

Aqua free



Operating and installation instructions

FLUSH 2.0



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1 Safety instructions

IMPORTANT! Please read these instructions carefully. The manufacturer accepts no liability for any damage that occurs because these instructions are not followed. For future reference keep these instructions in the case with the flushing system.

CAUTION

If the flushing system is connected to a low-pressure system such as a boiler there is a risk of pressure build up, causing leakage.

Before installing the flushing system check the water outlet and associated pipework. If gaskets or joints are damaged or unsecure, the additional weight of the flushing system can cause leakage.

2 Instructions for fitting and initial operation

Only suitably qualified technicians using appropriate tools should install and set-up the FLUSH 2.0 flushing system.

NOTE

The battery of the flushing system lasts for one year.

The date of the next battery change can be recorded on the device itself using the stickers supplied.

In the event of battery failure the valve failsafe position is CLOSED and the "DELAY", "FREQUENCY" and "RUN TIME" LEDs on the display will flash repeatedly.

When the battery is changed the flushing program will return to its default settings. The required programme should be re-entered and then re-activated by pressing the SET key for at least five seconds.

3 General instructions

3.1 Backflow protection

IMPORTANT! Before the flushing system is used with a mixer tap or similar it is important to make sure non-return valves are fitted.



WARNING

If the flushing system is used without non-return valves being fitted or working, any back pressure from the hot water supply risks contaminating the whole of the drinking water supply system.

Non-return valves should be fitted on both the hot water **and** cold water supply pipes to the tap.

The flushing system should not be used without functioning non-return valves in place.

3.2 Storage

Dry all of the individual components before storage and disconnect the battery. Store the components of the flushing system in the case provided.

3.3 Disposal

Please dispose of the packaging for this product in an environmentally friendly way. Do not dispose of batteries with domestic refuse. Take them to special battery collection points.

4 Product description

Aqua free has developed the FLUSH 2.0 flushing system to automatically and individually flush water outlets that are rarely used or left unused for periods of time. It prevents water stagnation and the threat of microbial contamination in the pipes.

FLUSH 2.0 can be easily installed on any taps, showers or other water outlets in private homes, public buildings or commercial establishments.

Recommendations for flushing cycles and flushing duration:

If drinking water pipes are flushed daily Aqua free recommends a flushing duration of 5 minutes.

However the precise duration depends on the cross section and length of the pipe and the water pressure although reference should always be made to national guidelines for flushing.



5 Technical data

Coupling options provided	M24×1; M22×1; G½"
Operating voltage:	9 Volt DC
Operating pressure:	0.2 - 10 bar
Water temperature:	5° - 60° C (without limitation) 60° - 90° C (lifetime reduced by 40%)
Flow rate:	20 l/min
IP rating:	IP68
Batteries used:	1× 9 volt PP3 (alkaline)
Flushing durations:	30 sec; 1 min; 2 min; 3 min; 4 min; 5 min; 10 min
Flushing intervals:	every 1 h; 2 h; 4 h; 8 h; 12 h; 24 h; 48 h; 72 h
Medium:	drinking water

6 Items supplied

1× FLUSH 2.0 flushing system	2× 9-volt PP3 battery
1× M24 adapter (including sealing gasket and U-clamp)	1× spanner (22 mm und 24 mm)
1× M22 adapter (including sealing gasket and. U-clamp)	2× hygienic flow straightener
1× G½"-adapter (including sealing gasket and U-clamp)	1× replacement sealing gasket
5× replacement O-rings (for attachment piece)	1× operating instructions
1x short instructions	5 x battery change sticker

7 Handling

Installation:

- Check whether non-return valves are fitted in the pipes supplying the tap.



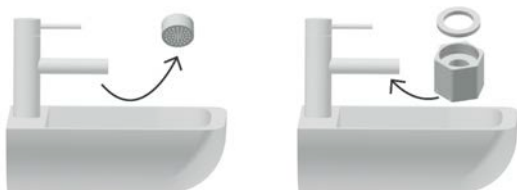
WARNING

If the flushing system is used without non-return valves being fitted or working, any back pressure from the hot water supply risks contaminating the whole of the drinking water supply system.

Non-return valves should be fitted on both the hot water **and** cold water supply pipes to the tap.

The flushing system should not be used without functioning non-return valves in place.

- Remove the aerator (from taps) or unscrew the shower hose (from showers)



- Then fit the appropriate quick-fit adapter with sealing gasket (the set includes three different adapters).

CAUTION

Ensure that the adapter is fitted to a fixed water outlet such as a wall-mounted shower or free-standing tap.

Fitting at the end of a flexible shower hose is not permitted because of the uncontrolled outflow of flushing water and possible resultant water damage.

- To insert the battery, first unscrew the transparent cover of the flushing system and remove the black battery cover below the operating panel.

CAUTION

When the transparent cover is removed the unit electronics can be damaged by water ingress. For this reason always detach the flushing system before programming it or changing the battery.

Ensure that you always programme the flushing system and change the battery in a dry environment.

- Connect the snap contact of the flushing system to the battery. Remove the protective film from the battery if necessary. Once the battery is installed the system performs a system check in which each of the LEDs flashes once in turn.

NOTE

The flushing program cannot be activated if the battery voltage is too low. In this case the “DELAY”, “FREQUENCY” and “RUN TIME” LEDs flash and the battery must be replaced.

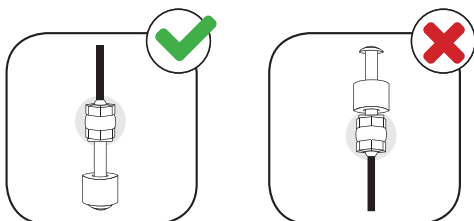
- Program the flushing device, if necessary refer to section 8.3.
- Replace the black cover on the battery compartment and screw the transparent cover back into place.
- Empty the washbasin and check that the water can flow away freely. Fix the water level switch to the inner edge of the washbasin with the float pointing vertically downwards.
- Wet the suction cup with water so that it holds firmly to the side of the basin. Ensure that the cable is not hanging down and pulling on the suction cup.

CAUTION

If the drain is blocked or the level switch wrongly fitted, water cannot run away creating a risk of overflow.

Make sure that no objects can obstruct the flow of water and that the water can drain away freely.

Ensure that the suction cup is correctly fitted and securely fixed.



Check that the level switch is correctly oriented; the float must be able to move freely and must point downwards.

- Moisten the O-ring of the FLUSH coupling with water (for easier and safer installation); then push the coupling into the adaptor with a slight turning movement and lock the FLUSH 2.0 in place with the U-clamp. Check that the flushing system is seated securely.



- Turn on the tap and no water should flow.
- Carry out a test flush (see section 8.3)

Regular checks:

■ Every 4 weeks:

- Check for potential blocking of the washbasin.
- Check that the water can flow away freely.
- Check that the level switch is correctly positioned, securely fixed and the float able to move freely.
- If necessary position the level switch and suction cup correctly. Replace damaged suction cup if required.

■ Every 6 months:

- Check the function of the flushing system: test the manual mode of drawing water and carry out a test flush, see section 8.3.

■ Yearly:

- Replace the battery, renew the battery change sticker

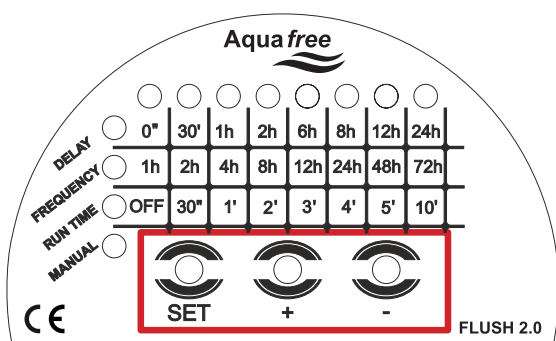


After use:

- Turn off the tap, remove the U-clamp and disconnect the FLUSH unit.
- To deactivate the flushing electronics unscrew the transparent cover and remove the black battery cover. Then disconnect the battery from the FLUSH unit.
- Release the level switch.
- Dry the flushing system and store the components in the case provided.
- Replace the tap aerator or shower hose as appropriate.

8 Programming the flushing system

8.1 Operating principle



The flushing system is controlled with the three keys labelled “SET”, “+” and “-” at the bottom of the operating panel.

8.2 Default settings

The default settings of the flushing system are as follows:

- DELAY: 0 minutes
- FREQUENCY: 24 hours
- RUN TIME: 5 minutes

To activate the flushing system press the “SET” key and hold it down for longer than five seconds. After this confirmation, the flushing programme is activated.

NOTE

Programming can only be activated from the “FREQUENCY” or “RUN TIME” areas. Switch to the corresponding function by pressing the “SET” key.

The LEDs are turned off after one minute of inactivity. If one of the three keys is pressed for three seconds the display is turned on again.

8.3 Examples

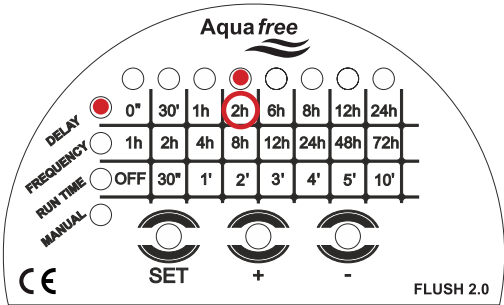
The function to be changed can be selected by pressing the “SET” key repeatedly. The required times can then be set with the “+” and “-” keys.

NOTE

After the “+” and “-” keys have been released the most recent values are stored. These new times will be used for the next flushing cycle.

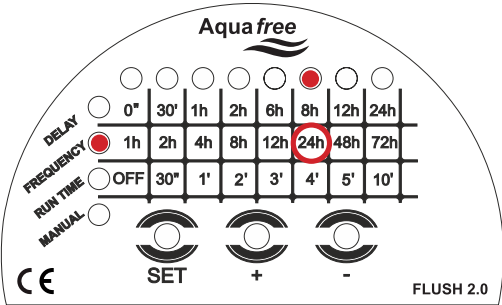
The following illustrated examples provide explanation of the different functions available:

DELAY: Preselection of starting time/ delay before the first flush



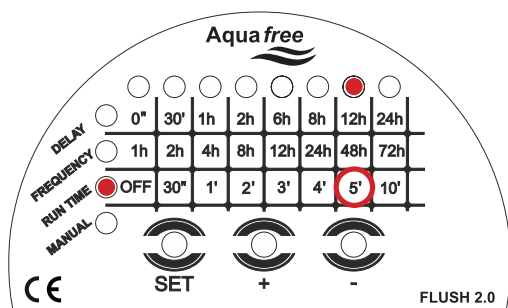
Example: DELAY = 2h
The first flush begins in 2 hours.

FREQUENCY: Pause between flushes



Example: FREQUENCY = 24h
Flushes are repeated every 24 hours.

RUN TIME: Duration of flushing

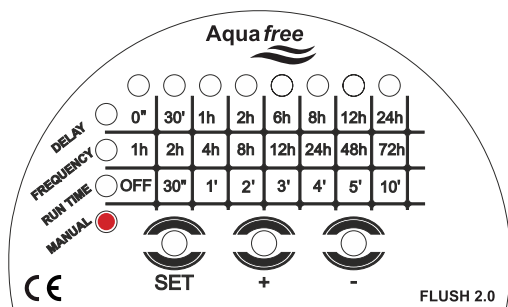


Example: RUN TIME = 5': Flushing continues for 5 minutes.

Times can be increased with the "+" key.

Times can be reduced with the "-" key.

MANUAL: Mode for drawing water manually and checking the functioning of the flushing system (test flush)



The valve is opened by pressing the "+" key.

The valve is closed by pressing the "-" key.

9 Trouble Shooting

The following table provides typical error modes and a solution for the FLUSH 2.0 unit. If your error is not listed please contact your local Aqua free representative.

Error	Cause	Procedure
Flushing programme cannot be activated	The setting is not on the right programmes	By pressing the "SET" key, change to "FREQUENCY" or "RUN TIME". Then press "SET" key for at least 5 seconds.
Flushing programme does not run	Water supply faulty	Check that the tap and any isolation valves are open
	The flushing program has not been saved	Press SET key for 5 seconds
	The battery is flat (the "DELAY", "FREQUENCY" and "RUN TIME" LEDs are flashing)	Change the battery
	Level switch incorrectly fitted	Check that the level switch can move freely and the float is pointing downwards
Level switch comes away from side of washbasin	Washbasin is not clean	Check that the surface of the washbasin is clean, dry and free of grease
	Suction cup is not clean	Check that the surface of the suction cup is clean, dry and free of grease
Leakage between water outlet and FLUSH unit	Faulty sealing gasket	Check the sealing gaskets and replace any that are damaged

10 Manufacturer

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