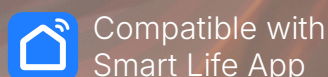
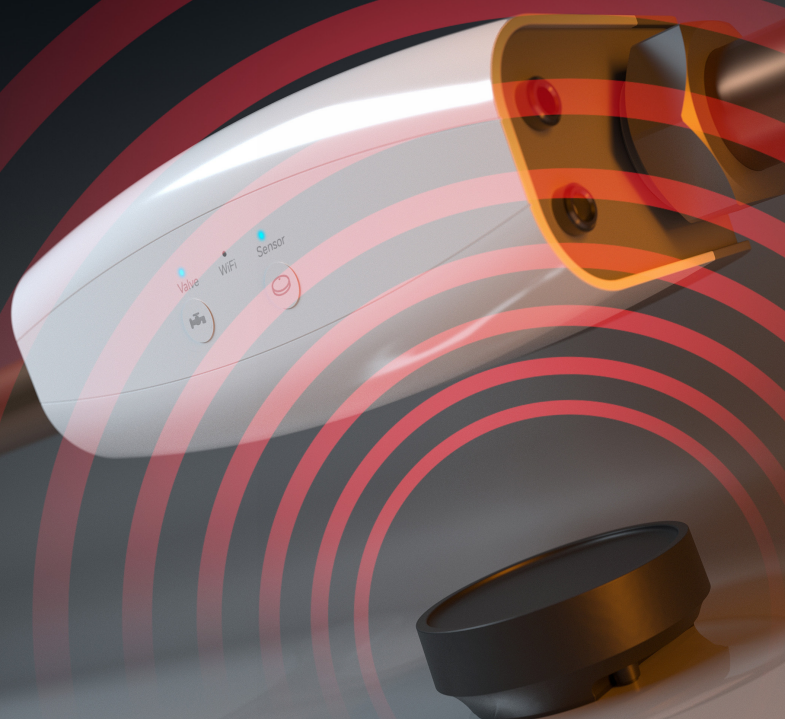




INSTALLATION AND OPERATING GUIDE





PRODUCT OVERVIEW

Activ Leak Sense (ALS) is a fully automated water leak detection and shut-off system designed for domestic and small commercial properties. The system continuously monitors water flow and can automatically close the water supply when abnormal flow conditions are detected. The system also supports wireless floor leak sensors for additional protection.

PRE-INSTALLATION REQUIREMENTS

IMPORTANT INSTALLATION NOTES

- Activ Leak Sense must be installed on the incoming mains cold water supply to the property.
- Installation must not be positioned before any fire sprinkler system connection.
- Suitable for cold potable water systems only.
- The installation position should protect all downstream pipework and outlets within the property.
- The unit may be installed horizontally or vertically.
- The installation location must remain accessible for operation, maintenance and inspection.
- Activ Leak Sense is designed for installation on rigid copper pipework.
- The supplied power adaptor lead is approximately 1.5m long.
- A suitable 230V electrical socket must be available within 1.5m of the valve assembly.
- Electrical installation must comply with local electrical regulations and BS 7671 requirements.
- Electrical work should only be carried out by a qualified installer.

PIPEWORK REQUIREMENTS

Straight Pipe Requirements

To ensure accurate ultrasonic flow measurement:

- Minimum 200mm straight pipe required upstream of the valve.
- Minimum 100mm straight pipe required downstream of the valve.

Failure to maintain these distances may create turbulence and affect flow sensor accuracy.

Flow Direction

IMPORTANT:

- Ensure the valve is installed in the correct direction.
- Observe the flow direction arrow marked on the valve body.

Isolation Valves

It is strongly recommended that isolation valves are installed:

- Upstream of the Activ Leak Sense valve.
- Downstream of the Activ Leak Sense valve.

This will facilitate future maintenance and servicing.

VALVE INSTALLATION

STEP 1

Isolate the incoming water supply to the property.

STEP 2

Drain the pipework as required.

STEP 3

Select a suitable installation position on the incoming mains water supply.

CONFIRM:

- 200mm straight pipe is available before the valve.
- 100mm straight pipe is available after the valve.
- The flow direction arrow will align with the direction of water flow.

STEP 4

Mark and remove the section of pipework required to accommodate the valve assembly.

VALVE DIMENSIONS:

- Length: 196mm
- Width: 72mm
- Height: 83mm

STEP 5

Assemble the supplied connection adaptors onto the valve.

ENSURE:

- The supplied 1" rubber washers are correctly fitted.
- Connections are tightened securely.

STEP 6

Connect the valve to the pipework using an approved installation method suitable for the pipe material.

Note: Connection fittings are installer supplied and are not included with the Activ Leak Sense unit.

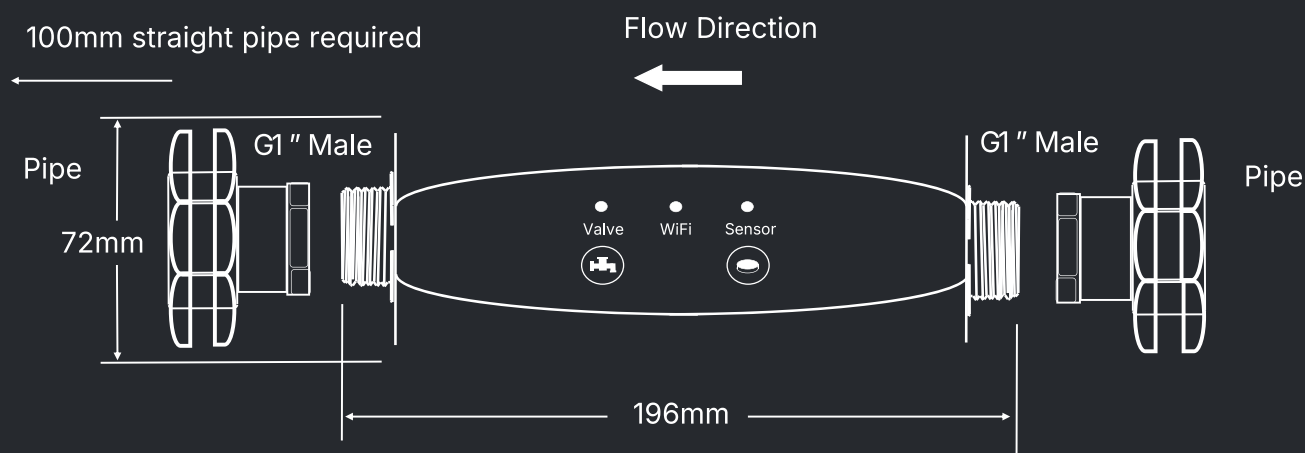
STEP 7

Open the water supply and inspect all joints and connections for leaks.

STEP 8

Flush the pipework to remove any trapped air before electrical commissioning.

DIMENSIONS



ELECTRICAL CONNECTION & POWER-UP

STEP 1

Insert the supplied power adaptor into a suitable 230V mains socket.

STEP 2

Connect the DC power connector to the Activ Leak Sense valve assembly.

STEP 3

The valve will perform an automatic self-test.

DURING THIS PROCESS:

- Valve LED will flash.
- Valve will automatically close.
- Valve will automatically reopen.

STEP 4

Once all LEDs are flashing, press the Valve/ Wi-Fi button to complete startup.

LED STATUS INDICATORS

Valve LED

- Solid Blue = Valve Open
- Flashing Blue = Valve Moving
- Off = Valve Closed

Wi-Fi LED

- Solid Blue = Connected to Wi-Fi
- Flashing Blue = Searching / Pairing Mode
- Off = Not Connected

Sensor LED

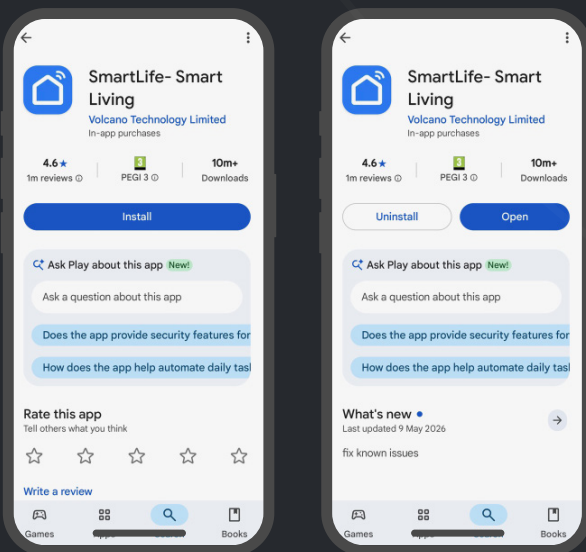
- Solid Blue = Sensor Paired
- Flashing Blue = Pairing Mode
- Off = No Sensor Connected

SMART LIFE APP SETUP

STEP 1

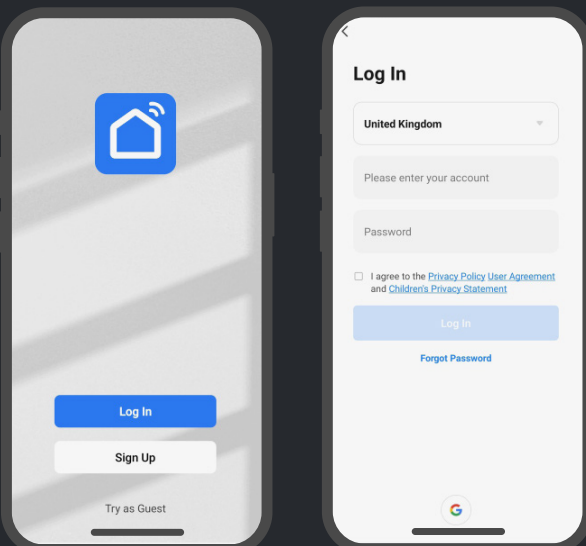
Download the Smart Life App from:

- Apple App Store (iOS)
- Google Play Store (Android)



STEP 2

Create a Smart Life account or log in using an existing account.



STEP 3

Place the Activ Leak Sense unit into Wi-Fi pairing mode.

Enter Pairing Mode

Press and hold the Valve/Wi-Fi button for approximately 3 seconds.

The device will:

- Emit a beep.
- Begin Wi-Fi setup mode.

If the Wi-Fi LED is not flashing:

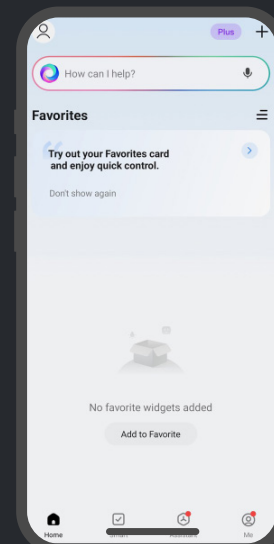
Press and hold the button for approximately 5 seconds until the Wi-Fi LED flashes.

Wi-Fi Requirements

- Device must be connected to a 2.4GHz Wi-Fi network.
- Mobile device must be connected to the same Wi-Fi network.

STEP 4

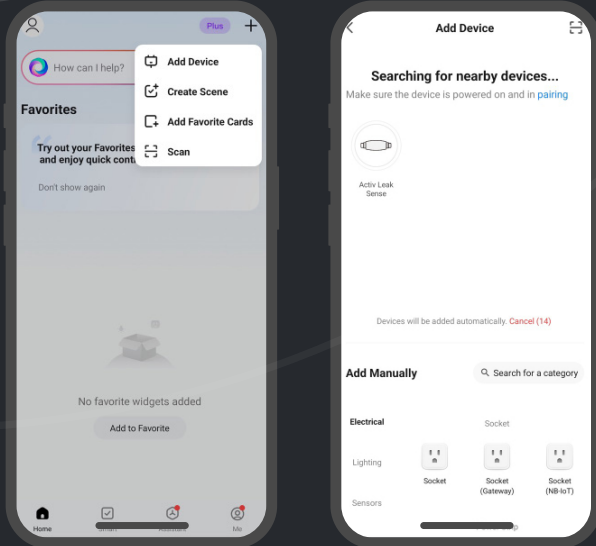
Open the Smart Life App.



STEP 5

Select: "+" (Top Right Corner)

Select: "Add Device", the App will automatically scan for nearby devices.



STEP 7

The application will display: "Leak Sense is being added..." Connection may take up to 30 seconds.

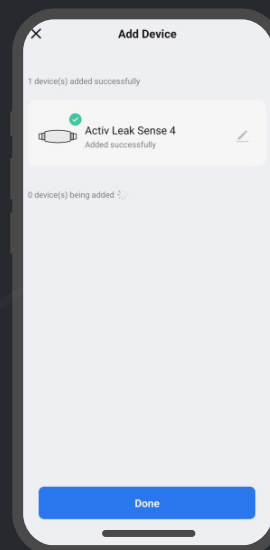
STEP 8

Upon successful connection:

"Device Added Successfully"

will be displayed.

The Wi-Fi LED will become solid blue.



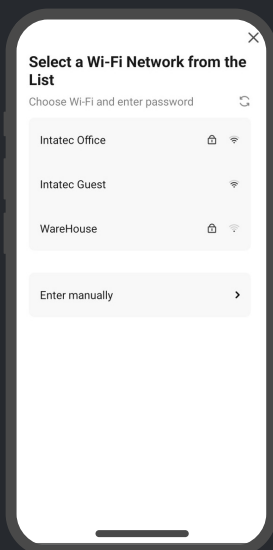
STEP 6

Select the appropriate Wi-Fi network.

Enter:

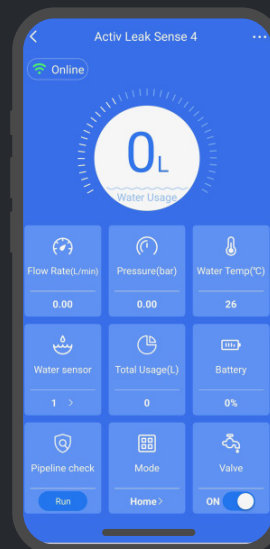
- Wi-Fi Name (SSID)
- Wi-Fi Password

Select: "Next".



STEP 9

Connection complete.



SYSTEM COMMISSIONING

IMPORTANT:

During commissioning, the valve should remain in the **CLOSED** position.

The valve status is shown on the lower right-hand side of the App.

After all settings have been configured and verified, the valve can be opened.

PARAMETER SETTINGS

Navigate to: Leak Alarm Parameters and configure the required settings.

1. Flow Detection Value

Purpose: Defines the maximum permitted continuous volume of water usage before an alarm condition is generated.

Adjustable Range: 50 – 990 Litres

Recommended Setting: Set above normal daily usage events but below levels associated with leak conditions.

2. Time Detection

Purpose: Defines the maximum permitted continuous water flow duration.

Adjustable Range: 30 – 120 Minutes

Manufacturer Reference: 30 – 90 Minutes minimum range shown in App.

Recommended Setting: 60 Minutes for typical domestic installations.

3. Anti-Freeze Detection

Purpose: Provides low temperature warning.

Alarm activates when temperature falls within: 2°C – 8°C (adjustable)

Recommended Setting: 5°C

4. No Flow Detection

Purpose: Generates an alert if no water usage is detected for an extended period.

Adjustable Range: 8 – 48 Hours

Options: ON/OFF

Typical Use: Monitoring vulnerable occupants or vacant properties.

5. Large Flow Detection

Purpose: Detects unusually high flow rates that may indicate burst pipes or major leaks.

Adjustable Range: 1 – 60 Litres per Minute

Options: ON/OFF

Recommended Setting: 15–25 L/min for typical domestic installations.

6. Regular Pipe Inspection

Purpose: Automatically checks the integrity of the plumbing system by performing periodic monitoring routines.

Recommended Setting: ON

Suggested Schedule: Enable automatic periodic inspection to identify developing leaks or abnormal consumption patterns before significant damage occurs.

WIRELESS FLOOR LEAK SENSOR SETUP

Up to 8 wireless leak sensors can be paired to each Activ Leak Sense valve.

SENSOR PAIRING PROCEDURE

STEP 1

Open the Smart Life App.

STEP 2

Select: Water Sensor

STEP 3

Select: Add

STEP 4

Create a sensor name, Select Confirm.

STEP 5

Install the supplied CR2477 battery.

Ensure: Positive (+) side faces upward.

STEP 6

The sensor LED will flash once and automatically search for the valve.

STEP 7

Press the Sensor Pairing button on the Activ Leak Sense valve.

Successful pairing will be confirmed by:

- Audible tone.
- Sensor information appearing in the App.
- Sensor LED indication.

STEP 8

Install sensors in high-risk locations such as:

- Under sinks.
- Washing machines.
- Dishwashers.
- Bathrooms.
- Flexible hose connections.

Sensors should be placed on a flat, non-conductive floor surface.

BATTERY BACKUP INSTALLATION

STEP 1

Fix the battery pack bracket to a nearby wall.

STEP 2

Install the battery pack into the bracket.

STEP 3

After commissioning is complete, connect the battery pack lead to the valve assembly.

Battery backup is now active.

Important: Replace batteries immediately when low battery warnings occur.

SYSTEM TESTING

MANUAL VALVE OPERATION TEST

Press the valve control button briefly.

Verify:

- Valve opens.
- Valve closes.
- LED indications operate correctly.

WIRELESS SENSOR TEST

Touch both contacts with water to simulate moisture detection

Confirm:

- Leak alarm activates.
- Alarm appears in the App.
- Valve responds correctly

LEAK DETECTION TEST

Confirm:

- Flow alarms operate correctly.
- Valve closes when alarm thresholds are exceeded.
- Alarm can be reset from:
 - Valve button
 - Smart Life App.

MAINTENANCE

ANNUAL VALVE TEST

At least once per year:

- Manually operate the valve.
- Confirm full open and close operation.

CLEANING

Clean only using:

- Water
- Mild detergent
- Damp cloth

Do NOT use:

- Alcohol-based cleaners
- Solvents

These may damage the plastic housing.

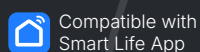
ALARM CONDITIONS

The system can generate alarms for:

- Water leak detection
- Large flow detection
- Excessive flow duration
- Frost warning
- Low sensor battery
- Low backup battery
- Sensor communication loss
- Network disconnection

SENSOR TESTING

Periodically test each wireless leak sensor.



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