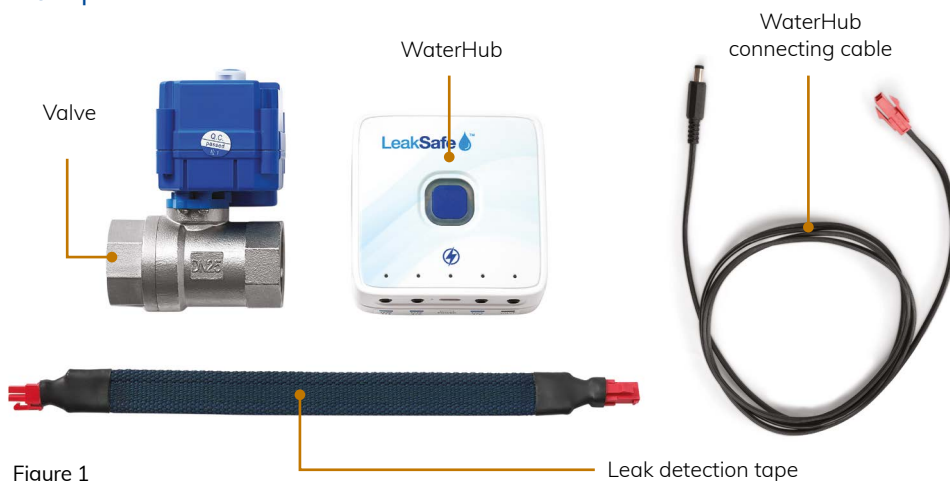# WaterHub

## Installation Guide

LeakSafe™

# INSTALLATION GUIDE

## A. General

WaterHub is a manual water On/Off system and 6-zone leak detection, automatic water shut off and leak notification system.

Each port that is used is programmed with a location tag so that if a leak is detected the notification gives precise date, time, and location information.

## B. Components

WaterHub

Valve

WaterHub connecting cable



Figure 1

Leak detection tape

## C. Installing the WaterHub and shut off valve

The WaterHub can operate on either lithium battery or on mains power with battery backup.

Install the ER26500 lithium battery in the battery compartment at the back of the WaterHub and connect the mains power adaptor (if being used) to the USB-C port marked "Power". If a mains power adaptor is being used a green LED will light above the power port when the mains is switched on.

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

Install the Leaksafe 22mm (DN20) or 28mm (DN25) motorised shut off valve on the incoming main/supply and connect the valve lead to the port marked "Valve" on the WaterHub. The valve should be installed by a qualified plumber.

## D. Testing the shut off valve

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

After the valve has turned, a blue LED around the blue On/Off button will light. This is the system sending a status message to the Leaksafe data platform. You must wait till the blue LED goes out before you can open or close the valve again.

If the WaterHub flashes green when the valve is already open, once the blue LED goes out press the On/Off button again, the valve will close and the system will be synchronised.

If the valve is closed the red LEDs on either side of the On/Off button will flash once every few seconds to give a visual indication of the valve status.

## E. Installing the leak detection tape

Install/position leak detection tape under pipework connections and wastes and use 2 core YY 0.05mm$^2$ cable to connect the tape and the WaterHub connecting cables (see Figure 1 and Figure 2).

Figure 2

● WaterHub
● Shot off valve
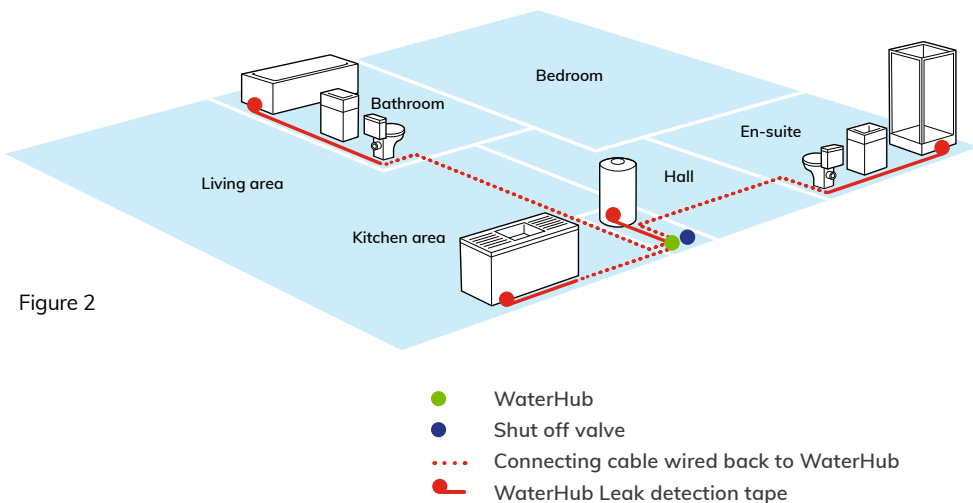···· Connecting cable wired back to WaterHub
⌐● WaterHub Leak detection tape

The tape can be laid directly on a floor or surface with or without retaining clips depending on the location of the tape and whether it is likely to be disturbed. Leaksafe use either Hellerman Tyton or RS self-adhesive clips as needed.

Tape can also be contained within predrilled 16mm x 25mm mini trunking if appropriate, ensuring that there are sufficient holes of adequate size so that if a leak does occur, the water would quickly soak into the leak detection tape.

We recommend that the leak detection tape is labelled "LEAK DETECTION TAPE DO NOT MOVE OR DISCONNECT".

Connect the tape to the YY cable using either a female Molex connector or female red bullet connectors depending on what has been specified, and at the other end of the YY cable connect to the WaterHub connecting cable and plug using male connectors.

Each zone port on the WaterHub will be pre-programmed with the zone location you have specified to Leaksafe. Example: Zone 1: Kitchen, Zone 2: Utility Cupboard, Zone 3: Master en-suite etc. It is very important that each connecting cable is labelled with the zone location so that it is plugged in to the correct port.

If more than 3 leak detection zones are to be installed, two zones can be connected to one port by using a Leaksafe double adaptor.

Zone 1 and 4 are grouped in port 1, zone 2 and 5 in port 2 and zone 3 and 6 in port 3 – see figure 3.
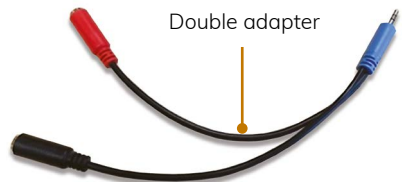


Double adapter

| TAPE 1/4 | TAPE 2/5 | POWER | TAPE 3/6 | VALVE |

Figure 3

Zones 1, 2 & 3 are plugged into the black port on the double adaptor and zones 4, 5 & 6 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.**

**Please note:** The maximum combined length of tape, YY cable and the cable that plugs into the control panel is 25M. Exceeding this limit may result in false alarms. The entire length should be tested for continuity prior to any areas e.g., bathrooms being sealed.

## F. Testing the leak detection ports

**We recommend that you ask Leaksafe to set up a test email or SMS facility to ensure that notifications are received when testing the leak detection ports. Contact info@leaksafe.com or telephone 0344 848 0488 to arrange this.**

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. Immediately after the valve closes the blue LED will light 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.

**Leaksafe Solutions Limited**

Unit D Rose Court, 89 Ashford Road, Bearsted, Maidstone, ME14 4BS, United Kingdom

Tel: **0344 848 0488**  Web: **www.leaksafe.com**  Email: **info@leaksafe.com**