

Note: each pump is tested with water before leaving the factory. Some residual water may be present within the pump.



Important safety information: Only the Power Supply Unit and Mains Power Cable provided must be used to operate TapBoost.

3. Dimensions & Connections



1/2" BSP male

Outlet

Figure 3 - Pump Dimensions (without inlet compression nut)

Figure 4 - Pump Connections

4. Installation Notes

Please follow these installation instructions carefully. Failure to install TapBoost in accordance with these instructions will invalidate your warranty.

General Considerations:

- Never install TapBoost on pipework fed via the hot water from an unvented cylinder.
- The best possible location for TapBoost is directly before the outlet to be boosted.
- TapBoost should be positioned to allow adequate ventilation of the pump (100mm recommended). The pump should never be covered so as to stop airflow for ventilation.
- The installation must comply with any local byelaws, the Water Supply (Water Fittings) Regulations 1999, BS EN 806 and in accordance with IET Electrical Regulations.
- Good practice is to fit a full bore isolating valve to the inlet pipework
 of the pump to facilitate any future maintenance.
- · All pipework must be securely fixed.

- Ensure the pump is protected from frost (NOTE: TapBoost and the power supply must be installed indoors).
- If the water supply is known to be hard/have a high mineral content, it is advisable to install a water softener after the stop tap. Always consult the manufacturers literature for correct installation.
- Never use on outside cold-water storage tanks.
- Never use jointing compound, Boss White, hemp, or steel wool.
- Complete all hot work (e.g. pipework soldering) prior to TapBoost installation. Solder flux should not come into contact with any part of TapBoost, the power supply unit or its power cables.
- Never fit to restrictive or collapsed pipework/supply (e.g. lead main).
 Any reductions in the bore diameter of pipework and/or fittings can significantly reduce the pumps performance.
- When installed on mains water, detachable hose sets must not be used, it
 must be installed onto rigid pipework and adequately supported.
- Pump noise: the technology within this pump makes it incredibly quiet, however no pump is completely silent, so there may be some humming noise when in operation.
- Observe the direction of flow arrow on the front of the pump when installing. TapBoost can be installed horizontally or vertically however for optimum performance it is better fitted vertically. Never install TapBoost upside down or against the direction of flow.

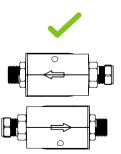
Figure 5 - Pump Orientation



TapBoost installed vertically



TapBoost installed upside down



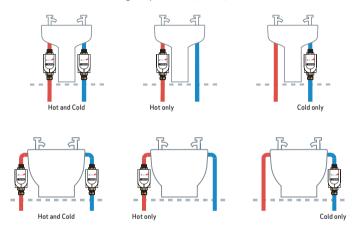
TapBoost installed horizontally

5. Typical Installations

If TapBoost is to be installed in a bathroom/shower room please also take note of the additional safety information in Section 6.

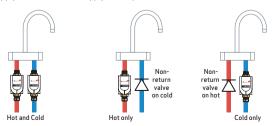
Figure 5 - Typical uses for TapBoost

Single Taps on Sinks/Basins/Baths



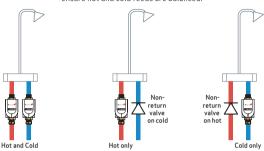
Mixer Taps

Note: for mixer taps with only one supply boosted with TapBoost, a non-return valve should be installed on the unboosted supply (if not already present) to prevent backflow from the boosted supply to the unboosted supply. It is important to ensure hot and cold feeds are balanced.



Thermostatic Mixer Showers

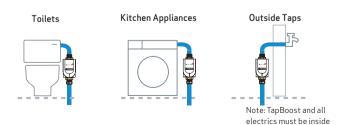
Note: for thermostatic mixer showers with only one supply boosted with TapBoost, a non-return valve should be installed on the unboosted supply (if not already present) to prevent backflow from the boosted supply to the unboosted supply. It is important to ensure hot and cold feeds are balanced.



Electric Showers



Note: before installing TapBoost on an electric shower there must already be sufficient natural flow and pressure to allow the electric shower to activate. Adding a TapBoost will boost the incoming flow and pressure to the shower. However, it is important to check the shower manufacturer's literature as you may already be getting the maximum allowable flow rate through the shower. In this instance, adding a TapBoost will not increase the flow rate from the shower.



6. Additional Safety Instructions for Bathroom & Shower Room Installations

There are 3-bathroom electrical zones that have been identified in the IET wiring regulations and these are:

Zone 0 - bath, basin or shower tray and is defined as 'any area within a bathroom that can hold water'

Zone 1 - the area directly above zone 0 to the height of 2.25m from the bottom of the bath or shower. It also covers the width of the shower cubicle and length of the bath or basin

Zone 2 - the area stretching 600mm beyond zone 1, outside of the bath or shower, be that above or to the sides of each.

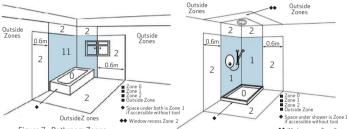


Figure 7 - Bathroom Zones

The TapBoost pump can be installed within Zone 2, however it is important that the electrical power supply unit is located beyond Zone 2 and ideally outside of the bathroom. The electrical power supply unit and mains plug must be protected against moisture and water. The plug must be located outside of the bathroom. The installation must be carried out to comply with the latest wiring/electrical regulations, building regulations and local byelaws.

IF YOU ARE UNSURE. CONSULT A QUALIFIED ELECTRICIAN.

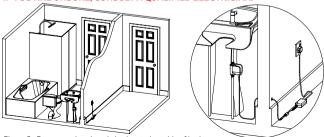


Figure 8 - Power supply unit and plug located outside of bathroom

7. Lighting Codes

The TapBoost power supply unit has a green LED which will illuminate when there is power to the supply unit.

The TapBoost pump is equipped with a blue LED to indicate its current status. Figure 9 below shows the location of the LED. When in 'Standby Mode' (power to the pump but outlet closed so therefore not boosting) the LED will remain solid for 5 minutes. After 5 minutes the LED will turn off so as not to cause a nuisance, however the pump will remain in 'Standby Mode'.

When an outlet is opened and water begins to flow, TapBoost will begin boosting the flow and the LED will fast flash to indicate 'Boosting Mode'. If the outlet is closed, TapBoost will enter 'Standby Mode' where the LED will remain solid for 5 minutes as described above.

TapBoost intelligently monitors the flow of water, if the flow reaches 11 lpm or more it will enter 'Idle Mode'. This ensures the boosted output flow does not exceed 12 lpm, complying with the Water Supply (Water Fittings) Regulations 1999. 'Idle Mode' is indicated by a slow pulsing blue LED. The pump is continuing to monitor the flow but will not provide any additional boost. If the flow drops below 11 lpm, the pump will again switch to 'Boosting Mode' and this will be indicated by a fast flashing blue LED.

Lighting Pattern	Mode	Denotes
Steady Light (for 5 mins)	Standby Mode	There is an electrical supply to the pump but there is no outlet open
Fast Flashing Light	Boosting Mode	Pump is boosting flow through the outlet
Slow Pulsing Light	Idle Mode	Incoming flow is equal to or greater than 11 lpm
No Light Standby Mode/Off		Pump has been in Standby Mode for longer than 5 minutes or pump has no electrical supply

Table 1 - Lighting codes



Figure 9 - LED Display on TapBoost

8. Commissioning

To successfully activate the pump on first operation:

- 1. Connect the pump to the pipework (inlet compression nut tightened to 40 Nm).
- 2. Turn on incoming water supply and ensure that all isolating valves are open.
- 3. Open outlet and check for natural flow from the outlet.
- 4. Ensure all air is purged from the system.
- 5. Inspect connections and connecting pipework for leaks.
- 6. Plug in electrical supply to pump and turn on.
- 7. The flow will now increase as the pump has entered 'Boosting Mode'. A blue LED will flash on the pump (see Section 7 for location on the pump) to indicate that it is boosting the flow.
- 8. Close the outlet fully and the pump will stop. The blue LED remains steady on to indicate it has entered 'Standby Mode'. The pump will remain in 'Standby Mode' until the outlet is opened, when it will again begin boosting the flow.
- When the pump is in 'Standby Mode' for more than 5 minutes, the blue LED on the pump will turn off until the outlet is opened and the pump begins boosting again.

If TapBoost doesn't activate, please refer to the troubleshooting section of this manual.

9. Maintenance

If a drop in performance is noted from TapBoost - the inlet filter should be checked and cleaned if necessary. Scan the QR code to learn how to clean the filter. Other than the inlet filter, there are no user serviceable parts. Any service work involving the repair or replacement of parts for the product must be carried out by Salamander Pumps, or by one of their approved service engineers.



Note: this includes the pump, power supply unit and all power cords provided.

10. Standards & Approvals

- WRAS Approved & NSF REG4 Certified
- Complies with the Water Supply (Water Fittings) Regulations 1999.
- IPX4 Rated Pump
- IPXO Rated Electrical Transformer. Note: must be protected against water and moisture
- UKCA and CE Marked.
- EN55014-1:2021 Electromechanical compatibility (EMC) requirements, household appliances, electrical goods, and similar apparatus (Part 1).
- BS EN 60335-1:2012+A15:2021 & BS EN 60335-2-41:2003+A2:2010 Household and similar electrical appliances – safety (Part 1 General requirements & Part 2-41 Particular requirements for pumps).

The company operates a policy of continuous development and reserves the right to change any of the specifications without prior notice. All information, data and illustrations given in this leaflet may be subject to variation.

11. General Specification

Part Number		TBS15/	TBIS15
Guarantee		2 years	
	Maximum inlet water pressure	10 Bar/1000 kPa	
	Minimum flow rate for activation	1.2 lpm	
	Backflow protection	Integrated non-return valve	
	Pump inlet connection	15mm compression	
Pump Specifi-	Pump outlet connection 1/2" male BSP		ale BSP
cation	Pump enclosure protection	IPX4	
	Pump weight	0.6 Kg	
	Motor duty rating	Continuous	
	Boosted output flow rate	7 - 11 lpm (depending on incoming flow rate)	
	Water temperature	4°C - 60°C	
	Maximum head	5m (0.5 bar)	
	Full load current	1.5 A	
	Maximum pump wattage	18 W	
	Pump dimensions (mm)	95mm(L) x 53mm(W) x 124mm(H)	
Power Supply Trans- former	Model number	GT-46600-6012-T2	EA10682G-120
	Electrical input	AC 100-240 Volts, 50/60Hz, 1.5A	AC 100-240 Volts, 50/60Hz, 2.0A
	Electrical output	DC 12 Volts, 60W, 5.0A	DC 12 Volts, 50W, 4.16A
	Mains power cable	UK 3 pin plug fitted with 3A fuse	
	Transformer enclosure protection	IPX0 - must be protected from water and moisture	
	Power supply weight	0.4 Kg	
	Power supply dimensions (mm)	145mm(L) x 52mm(W) x 34mm(H)	
	Actual values may vary due to tolerances		

11. General Specification Cont.

TapBoost is of Class III construction powered by an IEC 60335-1 approved Class II external power supply providing a SELV output and limited power source (LPS). Note: complete equipment (TapBoost with power supply) is a Class II product.

Class II - These products usually feature two layers of insulation between live components and users, which is why they are often known as "double-insulated" appliances.

Class III - Equipment built to the Class III standard is supplied from a special safety isolating transformer whose output is Separated/Safety Extra-Low Voltage or SELV.







12. TroubleshootingFor additional technical information scan the QR code

Fault	Probable cause	Recommended solution
Pump will not start Insuffici natural f	Electrical	Check power supply (all electrical connections to appliance) Check power transformer has a lit green light Check pump has blue light immediately after connecting the power source Check fuse in mains plug Check circuit breaker
	Insufficient natural flow	Check outlet is fully open Check natural flow rate is 1.2 lpm or above Check pump is correctly orientated Check flow through the pump corresponds to the arrow marked on the pump Check stopcock & all isolating valves are fully open Check for other restrictions in the supply pipework Check the maximum flow rate of the outlet to ensure it is not already delivering the maximum flow rate. Check & clean pump inlet filter Check that the installation complies with the information within this booklet
	Natural flow rate is 11 lpm or more	Pump is in idle mode. This is normal function due to sufficient natural flow
	Electrical	See above
Re- duced/ inter- mittent boosted flow	Insufficent natural flow	See above
	Variance in natural flow	Natural flow is fluctuating to $11\mathrm{lpm}$ or above then dropping below $11\mathrm{lpm}$
	Restrictive flow	Check for any restrictions in the incoming pipework or outlet that can limit the pumps performance
	Air in system	Run water through the system with the pump electrically disconnected for several minutes to clear all air

Table 3 - Troubleshooting

Fault	Probable cause	Recommended solution
Pump oper- ates	Leak in system	Check all pipework for leaks
with all out- lets closed	Outlet open	Ensure outlet is fully closed
Pump is noisy	Air in system	See above
	Pump vibrating against other pipework	Move pump away from contacting with any other pipework Make sure all surrounding pipework is secure
	Blocked inlet filter	Check & clean pump inlet filter. Replace with supplied spare filter if necessary
Pump is leaking	Pump has suffered chemical damage	Ensure that the pump has not encountered any chemical substance i.e. solder flux
	Pump exposed to extreme temperature	Ensure adequate frost protection Check water temperature is above 4°C and does not exceed 60°C
	Pump appears to have leaked from pipework connections or the location of the leak is unknown	Check the plumbing connections on the inlet and outlet are correctly fitted and tight Check there are no leaks in the pipework or connections above the pump Build up of condensation within the pump. Excessive build up should drain out of the casing between the two halves. Ensure adequate protection from extremes of air and water temperature

Table 3 - Troubleshooting

13. WEEE Directive

Your appliance contains valuable materials which could be recovered or recycled. At the end of the product's useful life please dispose of it at an appropriate civil waste collection point.



WEEE Directive 2012/19/EU

At the end of the product life dispose of packaging and product in a corresponding recycling centre.

Do not dispose of the unit with the usual domestic refuse. Do not burn the product.

14. PumpWise and Warranty

Monday to Thursday 8:30am to 4:30pm, Friday 8:30am to 2:30pm.

PumpWise is the cornerstone of Salamander Pumps' support service to our customers and the means by which our customers are guaranteed:

Selection of the right pump for the job

With more than 30 pumps in our range, the PumpWise team can help you to choose the pump that's most suitable to your specific installation.

- Avoiding installation pitfalls

Due to the technical nature of our products, it is essential that they are fitted according to our installation guidelines. The PumpWise team are available to talk through any installation questions and provide technical support and guidance.

Our PumpWise Commitment

Our PumpWise helpline is here to help you and we aim to provide a support service second to none. Installers and consumers can be sure of a speedy response to requests for technical help, guidance, and advice.

Your Warranty

TapBoost comes with a two-year warranty.

This warranty will operate from the date of purchase and is subject to the installation guidelines being followed correctly.

Please complete the warranty registration on our website **www.salamanderpumps.co.uk** or scan the QR code to complete the online warranty registration.

For further details please contact the PumpWise team. If you need to contact the PumpWise team, please have your serial number to hand. The serial number can be found on the pump or on the front of this booklet.
Telephone: 0191 516 2002

Email: tech@salamanderpumps.co.uk

PLEASE NOTE: Incorrect installation will invalidate the pump warranty. Please fully read the following terms and conditions.

15. Warranty Information

To the installer

Please follow the guidelines for installation provided in this brochure and call the PumpWise helpline for installation advice.

Once the installation has been completed and the system has been tested to your satisfaction, please assist the customer in completing warranty registration.

Please note that Salamander Pumps are able to provide an onsite service visit which may be chargeable.

1 The Scope of the Warranty

SALAMANDER PUMPED SHOWER SYSTEMS LTD ("the Company") Warrants subject to the terms and conditions below for the Warranty period(s) specified in paragraph 3 that the Company shall:

Repair or replace free of charge the product(s) specified on the Online Warranty Registration or Telephone Warranty Registration any component part thereof (together referred as "the equipment") which shall in the opinion of the Company have proved defective by reason only of the Company's materials or workmanship. The Company shall be under no obligation whatsoever under this Warranty to repair or replace equipment which has been misused, tampered with, or modified/altered in any way without the consent in writing from the Company; or if any component or accessory has been replaced by a type not specified by the Company; or if the equipment is incorrectly installed, operated or used other than as described in the instruction manual; or if any servicing or repair of the equipment shall have been carried out by anyone other than an authorised Company ("dealer").

The Company's liability under this Warranty is limited to the said repairs or replacement and shall under no circumstances extend to any financial loss or damage including consequential losses alleged to have been suffered by the claimant.

Subject as provided in this warranty and except where the equipment is sold to a person dealing as a consumer all warranties, conditions or other terms implied by law are excluded to the fullest extent permitted by law.

Nothing in this warranty shall exclude liability for death or personal injury caused by the Company's negligence.

2 Terms and conditions

This Warranty shall only be enforceable by you if the following terms and conditions have been complied with:

- That the equipment has been installed in accordance with the installation instructions, guidance and advice contained within the installation and warranty guide and/or provided by the Salamander help desk.
- b. You are the original purchaser of the equipment from a dealer and not an assignee or subsequent purchaser of the equipment.

- c. You must evidence the date of purchase by retaining the original invoice from the dealer. Without such evidence the Company reserves the right to reject any such claims under the terms of this Warranty.
- d. Within 15 days of purchase of the equipment the Warranty registration is accurately completed online or over the telephone.
- e. Within 30 days of discovery of a defect giving rise to liability under paragraph 1 above you give notice thereof in writing to the Company.
- Provided the equipment has not been altered, tampered with, modified or transformed in any way.

3 The Warranty periods

The Warranty periods referred to in paragraph 1 above are as follows:

- TapBoost products manufactured by the Company 2 years from date
 of purchase provided the warranty registration is completed online
 or over the phone within 15 days of purchase.
- b. Products supplied by the company, but are not of the company's manufacture come with 30 day warranty from date of purchase.
- The warranty period in respect of any product repaired or replaced under the warranty shall be part of the above period(s) which remain unexpired.
- d. In the event of a claim for repairs or replacement being made under the terms of this Warranty, a visit from a Salamander service engineer may be necessary. Engineer visits are not covered under/part of the warranty agreement. In circumstances where in the opinion of the Company the defect has not been caused by the Company's materials or workmanship then the Company reserves the right to charge the claimant at its current hourly rates and list prices in respect of any service engineer's time and replacement of any parts. Please speak to our PumpWise for further details and confirmation of costs. Be advised in order for the equipment to be assessed by an onsite engineer the equipment must remain insitu.
- e. This Warranty is given in addition to and does not affect your statutory rights as a consumer.
- f. This Warranty is valid and enforceable for equipment purchased and used exclusively in the UK and The Republic of Ireland only.
- g. Where the Company issues a replacement the equipment replaced shall be returned to the Company forthwith and shall become the property of the Company.
- No authority has been given to any person, firm or company to vary the terms of this Warranty.

Get in touch, we're here to help call us on 0191 516 2002

Unit 2c Colima Avenue Enterprise Park West Sunderland, SR5 3XE

For ROI/EU Customers: MT Agencies Ireland Ltd Fearn House, Jamestown Business Park Jamestown Road, Finglas, Dublin 11, D11 K7TV











Register your warranty

Apply online at: www.salamanderpumps.co.uk

Apply by phone: 01915162002



