



WaterHub+

Installation Guide

LeakSafe 

INSTALLATION GUIDE

A. General

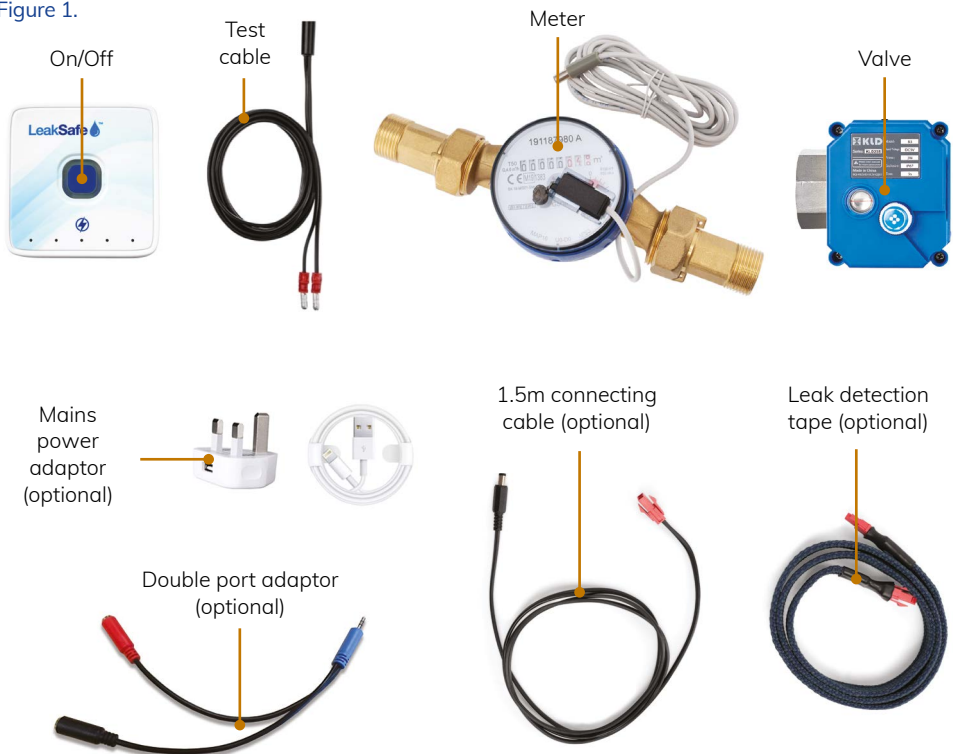
WaterHub+ is a smart water control system that helps protect property from leaks and water damage.

What it does:

- Manual On/Off for the water supply.
 - Automatic shut-off if it detects continuous water flow (possible leak), no flow (indicating the property may be empty), or a wet leak detection tape.
 - Optional leak detection zones (up to 4).
 - Sends alerts via SMS, email, or app (if enabled).
 - Runs on battery power or mains power with battery backup.
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B. Components

Figure 1.



C. Installing the WaterHub+ Control Panel, shut off valve and meter

The WaterHub+ can operate on battery power, or on mains power with battery backup.

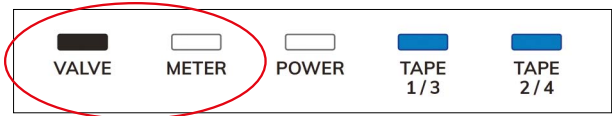
Install the lithium battery in the battery compartment at the back of the control panel. Connect the mains power cable (if using) and plug to the USB-C port marked 'Power'. A green LED will light above the power port when the mains is switched on. The panel will take a minute to be fully powered.

The WaterHub+ control panel must be positioned within 1.5m of the proposed location of the shut off valve. Use the backplate supplied to fix the panel. Slide the control panel upwards to release from the backplate.

The valve and flow meter should be installed by a qualified plumber.

Install the Leaksafe 22mm (DN20) or 28mm (DN25) motorised shut off valve on the incoming main/ supply. The valve can be installed on either horizontal or vertical pipes. Ensure that the top of the actuator with the valve status window and manual override button can be seen and reached. Connect the valve to the port marked 'Valve' on the WaterHub+ control panel. (see Figure 2).

Figure 2.



Install the meter on the incoming supply ensuring that it is installed with the water flow in the indicated direction on the barrel of the meter. If installing a DN25 (28mm / 1") meter with clip on pulse module, ensure that the pulse module is fixed in place with the retaining screw provided, and as shown in the installation instructions sent with the meter. Plug the meter into the port marked "Meter" on the control panel.

PLEASE ALSO SEE SECTION E REGARDING FLOW TESTING.

D. Testing the shut off valve

To test the valve function, press the blue On/Off button (see Figure 1). The LED around the blue button will flash once, green if the control is opening the valve, red if it is closing the valve. The small red LED above the valve port will light to indicate that the command has been sent, and the valve will open/close.

If the valve is not in sync with the control panel i.e., the control flashes green when the valve is already open, wait 5 seconds, press the 'On/Off' button again, the valve will close, and the system will be synchronised.

Please note that if alarm notification (by email/SMS) has been enabled, the WaterHub+ will light blue during transmission - approx 5 seconds. You can't press the On/Off button to open/close the valve whilst the blue LED is lit.

E. Testing the flow and no flow shut off feature

The WaterHub+ is supplied in Engineers Mode that allows you to run a 5-minute test for 'continuous flow' and a 15 minute 'no flow' test. When the system is in engineering mode the red, green and blue LEDs around the On/Off button will flash.

As soon as the control panel detects that a meter is connected it will start the test sequences and will continue to run the sequence until you put the system into User Mode.

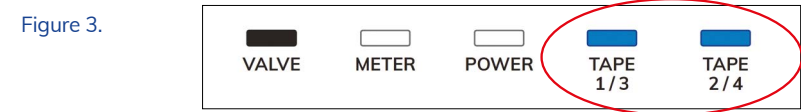
To test, run cold water for approx. 5 minutes and the valve will close. Reopen the valve and make sure no water is being used for approx. 15 minutes. The valve will close.

Once the tests are complete you MUST put the system into User Mode. PRESS and HOLD the 'On/Off' button for approx. 10 seconds and until all the LEDs flash. This will put the system into User Mode and the system will default to factory settings that will shut the water off after 30 minutes of continuous flow and 24 hours of no flow.

PLEASE NOTE: If Engineer Mode is needed again, repeat the press and hold sequence and the system will toggle between Engineer Mode and User Mode.

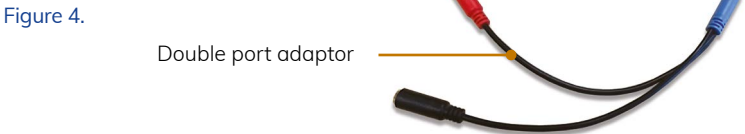
F. Installing the leak detection tape

Install/position any leak detection tape (optional) under pipework connections and wastes and connect using the connecting cable to the "Tape" ports on the WaterHub+ (see Figure 3). The connecting cable can be extended to a maximum 25M using 2 core audio or YY cable and connectors (not supplied). If more than 2 leak detection zones are to be installed, two zones can be connected to one port by using a Leaksafe double adaptor. Zones 1 and 3 are grouped in port 1, zone 2 and 4 in port 2 (see Figure 3).



When using a double adaptor, zones 1, & 2 are plugged into the black port on the double adaptor and zones 3 & 4 are plugged into the red port.

It is essential that the correct cable is plugged into each port to ensure that the correct leak location is transmitted.



G. Testing the leak detection ports

To test the leak detection ports on the control panel, simulate a leak by plugging a test cable into the first port that is to be used and hold the two male test pins together for 20 seconds or drop the pins into water.

The red LEDs associated with the port and the valve will illuminate and the valve will close. If the WaterHub+ has the notification feature enabled, the blue LED will light immediately after the valve closes to indicate that a 'LEAK DETECTED' message is being transmitted. Once the blue LED has gone out disconnect the test cable and open the valve. Repeat the process for any other ports that will be used.

USER GUIDE

TURNING WATER 'ON' AND 'OFF'

On the WaterHub+ control panel, press the Blue 'On/Off' button. The LED around the blue button will flash once, green if the control is opening the valve, red if it is closing the valve. The small red LED above the valve port will light to indicate that the command has been sent, and the valve will open/close.

Please note that if alarm notification (by email/SMS) has been enabled, the WaterHub+ will light blue during transmission - approx 5 seconds. You can't press the On/Off button to open/close the valve whilst the blue LED is lit.

LEAK DETECTION

Continuous Flow:

WaterHub+ measures continuous flow of water through the flow meter to determine abnormal flow that indicates a leak and will turn the valve on the supply 'OFF' if it exceeds 30 minutes. If the notification feature is enabled, you will receive a SMS or email notification that a leak (abnormal flow) has been detected.

Please note washing machines and dishwashers do not pull water continuously and will not trigger an alarm if their cycle exceeds 30 minutes.

Leak detection tape:

If you have installed lengths of leak detection tape and it gets wet, the WaterHub+ will immediately close the valve on the supply. The Red LED above the leak detection tape zone port will light.

If you are using the notification feature you will receive a SMS or email that a leak has been detected, and which zone has been activated.

PLEASE NOTE: that the leak detection tape is deliberately sensitive and will activate with just a few drops of water.

RESPONDING TO A LEAK ALARM

If a leak alarm is raised due to continuous flow and you have checked the property for leaks or know the reason why the alarm has been triggered, then you can open the valve on the Control Panel by pressing the 'On/Off' button.

If a zone (leak detection tape) alarm is raised, the red Zone LED on the WaterHub+ into which the wet tape is plugged will be lit. If you get a notification but when you look at the WaterHub+ the Zone LED is not on, please still check the area, but no LED signifies that the tape has dried since the alarm was raised.

When you find the source of the leak, and if the leak detection tape is still wet, disconnect the tape by unplugging it from the bottom of the WaterHub+, and if safe to do so open the valve by pressing the 'On/Off' button on the Control Panel.

Repair the leak and let the tape dry completely before plugging it back in. If an alarm is raised as soon as you plug the tape back in, then it is not yet dry. Disconnect and leave for a further period to dry then re-connect.

PLEASE REMEMBER: to re-connect the tape as soon as possible once it is dry. The location where the tape was activated is not protected unless it is plugged into the WaterHub+.

WATER SHUT OFF AS A RESULT OF NO FLOW

If the system does not sense any water going through the meter for 24 hours, it is programmed to shut the valve as the property is likely unoccupied. To re-instate the water simply press the 'On/Off' button on the Control Panel.

MANUAL OVERRIDE

If needed, the valve can be opened or closed manually. To manually operate the valve, lift and turn the operating button (Figure 5). The button must be fully out. When the valve is open the red line in the valve status window is parallel to the water pipe and at right angles when closed. Push the operating button down when finished.

Figure 5.



MAINTENANCE

The WaterHub+ can be mains powered with lithium battery backup, or operate on battery only. Battery life is 2 – 5 years depending on use and ambient conditions.

We recommend you test the valve function regularly and change the battery every 2 years. If the notification feature is enabled, you will receive a LOW BATTERY warning when the battery needs changing. The battery is NOT rechargeable.

To change the battery, slide the Control Panel upwards to release it from its wall bracket and reveal the battery compartment on the back. Lithium battery type ER26500.

VALVE DECALCIFICATION ROUTINE

WaterHub+ is programmed to automatically part close then open the valve once a week at 03:00 hours to prevent any possible build-up of calcium on the valve that could cause it to seize.

For technical support:

<https://leaksafe.com/support/waterhub-support-2/>



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