

LEAKSMART 8880100

leakSMART 1-inch Automatic Water Shut-Off Valve Instruction Manual

Model: 8880100

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the leakSMART 1-inch automatic water shut-off valve, model 8880100. This device is designed to protect your property from water damage by automatically shutting off the main water supply upon detection of a leak. The valve integrates with leakSMART sensors and a smart hub (sold separately) to provide an immediate response system.

Key features include:

- Automatic water shut-off in approximately 5 seconds when paired with leakSMART sensors and smart hub.
- Clear LED indicators (green for open, red for closed) for valve status.
- Compatibility with various pipe installation types: male and female NPT threaded, SharkBite, or PEX tubing.
- Integrated battery backup for continued operation during power outages.
- Smart home system compatibility with platforms such as Nest, Wink, IRIS, and SmartThings.



Image 1.1: Overview of the LeakSmart system, highlighting intelligent leak and flood protection for homes.



Image 1.2: Illustration of potential water damage from a burst pipe, emphasizing the need for protection.

2. SAFETY INFORMATION

WARNING: This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, please visit www.P65Warnings.ca.gov.

Always follow local plumbing and electrical codes during installation. Professional installation is recommended to ensure proper function and compliance with safety standards.

3. PACKAGE CONTENTS

The leakSMART 1-inch Automatic Water Shut-Off Valve package includes:

- One (1) leakSMART 1-inch Automatic Water Shut-Off Valve.
- Four (4) AA batteries (pre-installed or included separately).



Image 3.1: The leakSMART 1-inch Automatic Water Shut-Off Valve, showing the main unit and brass valve body.

4. SETUP AND INSTALLATION

Professional installation by a qualified plumber is strongly recommended for the leakSMART Automatic Water Shut-Off Valve. Incorrect installation can lead to leaks or improper operation.

4.1 Pre-Installation Considerations

- **Valve Size:** Ensure you have the correct 1-inch valve size for your main water line.
- **Pipe Compatibility:** The valve accommodates male and female NPT threaded, SharkBite, or PEX tubing connections.
- **Location:** Install the valve on your home's main water supply line, typically after the main shut-off valve and before any branches.
- **Power:** The valve operates on battery power (4 AA batteries included) and can also be connected to an optional power adapter (sold separately) for continuous power.
- **Smart Home Integration:** For automatic leak detection and shut-off, the valve requires pairing with leakSMART sensors

and a leakSMART smart hub (both sold separately).

4.2 Installation Steps (Professional Recommended)

1. Turn off the main water supply to your home.
2. Drain the water lines to relieve pressure.
3. Cut into the main water line at the desired installation point.
4. Install the leakSMART valve according to the specific pipe connection type (NPT, SharkBite, or PEX). Ensure proper sealing to prevent leaks.
5. Install the 4 AA batteries into the valve's battery compartment.
6. Slowly turn the main water supply back on and check for any leaks around the valve connections.
7. Proceed to pairing the valve with your leakSMART smart hub and sensors.

4.3 Pairing with Smart Home Systems

The leakSMART valve is compatible with various smart home platforms, including Nest, Wink, IRIS, and SmartThings. Refer to your specific smart home hub's instructions for pairing new Z-Wave or Zigbee devices. The leakSMART hub (sold separately) provides dedicated integration and control.



Image 4.1: The leakSMART valve, hub, sensor, and smartphone app, illustrating the complete system for water leak protection.

**LeakSmart Valve**

An electronic motorized brass ball valve that connects to your main water line. Receives signal and automatically shuts off your house's entire water supply to prevent any further damage.

**LeakSmart Hub**

Communicates between the sensors, the valve, and you. The LeakSmart System can also be used with other compatible Smart Home platforms.

**LeakSmart Sensor**

Place behind appliances, under pipes, and in other places where leaks may occur. Detects leaks and monitors temperature. Signals your LeakSmart Valve to automatically shut off water the moment a leak is detected.

**LeakSmart App**

Instantly notifies you when a leak is detected, and monitors temperature, battery life, and connectivity. The app also enables you to turn your main water on or off remotely.

Image 4.2: Detailed view of the LeakSmart system components, including the valve, hub, sensor, and mobile application.

5. OPERATION

Once installed and paired with leakSMART sensors and a smart hub, the valve operates automatically to protect your home.

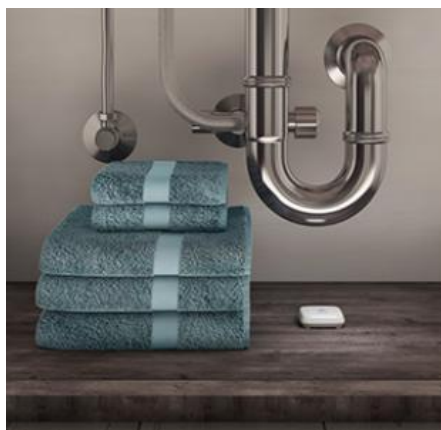
5.1 Automatic Shut-Off

When a leakSMART sensor detects water, it sends a signal to the smart hub. The hub then commands the leakSMART valve to close, shutting off the main water supply to your home within approximately 5 seconds. This rapid response minimizes potential water damage.



Shuts off your water main in 5 seconds or less.

Image 5.1: The leakSMART valve with text indicating its ability to shut off the water main in 5 seconds or less.



LeakSmart is leak and flood protection solved.

Senses leaks.

Place wireless, waterproof LeakSmart Sensors around appliances, water heaters, bathrooms, and HVAC units for nonstop protection.

Responds Instantly.

At the first sign of unwanted water, the LeakSmart Sensor springs into action, sounding an alarm, sending a text alert, and prompting the LeakSmart Valve to shut off your water main supply.

Prevents damage.

The LeakSmart Valve shuts off your water in 5 seconds or less and thus prevents any further damage in the event of a leak.

Image 5.2: Diagram illustrating how the LeakSmart system senses leaks, responds instantly, and prevents damage by shutting off the water supply.

5.2 Manual Control and Status Indicators

The valve features LED indicators on its display:

- **Green LED:** Indicates the valve is in the OPEN position, allowing water flow.

- **Red LED:** Indicates the valve is in the CLOSED position, stopping water flow.

You can also manually open or close the valve using the buttons on the unit or through the leakSMART mobile application (if connected to a compatible smart hub).

5.3 Battery Backup

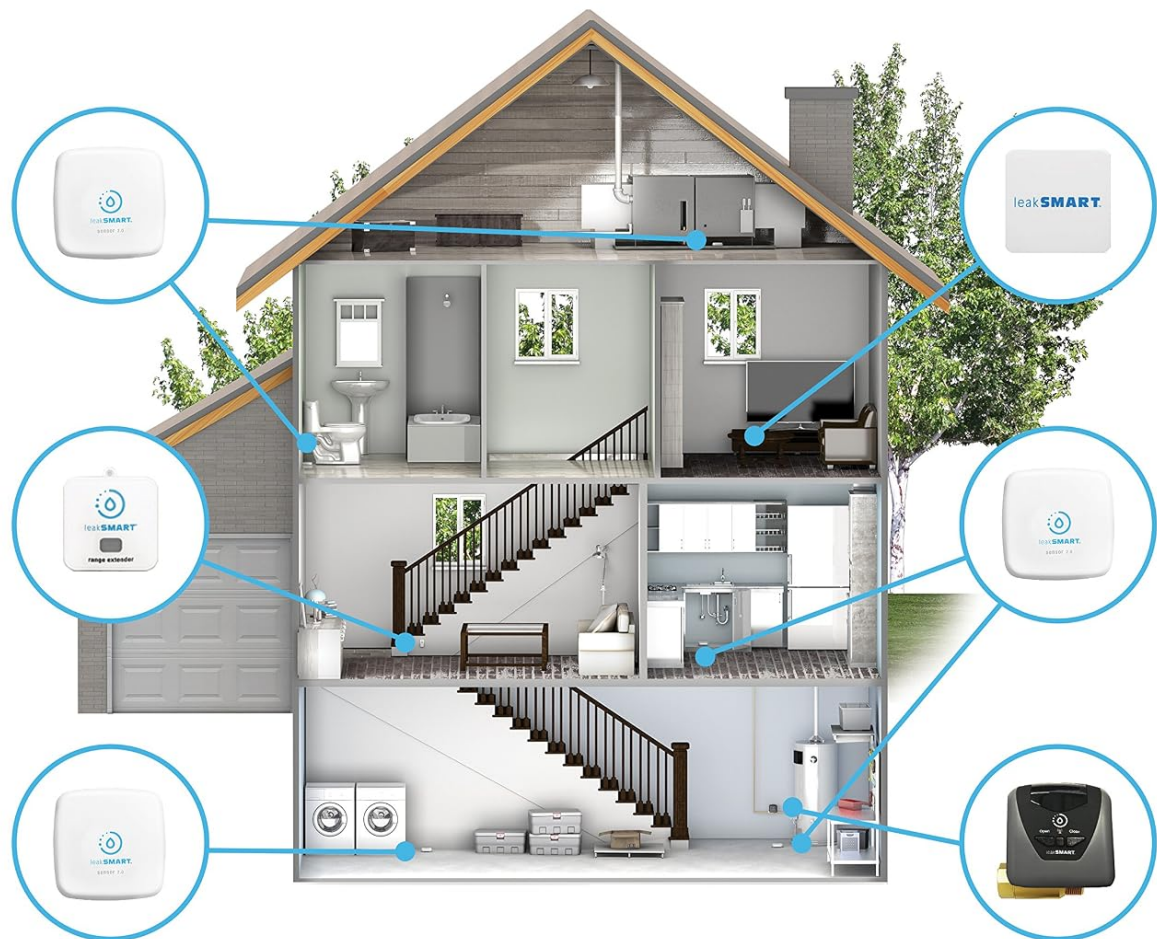
The valve includes a battery backup system, ensuring it can still operate and shut off your water even during a power outage.



Place LeakSmart Sensors where leaks may occur.



Image 5.3: Example placements of LeakSmart sensors in areas prone to leaks, such as under sinks, near washing machines, and toilets.



LeakSmart Sensors can detect leaks anywhere in your home.

Image 5.4: A cross-section diagram of a house showing strategic placement of LeakSmart sensors to detect leaks throughout the home.

6. MAINTENANCE

6.1 Battery Replacement

The valve requires 4 AA alkaline batteries. When the batteries are low, the system will typically send a notification via the leakSMART app (if connected). To replace the batteries:

1. Locate the battery compartment on the valve unit.
2. Open the compartment cover.
3. Remove the old batteries and dispose of them properly.
4. Insert four new AA alkaline batteries, ensuring correct polarity.
5. Close the battery compartment cover securely.

6.2 General Care

Keep the valve unit clean and free from dust and debris. Do not use abrasive cleaners or solvents. Periodically test the valve's operation through the leakSMART app or by manually triggering a sensor to ensure it functions correctly.

7. TROUBLESHOOTING

If you encounter issues with your leakSMART valve, consider the following:

- **Valve Not Responding:** Check the battery level. Replace batteries if necessary. Ensure the valve is within range of your smart hub and that the hub has an active internet connection.
- **Valve Goes Offline:** Verify the smart hub's internet connection and power supply. Ensure the valve is not obstructed and is within wireless communication range of the hub.
- **Valve Not Fully Opening/Closing:** This could indicate a mechanical issue or calibration problem. Attempt to cycle the valve manually or via the app a few times. If the issue persists, contact leakSMART support.
- **Leaks at Installation Point:** If leaks occur after installation, immediately shut off the main water supply and consult a professional plumber to re-seal or re-install the valve.
- **No Leak Detection:** Ensure leakSMART sensors are properly placed, powered, and paired with your smart hub. Test sensors periodically by placing them in a small amount of water.

8. SPECIFICATIONS

Attribute	Detail
Brand	LEAKSMART
Model Number	8880100
Material	Brass
Item Dimensions (L x W x H)	7.3 x 7.2 x 6.4 inches
Item Weight	3.15 pounds
Inlet Connection Size	1 Inch
Inlet Connection Type	NPT
Outlet Connection Type	FNPT
Number of Ports	2
Power Source	Battery Powered
Batteries Required	4 AA batteries (included)
Battery Cell Type	Alkaline
Specification Met	ANSI B1.20.1, ANSI B16.11, CSA, ULC

9. WARRANTY INFORMATION

The leakSMART 1-inch Automatic Water Shut-Off Valve comes with a **2-Year Manufacturer Warranty**. For specific terms, conditions, and to make a warranty claim, please refer to the warranty documentation included with your product or contact leakSMART customer support.

10. CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please contact leakSMART customer support. Refer to the product packaging or the official leakSMART website for the most current contact information.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question