NOWA

System Ok
Valve OPENED

NOWA

NOWA 4S
Installation
and Operation
Manual

Product Warnings

A properly installed and maintained water leak protection system may only reduce the risk of events such as water leakage, water infiltration, sewer backup; it is not insurance or a guarantee that such events will not occur, that adequate warning or protection will be provided, or that there will be no death, personal injury, and/or property damage as a result. While NOWA undertakes to reduce the probability that a third party may hack, compromise or circumvent its security products or related software, any security product or software manufactured, sold or licensed by NOWA, may still be hacked, compromised and/or circumvented. Communications between the 4S and the NOWA servers are encrypted using a cryptochip in each device. 319MHz communication between the 4S and the detectors are encoded but not encrypted. The physical connections to the devices are analog and not encoded. As a result these communications may be intercepted and could be used to circumvent your system.

Electrical Shock And Fire

- Only connect the power supply to a suitable, properly gounded power outlet. Make sure that the voltage of the power source is the same as that specified on the NOWA control panel rating plate (located on panel rear).
- Attach the power supply stripped wires to the correct wall bracket terminals before connecting the power supply base into the socket.
- Do not pull the cable over sharp edges, clamp it or allow it to hang down. Keep the cable away from heat and moisture.
- If the power supply cord is damaged, it must be properly replaced by qualified personnel.
- To prevent electrical shock or injury, do not immerse the panel, power cord, power adaptor in water or other liquids.
- Do not use the panel if damaged. A damaged panel can cause electric shocks, burns and fire.
- Do not operate the panel with a damaged cord or plug in the panel if it has malfunctioned, dropped or is damaged in any manner. Return the panel to the nearest authorized service facility for examination, repair or electrical or mechanical adjustment.
- Do not use outdoors.

Disposal

Your NOWA system contains materials which can be recovered or recycled. Separation of the remaining waste products into different types facilitates the recycling of raw materials. You can obtain information on disposal from your local auhtority.

PIPEDA

NOWA complies with PIPEDA standards in effect in Canada.

Warranty Disclaimers

NOWA hereby disclaims all warranties and representations, whether express, implied, statutory or otherwise including (but not limited to) any warranties of merchantability or fitness for a particular purpose with respect to its security products and related software. NOWA further disclaims any other implied warranty under the uniform computer information transactions act or similar law as enacted by any state. (USA only) some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights that vary from state to state. NOWA makes no representation, warranty, covenant or promise that its security products and/or related software (i) will not be hacked, compromised and/or circumvented; (ii) will prevent, or provide adequate warning or protection from, water leak, water infiltration, sewer backup; or (iii) will work properly in all environments and applications.

Disclaimer

The information in this document is subject to change without notice. The NOWA valve must be installed by a certified plumber according to your local regulation. NOWA assumes no responsibility for inaccuracies or omissions and specifically disclaims any liabilities, losses, or risks, personal or otherwise, incurred as a consequence, directly or indirectly, of the use or application of any of the contents of this document. For the latest documentation, contact your local supplier or visit us online at **www.nowa4S.com**.

Intended Use

Use this product only for the purpose it was designed for; refer to the data sheet and user documentation. For the latest product information, contact your local supplier or visit us online at **www.nowa4S.com**. The system should be checked by a qualified technician at least every 3 years and tested annually by the customer. Consult the NOWA testing procedure at page 11, point 3, of this manual.

Copyright

Trademarks

Table of Content

Assistance

If you need technical assistance for installing & configuring the NOWA 4S system you can:

Look at online documentation:
www.nowasupport.com

Send us an email:
support@nowa4S.com

Call us:
1 877 287-7777

Box Contents

1. Control panel (NOWMA400)
2. Power supply (NOWPOW400)
3. 5 round sensors (NOWDSF360)
4. 5 sensor cages for optional use
5. 1 NOWA valve (1/2", 3/4" or 1") (NOWVALXXX-400)

Requirements

- Access to power outlet within 9.5 feet / 3M
- Use requires creation of a NOWA account and acceptance of terms of service, which can be found online at **www.nowa4s.com**.
- Indoor use only.
- **For app use only:** Wi-Fi 802.11 b/g/n, 2.4GHz (WEP, WPA, WPA2 encryption supported). Working broadband Internet connections with at least 2 Mbps upload speed.

Specifications

Electrical	Input	100-240V 50/60Hz 0.8A
	Output	10-30 VDC @ 0.6-4A
Protection class		III
Control action		Type 1.B
Control function		Class A
Degree of protection (IP)		IPX0
Pollution degree		2
Panel dimensions (W x H x D)		5.3" x 4.5" x 1.1"
Panel weight		246g
Power supply cable length		9.5'
Storage temperature		-20°C to 50°C
Operating temperature		0° to 40°C
Installation		Surface mount or electric junction box

Communication protocols	RF (319.5Mhz) Used for sensors
	LTE CAT-M1 Internet connectivity
	Wi-Fi 802.11 B/G/N Internet connectivity
Certifications	NRTL Certificate # U8 113615 0001 Rev. 00
Tested according to	CAN/CSA-E60730-1:2015/A1:2012-11 UL 60730-1:2016
Contains	**LTE Module** FCC ID: XMR201707BG96 IC: 10224A-201709BG96
	WIFI Module FCC ID: 2ADHKATWINC1500 IC: 20266-WINC1500PB
Limited warranty	2-year limited warranty

Valve Installation

Make sure to install the valve according to guidance and directions below:

- The NOWA valve must be installed by a certified plumber according to your local regulation.
- The main water valve must be closed before installing the NOWA valve.
- The NOWA valve should be installed downstream and as near as possible to the main water valve.
- The NOWA valve body does not have flow direction.
- It is recommended to use a thicker teflon threading tape (yellow or orange) for the stainless steel NTP-thread.

Water flow direction

Split Point

A

1

2

B
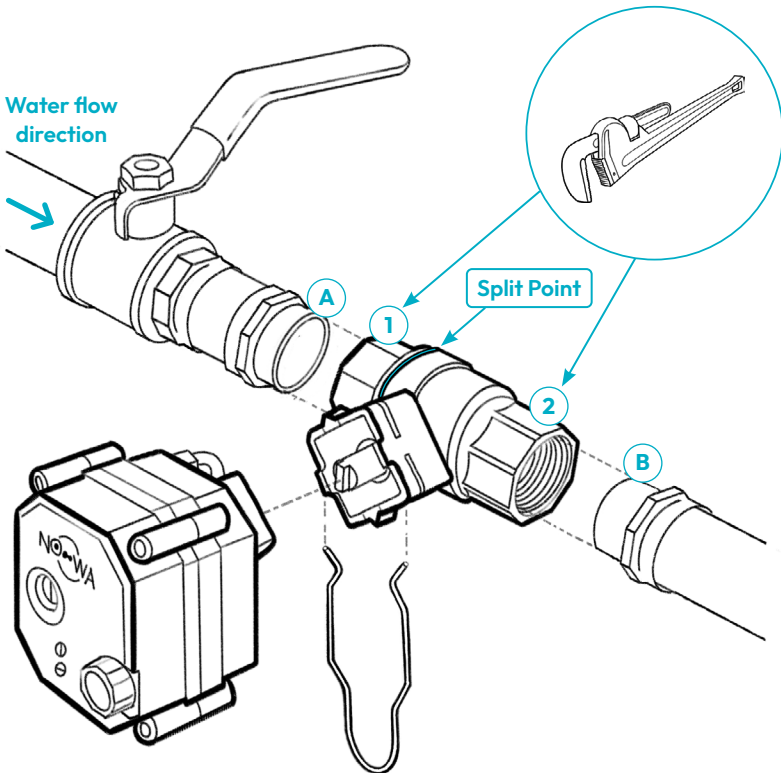
Nipple (A) into part (1)

If you thread inward/outward a nipple (A) into part 1, a pipe wrenche needs to be holding part 1.

Nipple (B) into part (2)

If you thread inward/outward a nipple (B) into part 2, a pipe wrench needs to be holding part 2.

NORMALLY OPEN (NO) VS NORMALLY CLOSED (NC) VALVE

The NOWA valve can be installed normally open or normally closed.

| Installation Modes	Advantages	Considerations
Normally open (NO)	Even when the NOWA control panel is no longer powered, the valve will stay open.	If the valve was closed, it will open automatically when the NOWA system is no longer powered.
Normally closed (NC)	If the power is off or valve wire disconnected, the valve close.	If the panel is not powered, the valve will close. To open it, you will need to use the manual override on the valve actuator.

HOW TO INSTALL THE VALVE IN NORMALLY OPEN (NO) MODE

The **disconnected and not energized** valve actuator must be installed on the opened valve body.

Valve body

Valve actuator

Opened valve
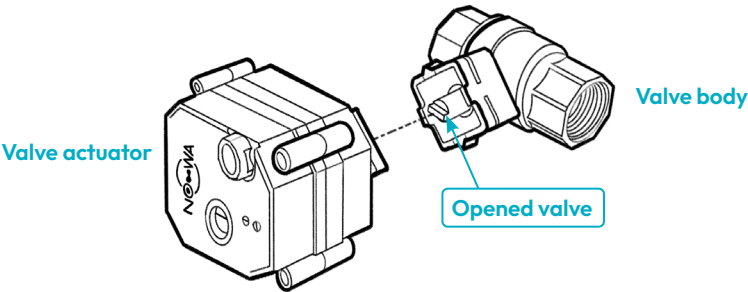
HOW TO INSTALL THE VALVE IN NORMALLY CLOSED (NC) MODE

The **disconnected and not energized** valve actuator must be installed on the closed valve body.

Valve body

Valve actuator

Closed valve
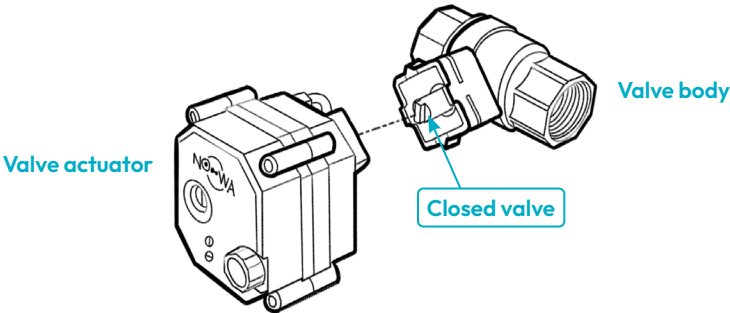
Control Panel Installation

A Choose the location

The control panel should be installed near the water inlet, where the NOWA valve is installed.

Water inlet

**Valve cable**

6'

Power cable

9,5'
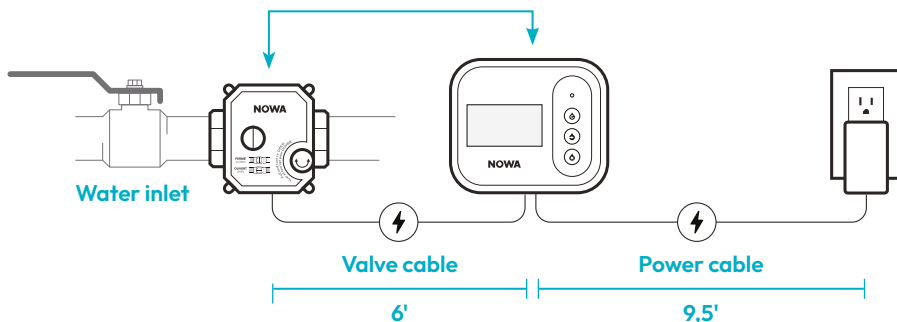
The NOWA valve cable length is 6 feet and the control panel power cable length is 9.5 feet. It is recommended to have/install an electrical outlet at less than **9.5 feet from the valve**. If you need longer cable, you may lengthen the cable to the valve with 22AWG 5-conductor wire up to a maximum length of 60 feet total between control panel and valve.

Note that existing electronic devices and certain materials such as mirrors, and metals may interfere with the communications signals of the NOWA 4S system.
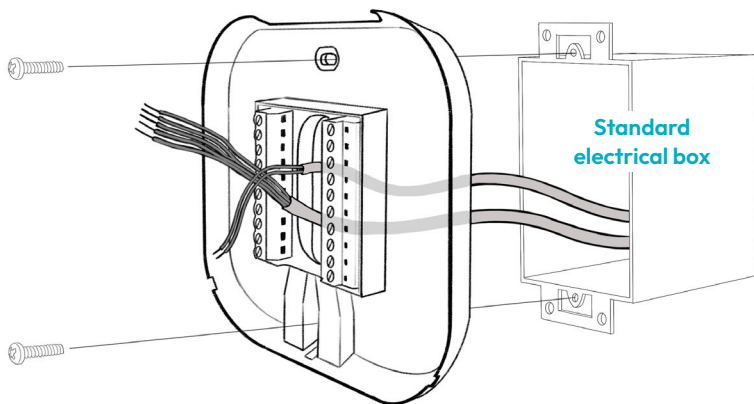
B Install the wall bracket

To remove the control panel from it's wall bracket, insert a flat screwdriver at a **45° angle** (as shown below) into the notch **A** & **B** at the bottom corners. Start with corner **A** by applying gentle prying pressure, then with corner **B**. Repeat at corners **A** & **B** until the lever effect detaches the control panel from the wall bracket.


A   **B**
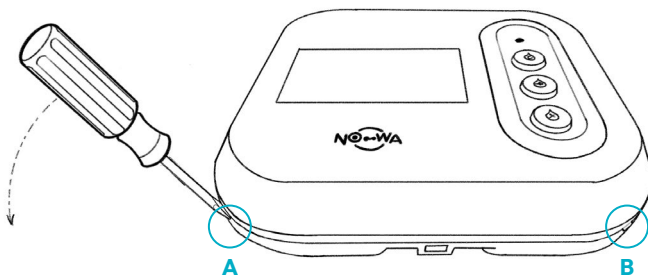
INSTALLATION WITH HIDDEN WIRES

1 If you intend to pass the wires behind the wall, we recommend making your hole first.

2 Pass the wires in the middle hole to connect them to the terminals. Use the two provided Philips screws to fix the wall bracket on the wall.
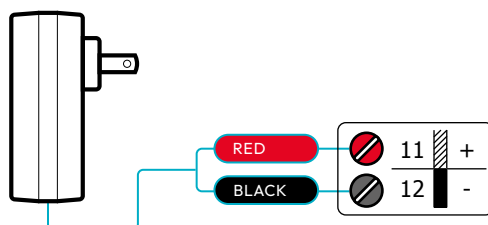
Standard electrical box

INSTALLATION WITH VISIBLE WIRES

1 If you intend to pass the wires on the wall, then there is no requirement to make a hole in the wall behind the panel.

2 Pass your wires in the channels on each side of the bottom screw. Use the two provided Philips screws and their anchor to fix the wall bracket on the wall.
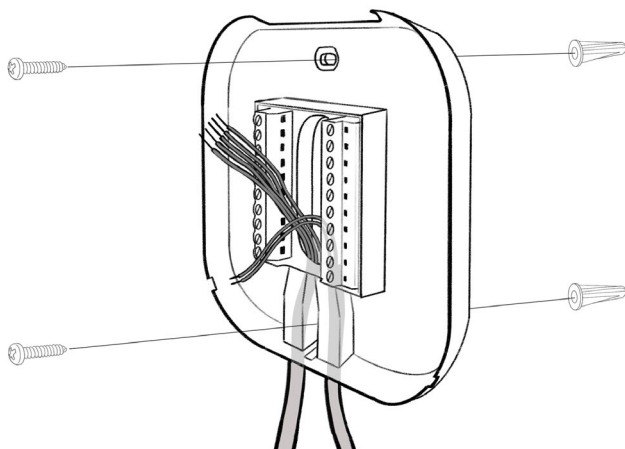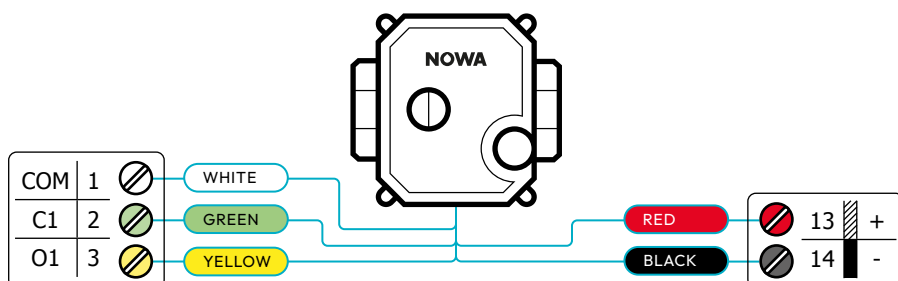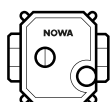
C Connect the power supply & the valve

POWER SUPPLY CONNECTIONS

RED		11	+
BLACK		12	-

NOWA VALVE CONNECTIONS

NOWA

COM	1		WHITE
C1	2		GREEN
O1	3		YELLOW

RED		13	+
BLACK		14	-

OPTIONAL CONNECTIONS

Secondary NOWA valve	WHITE		4	COM
	GREEN		5	C2
	YELLOW		6	O2
	RED		15	+
	BLACK		16	-

Wired sensor	WIRE		7	IN
	WIRE		8	COM

Dry contact output for alarm signals	WIRE		19	A
	WIRE		20	COM

Dry contact output for trouble signals	WIRE		17	T
	WIRE		18	COM

D Fix the panel on the wall bracket

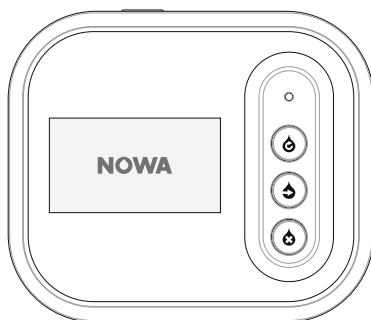**1**   Take the control panel and carefully align so that the rear of the panel is aligned inside the mount edges and gently push it into the wall bracket.

2   You should hear multiple clicks from the plastic bracket as the panel is pushed into the bracket.
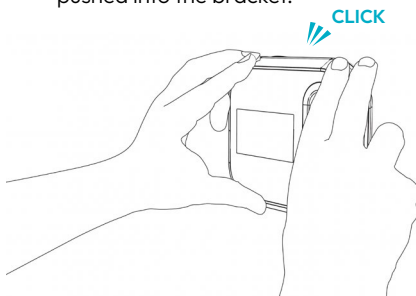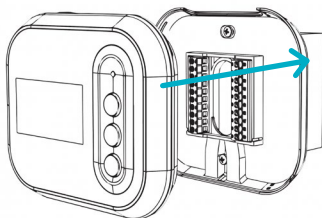
3   Plug the power supply in the wall outlet.
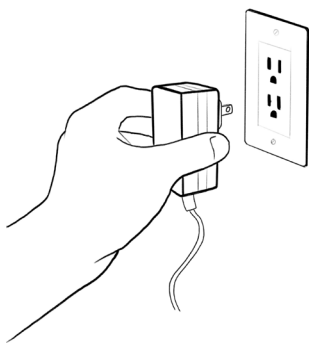
**4**   The panel should power on and show you the NOWA logo.

Configuration

Go to **nowa4s.com/setup** from a mobile device

or computer and follow the online instruction.

Installation & Testing of Sensors

Once you have configured the sensors online, you can now install and test them.
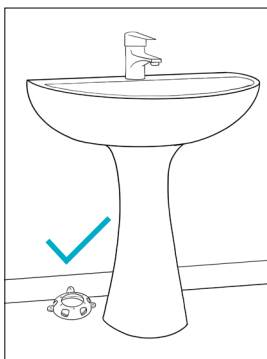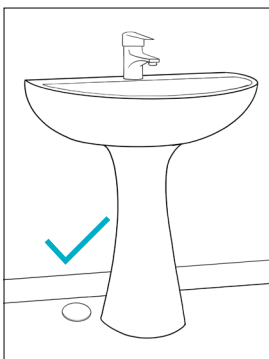
1   Pick the sensor you want to install.

2   Move to the location it will protect with the sensor.

3   Test the sensor by touching 2 adjacent gold pins under the sensor with two wet fingers. The system should receive the alarm signal from the sensor. The control panel should indicate the area the sensor is supposed to protect.
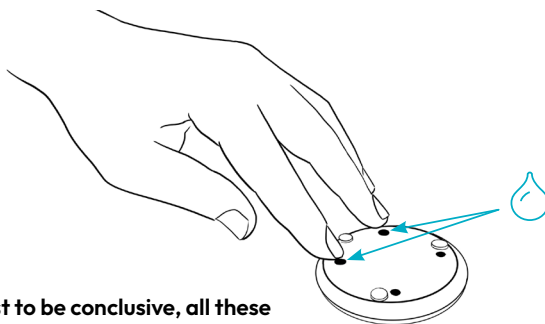
For the test to be conclusive, all these criteria must be met:

> ✓ **The control panel indicates the location of the detector.**
> ✓ **The main water valve is closed.** Open a tap to make sure that the water is indeed cut off.
> ✓ **An "Alarm" notification has been sent to your mobile application.**

4   At the sensor location, determine the lowest point where water will accumulate (you can use a marble to easily determine where water will accumulate).

5   Place the sensor on the ground, **making sure the 3 legs touch the ground**.

6   (Optional) Secure the sensor using the protective cage provided. You can fix the cage using the supplied screws or other forms of adhesive.

7   Repeat the previous steps with each sensor you configure next.

Buttons, Indicators & Status Definitions

Control panel buttons definition

Menu

Status Bar

System Status

Valve Status

Date & Time

LCD Screen

System Ok
Valve OPENED
2022-01-01 17:35

Status LED

Reset*

Open Valve*

Close Valve*
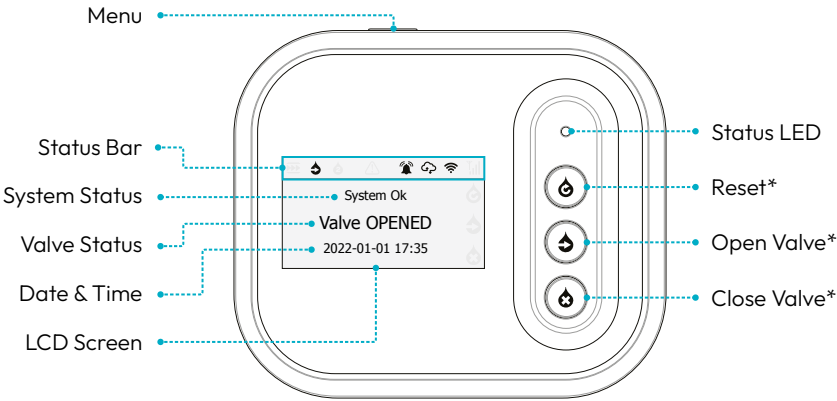
*Only lit up buttons are active. Depending on system state, buttons behavior might change. The new behavior will be identified on the LCD screen beside the buttons.

Status bar indicators definition

Main valve status

Main valve is opening/closing *(flashing)*

Main valve is opened

Main valve is closed

Aux valve status

Aux valve is opening/closing *(flashing)*

Aux valve is opened

Aux valve is closed

Alarm state

System is in alarm

System is not in alarm

Audible alarm

Muted alarm *(flashing)*

Audible alarm is active

No audible alarm

Connection to cloud

Trying to connect *(flashing slowly)*

Updating the software *(flashing fast)*

Connected to the cloud

Not connected to the cloud

Wi-Fi Signal

Trying to connect *(flashing)*

Signal is excellent

Signal is good

Signal is fair

Signal is low

No signal

Cellular signal

Trying to connect *(flashing)*

Signal is excellent

Signal is good

Signal is fair

Signal is low

No signal

Status LED indicators definition

The status LED indicate the general state of the system.

LED Color	Definition
Blue	The system is in an ok state.
Red	The system is in alarm and can't be reset.
Red/blue (alternating)	The system is in alarm but can be reset.
Yellow	The system is in trouble.
Red/yellow (alternating)	The system is in alarm and has unresolved trouble(s).

System status definition

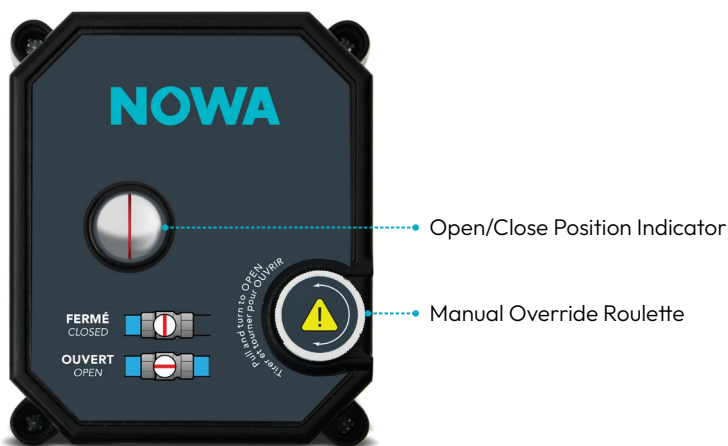| Event Name	Event Definition
System Ok	The system has no issues and is operating normally.
Alarm	An alarm signal has been received by the system.
Restored	The system is in an alarm state but can be reset to the standby mode.
Trouble	A trouble has been detected by the system (low battery, loss of supervision).
Low battery	A low battery has been detected by the system.
Supervision fault	A sensor is out of the network, since no signals were received from it for more than 24 hours (default).
Tamper	A tamper alarm has been received by the system.
Local sensor	An alarm signal has been received by the system's local sensor.
Valve opened / Aux Valve Opened	The valve has been opened.
Valve closed / Aux Valve Closed	The valve has been closed.
Maintenance	The valve is undergoing maintenance.
Maintenance error	The system detected an error during the valve maintenance.
Trouble - Opening/closing	An issue related to the valve has been detected. The valve seems to not open/close.
Trouble - Valve overridden	The manual valve control is activated and override the system control.
System updating...	The system software is being updated to a newer version.
Learn mode	The system is waiting for a signal to learn a new sensor.

What to Do When There Is an Alarm?

1 Go to the NOWA control panel. Identify the location and type of alarm issued.

2 Go to the location of the sensor in alarm.

3 Identify the cause of the leak if possible. (Do not turn water back on until the problem that caused the leak is resolved, either by you or a capable pro, i.e., plumber.)

4 Dry the sensor and the floor where the sensor resides, and replace it in its location.

5 Go back to the NOWA control panel. If no more water is detected, the system indicates **Restored** and the **Reset** ⟳ button is illuminated. **If a sensor still detect water, the system stay in alarm and you won't be able to reset it**.

6 Press the **Reset** ⟳ button to mute the alarm. Press again and hold the **Reset** ⟳ button for **3 seconds** to cancel the alarm.

7 Press the **Open Valve** ⟲ button to open the valve.

Type of Alarm

Sensor Location

⚠ 🔔 ☁ 📶
Alarm
WATER DETECTION
Water heater
0:06

NOWA

Reset

Open Valve

How to Open the Valve in Case of Power Outage?

By default, the NOWA valve closes during a power outage. Follow the steps below to open the valve manually:

1 Find the manual override roulette on the NOWA valve and lift it.

2 Turn the roulette clockwise until the valve is in the open position. If the valve begins rotating by itself, let it complete it's rotation and redo step 2. **Do not push the roulette back into its recess just yet.**

3 **Once the power is restored**, push the roulette into it's original position to disengage the manual override.

4 Ensure that your NOWA system can automatically control your valve by opening/closing the valve via the control panel and observing the Open/Close Position indicator.

Open/Close Position Indicator

Manual Override Roulette

NOWA

For more information