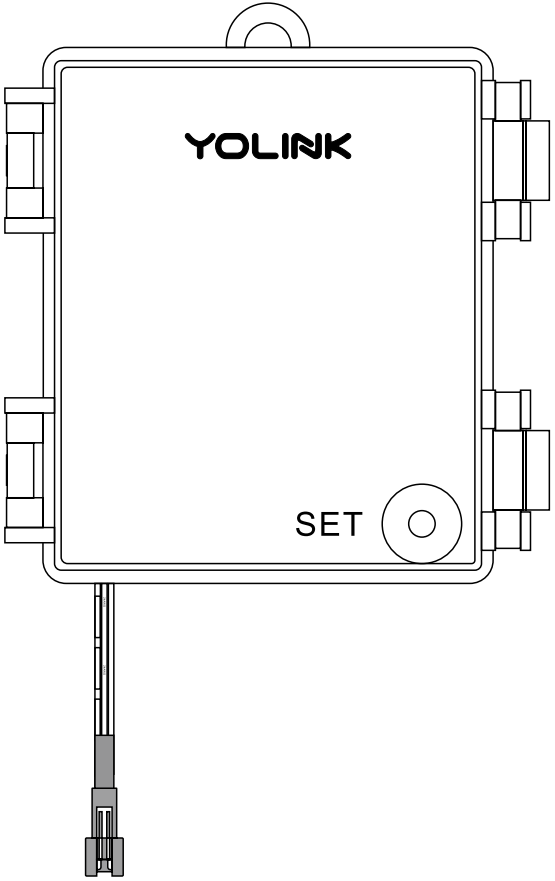
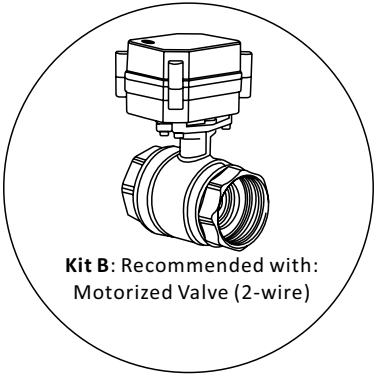


Kit A: Recommended with:
Gas/Water Valve Manipulator



Kit B: Recommended with:
Motorized Valve (2-wire)

YOLINK

Gas/Water Valve Controller

YS4909-UC

Installation & User Guide

(for Kit A/Kit B)

Rev 1.1

Thank you for purchasing YoLink products and for entrusting us with your smart home needs! Your 100% satisfaction is our goal. If you experience any problems with setting up your new YoLink Gas/Water Valve Controller, please give us a chance to assist you, before returning your purchase.

We at Customer Support are here for you.If you need any assistance installing, setting up or using a YoLink product or our app.

Find additional support and ways to reach us at:

www.yosmart.com/support-and-service

Or scan this QR code with your smartphone

Email us, 24/7 at:

service@yosmart.com

Call us, 9AM to 5PM Pacific Standard Time at:

(949) 825-5958

You may chat with us on Facebook (non-urgent matters):

www.facebook.com/YoLinkbyYoSmart

Sincerely,

Queenie, Clair, James, Eric

Customer Support Team

Contents

Revised: 04/08/2021

A. In the Box

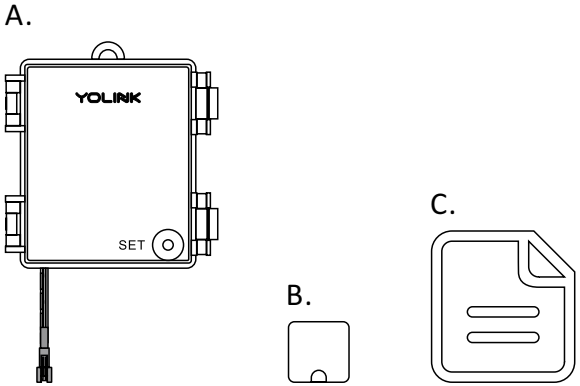
A-1. Kit A - YS4909-UC Gas/Water Valve Controller + Valve Manipulator

Box 1

A. Gas/Water Valve Controller

B. Mounting Hook

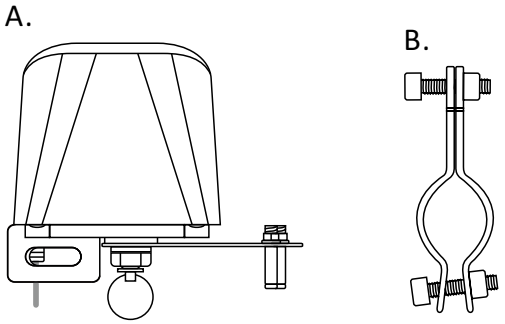
C. Quick Start Guide



Box 2 (Optional Accessory)

A. Gas/Water Valve Manipulator

B. Bracket (2) (with 2 mounting bolts)



A-2. Kit B - YS4909-UC Gas/Water Valve Controller + Motorized Valve

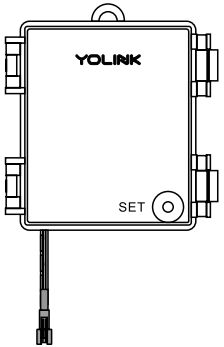
Box 1

A. Gas/Water Valve Controller

B. Mounting Hook

C. Quick Start Guide

A.



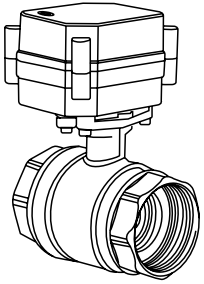
B.

C.

Box 2 (Optional Accessory)

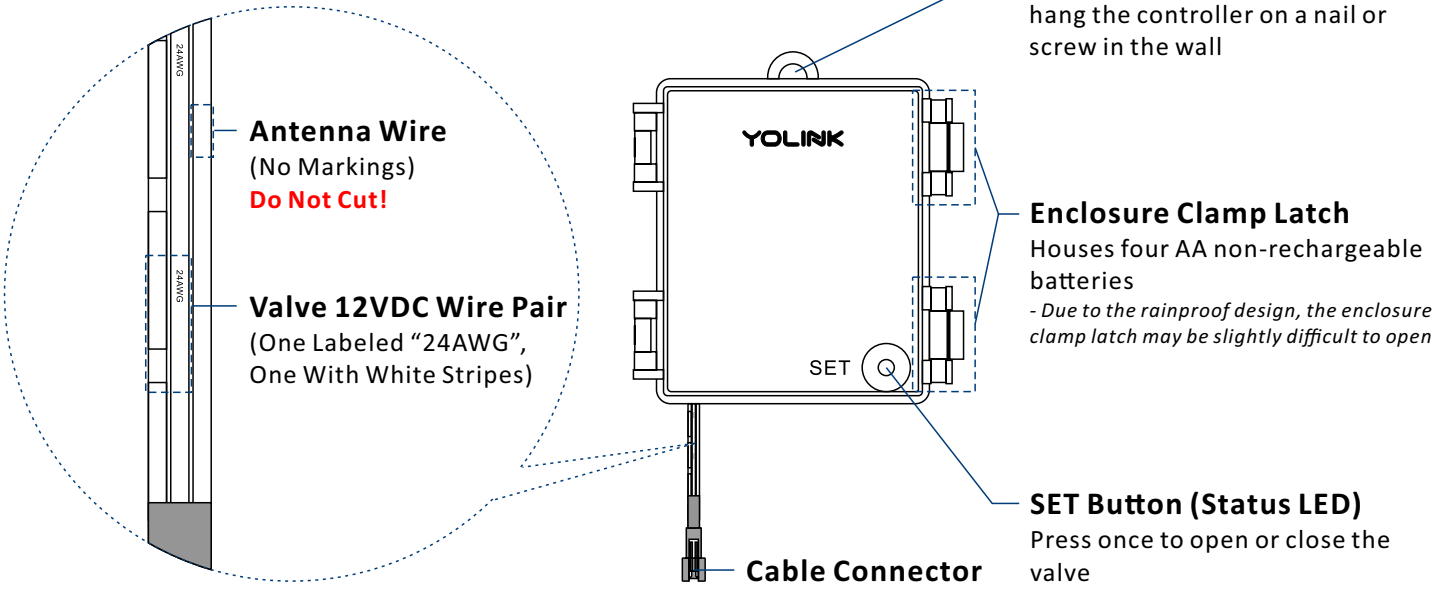
A. Motorized Valve (DN15/DN20 /DN25/DN32, 2-wire)

A.

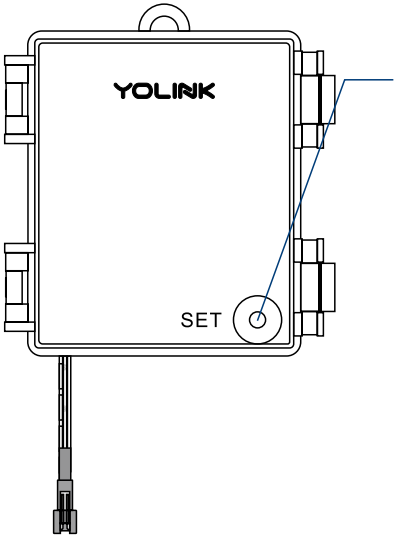


B. Introduction

The YoLink Gas/Water Valve Controller is a smart device that can control a 12 VDC ball-type (only) gas or water valve manipulator remotely with the YoLink app on your smartphone or tablet or using the SET button on the device. Pressing "Open" or "Close" on the app will mechanically rotate the handle 90 degrees in the appropriate direction, to close or open the valve.



The LED light indicates the current status of the Gas/Water Valve Controller:



Blinking Red Once, Then Green Once
Device turned on

Blinking Red And Green Alternately
Restoring to Factory Defaults

Blinking Green Once
Turn on the manipulator/valve

Blinking Green
Connecting to Cloud

Slow Blinking Green
Updating

Fast Blinking Green
Establishing Connection with YoLink System (YoLink *Control*)

Blinking Red Once
Turn off the manipulator/valve or device is connected to the cloud and is functioning normally

Fast Blinking Red
Removing Connection to YoLink System (YoLink *Control*)

Fast Blinking Red Every 30 Seconds
Batteries are low; please replace the batteries (see page 41)

C. Set Up

C-1. Set Up - First-Time YoLink Users (*Existing users proceed to **C-2. Add Device**, next page*)

1. Download the YoLink app through Apple App Store or Google Play Store (Search in the store or use the QR code on the right)

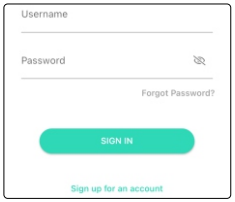
Available on the App Store

Google Play

> Apple iPhone or tablet that is iOS 9.0 or higher, or an Android phone or tablet that is Android 4.4 or higher

---

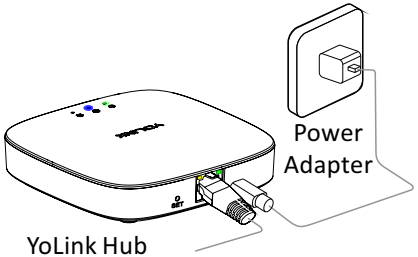
2. Log in to the YoLink app



> Create a new account if required

---

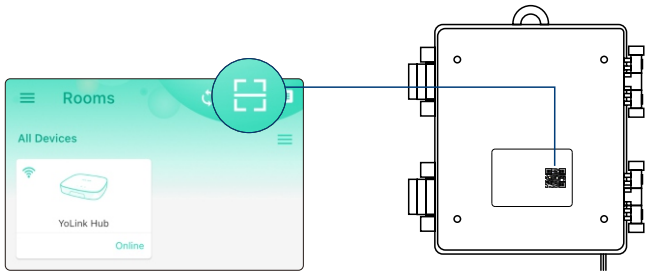
3. The YoLink Hub is required to set up your Gas/Water Valve Controller. Please set up your YoLink Hub first (refer to YoLink Hub manual)



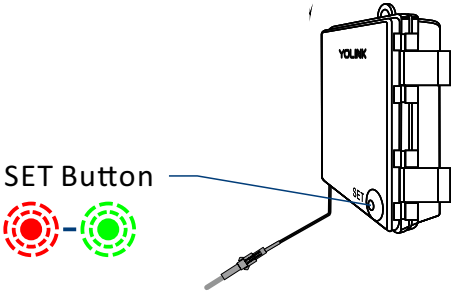
> 1. Make sure your Hub is connected to the internet (green LED indicator is blinking, blue LED indicator is always on)
>
> 2. Ethernet patch cable (included) to your network (router, switch, etc.), recommended. Otherwise connect your Hub to your home 2.4 GHz Wi-Fi network (only when necessary). Refer to the Hub set up manual for more information:
>
> YS1603-UC User Guide

C-2. Add Device

1. Tap " ⛶ " button, then scan QR Code on the device. Follow the steps to add the device



2. Press the SET button once to turn on the device after installation. The Status LED will blink red once, then green several times, indicating your device has connected to the cloud and is ready to use

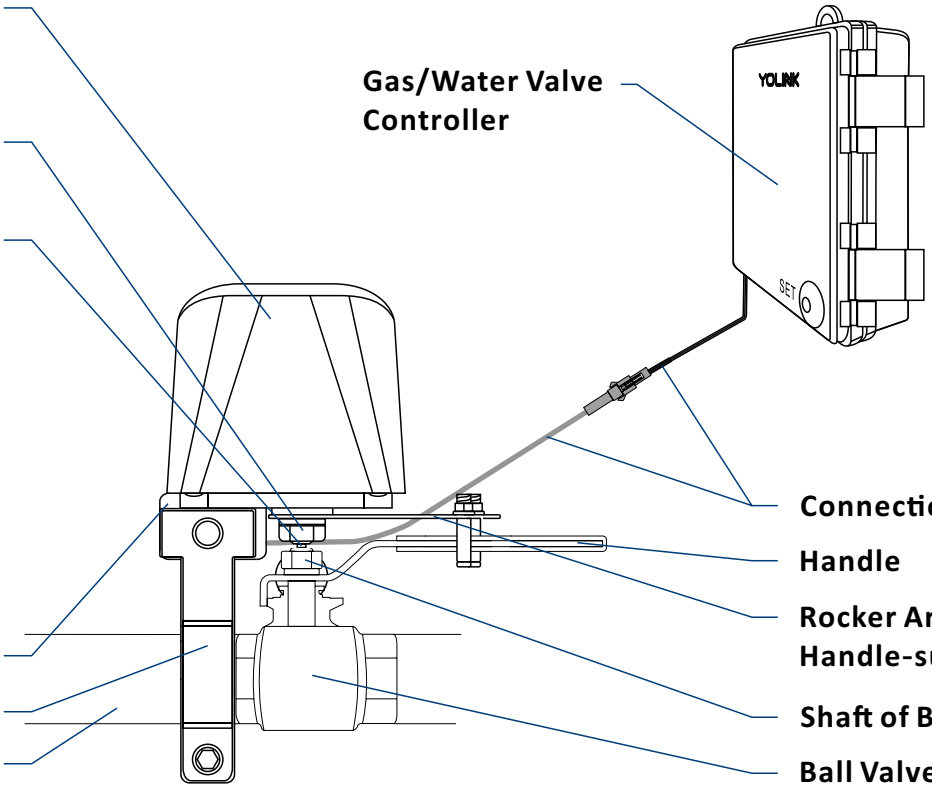


1. You will need to press the SET button once again if the device failed to connect to the cloud
2. Pressing the SET button at any other time after this initial process will result in the LED blinking red/green once, only. This indicates the device is connected to the cloud and is functioning normally
3. If the red LED does NOT blink as noted this may indicate a problem with the controller. Please see the troubleshooting section and the contact section for technical support

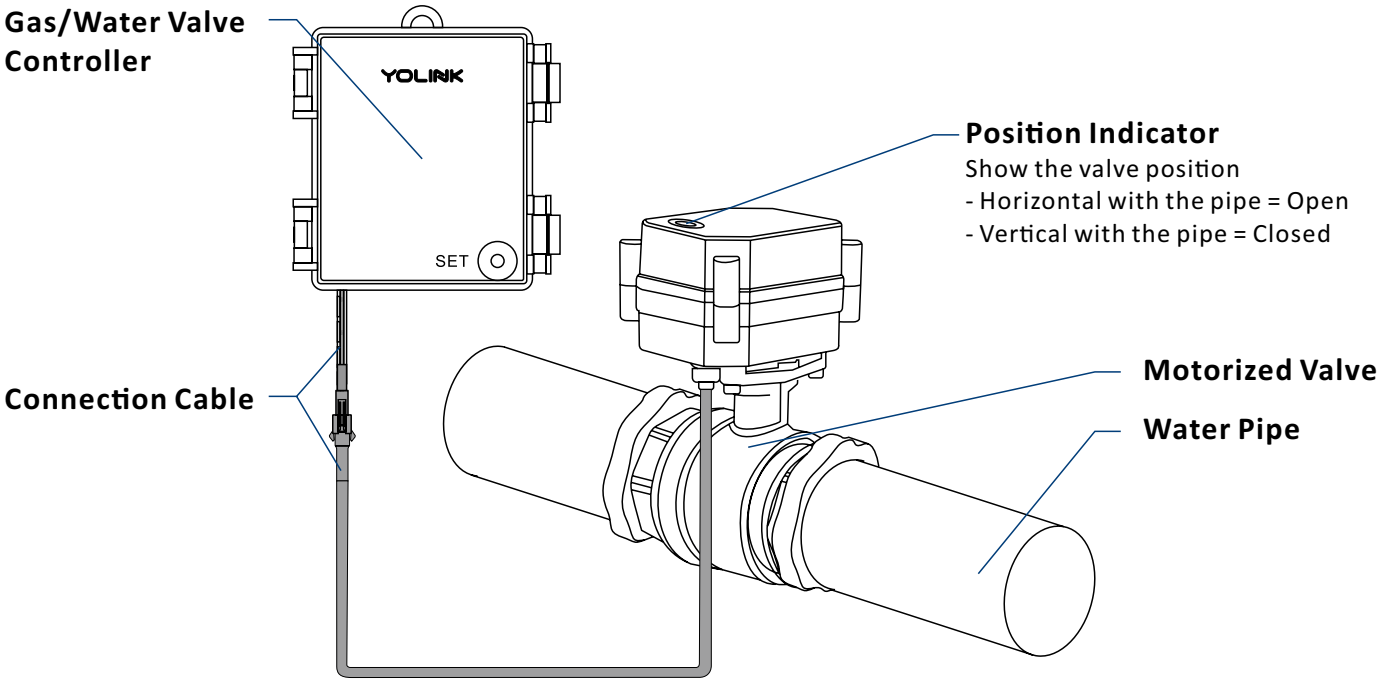
D. Installation

D-1. Diagram

Diagram(A): Install with Ball-type Manipulator



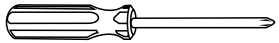
Diagram(B): Install with Ball-type Motorized Valve (2-Wire)



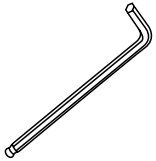
D-2. Instructions for installing the Gas/Water Valve Controller for use with a new Valve Manipulator / Motorized Valve

D-2-1. How to install the Gas/Water Valve Manipulator

1. These Tools may be Required



Phillips Screwdriver

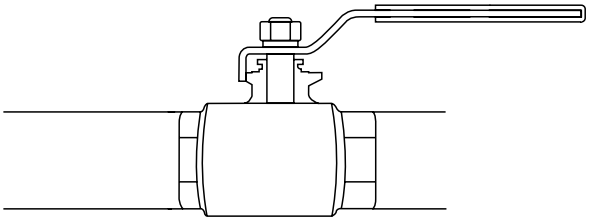


Allen Wrench - Number 5 Metric

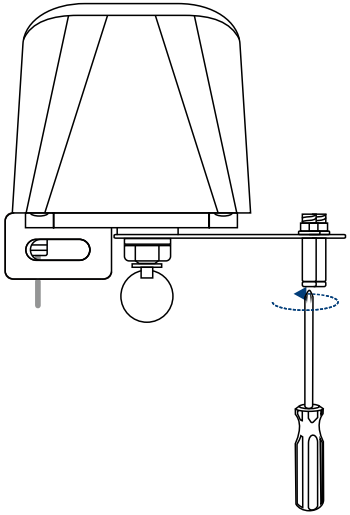
1. The manipulator has moving parts and must not be too close to the wall or other obstructions. Ensure at least 1 inch clearance between the manipulator and the wall or any objects, pipes, etc.
2. The manipulator should be installed in a position convenient for manual operation

2. Get Ready

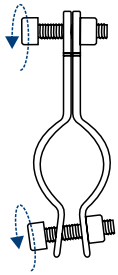
1. Turn the ball valve to OPEN status (keep the center axis of ball valve aligned to the water pipe)



2. Loosen the two screws on the two handle-supporting bolts



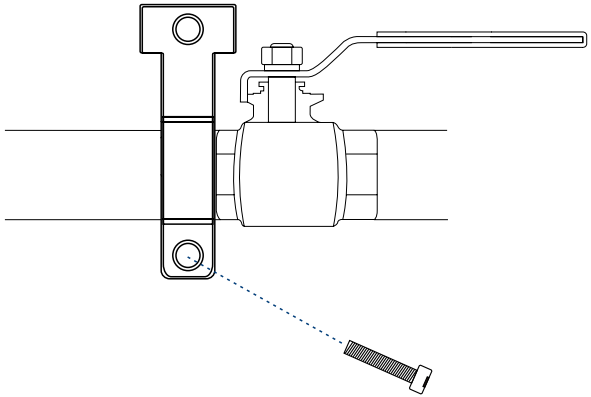
3. Loosen the brackets into two separate parts (carefully place the two bolts aside)



3. Begin Installation

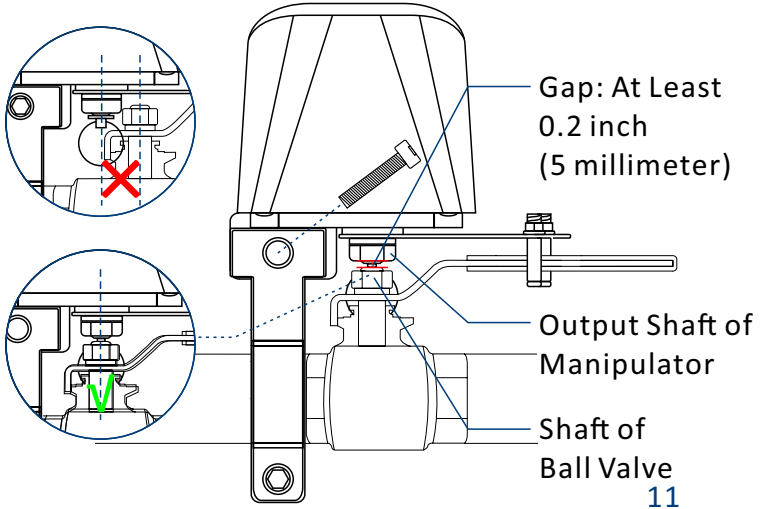
1. The manipulator should be installed close to the ball valve
2. Ensure the clutch and rocker arm can be moved freely

1. Insert the screw through the bottom of brackets with the non-threaded hole *(*the threaded hole should be facing inside*, do not tighten the screw)*

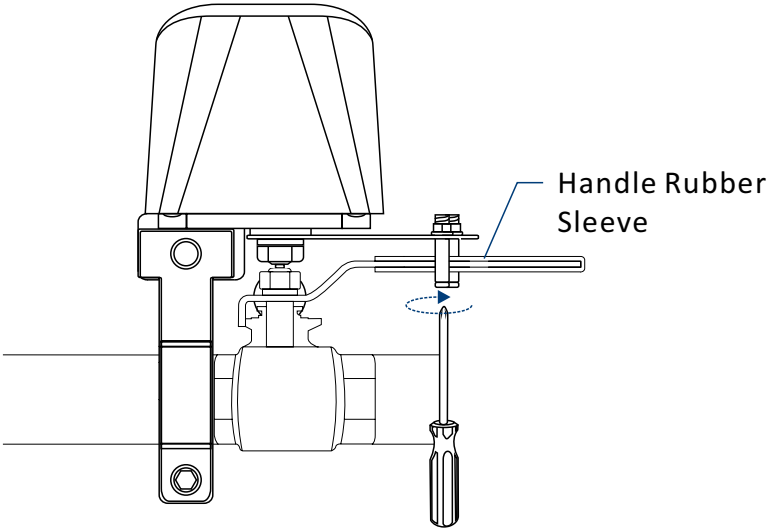


2. Insert the screw through the top of the brackets and the mounting ear of the manipulator with the non-threaded hole *(place the two* handle-supporting bolts on *either side of the handle)*

1. Keep the center axis of the output shaft of manipulator aligned with the center axis of the shaft of ball valve
2. Keep at least 0.2 inch (5 millimeter) gap between the output shaft of manipulator and the shaft of ball valve

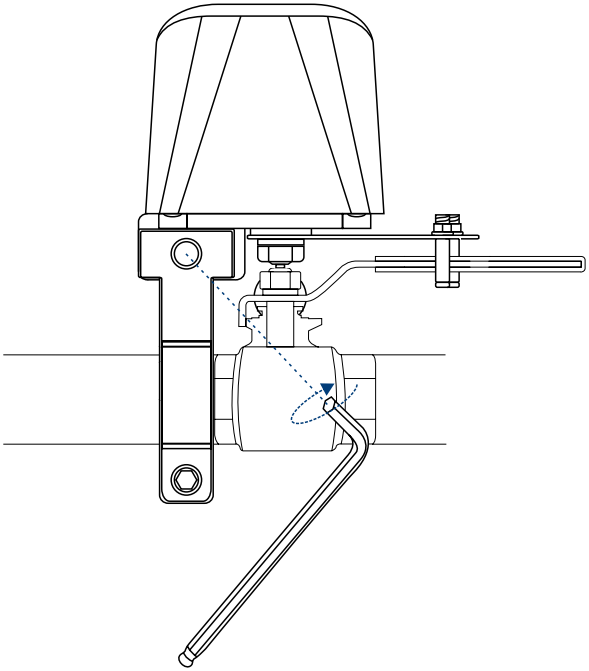


3 Securely tighten the two screws on the two handle-supporting bolts using a Phillips screwdriver



! The handle's rubber sleeve may affect the tightness of the rocker arm and the handle. It is recommended to remove it as needed

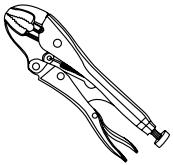
4 Securely tighten the two screws on the brackets using a Number 5 metric Allen wrench



D-2-2. How to install the Motorized Valve

1. These Tools or Parts may be Required

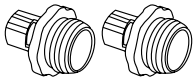
Pipe Wrench



Locking Pliers

Manual Steel Pipe Cutter

Aqueous Marker



NPT Water Pipe Connector (2) (Size appropriate for pipe)

Waterproof Sealing Tape

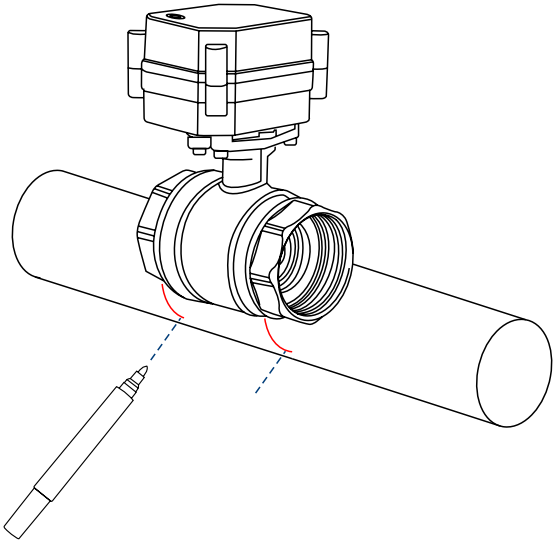
1. Confirm the valve is correct size for the pipe
2. If you are not comfortable working with plumbing, please consult or hire a plumber
3. Flame-protecting cloth gloves and soldering torch may be also required for soldering installation of pipe access and pipe connector
4. Refer to the OEM manufacturer's guide for more information:
   https://m.media-amazon.com/images/I/81iA78dQJbL.pdf

2. Get Ready

1. Shut-off the main valve of the water pipe, then turn on a tap to run out the water left in the water pipe

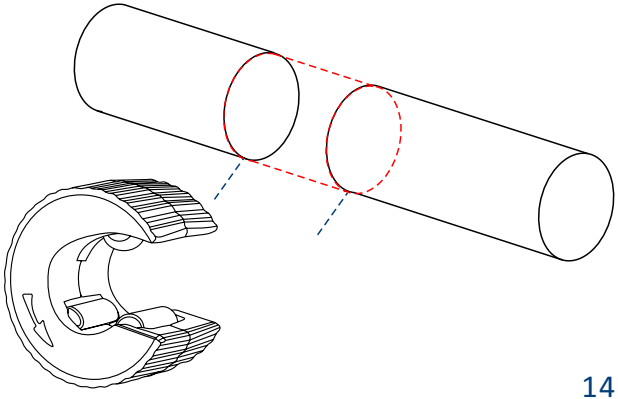
2. Place the motorized valve at the desired location, then mark an outline (with a aqueous marker, tape, etc.) of the motorized valve on the water pipe for future reference

> ! We do not recommend removing any main ball valves (and a quick shut-off with no dependence on electronics may be required by local building codes)



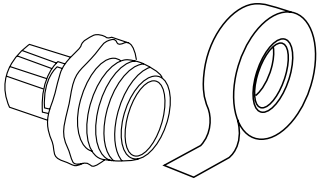
3. Cut the water pipe through the mark using a steel manual pipe cutter, then remove the cut section of the water pipe
4. Wipe off the cut section of pipe with a clean cloth

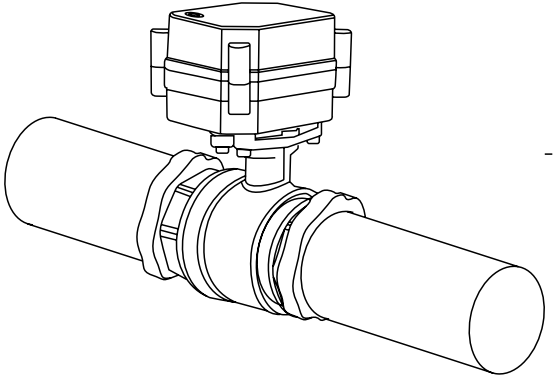
> ! To avoid injury use care when working around the cut sections of pipe



3. Begin Installation

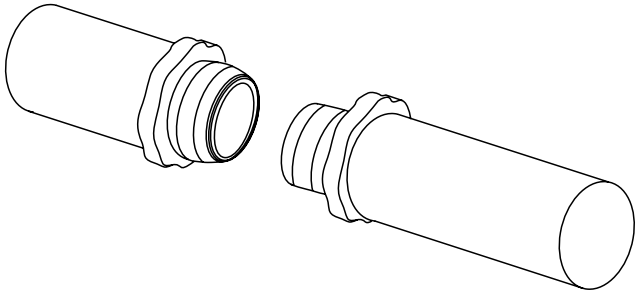
1. U.S. Solid Valves follow National Standards for pipe thread. In the U.S.A. we use NPT, while in England we use BSPT. We recommend use of tefflon tape to ensure seal of the NPT threading, as shown in the figure





2. Install and secure tightly the water pipe access with two water pipe connector

> ! Water pipe will probably leak if the access were not being secured tightly with the connector



3. Connect the motorized valve to the water pipe connector, then tighten securely the valve using a pipe wrench and a locking plier

D-2-3. How to Connect the Manipulator/Motorized Valve to the Controller

1. After the manipulator/motorized valve is securely installed (all screws tight, etc.), refer to "Install or Replace the Batteries (Gas/Water Valve Controller)" section on page 41 for the installation of batteries for the controller
2. Connect the manipulator/motorized valve to the controller

! After the connection, proceed to page 23-25, for testing

Diagram (A): Connect the manipulator to the controller

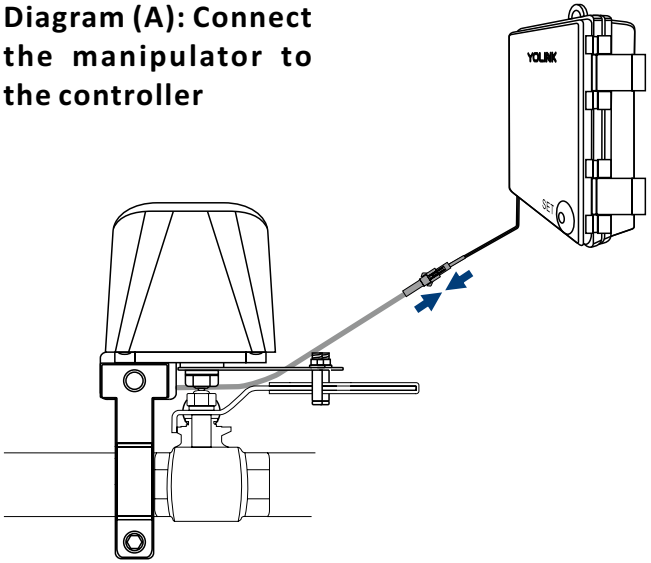
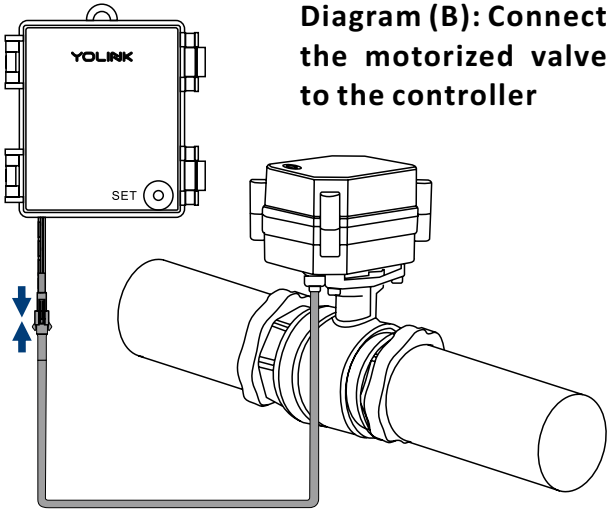
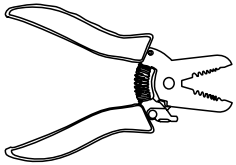


Diagram (B): Connect the motorized valve to the controller

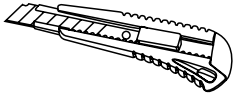


D-3. Instructions for installing the Gas/Water Valve Controller for use with an existing Valve Manipulator (Non-smart, 12VDC only!) / Motorized Valve (Non-smart, 2-wire, 12VDC only!)

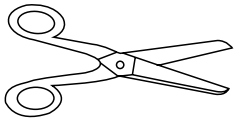
1. These Tools may be Required



Wire Cutter/Stripper



Utility Knife



Scissors

Wire Nuts /Connectors (2)

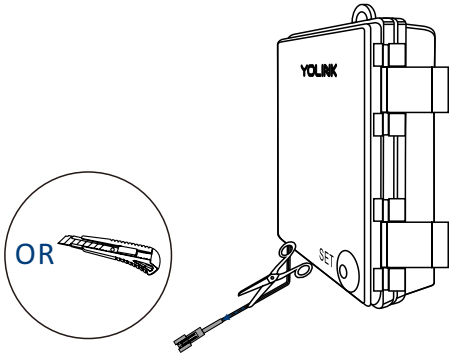
Electrical Tape

1. Your existing valve manipulator must be 12 VDC, non-smart, and functional, while your existing motorized valve must be 2-wire, 12 VDC, non-smart, and functional
2. Wire nuts (twist-on connectors) are the recommended wire splicing method. Other methods may be acceptable as long as they provide a secure electrical connection, with no exposed conductors

2. Get Ready

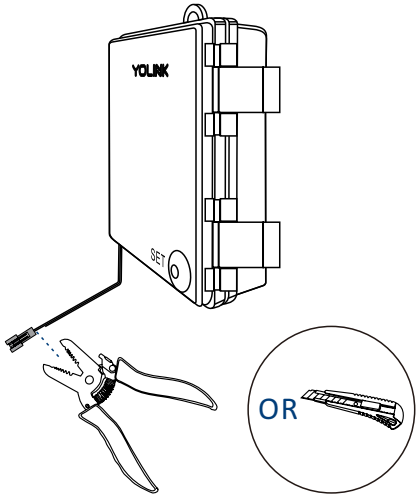
1. Remove power from the manipulator/motorized valve by disconnecting the connection cable
2. Examine the connector on the manipulator/motorized valve connection cable. If compatible with the controller's connection cable connector, connect the two cables together and proceed to page 16

D-3-1. How to Prepare for Installation of the Valve Controller

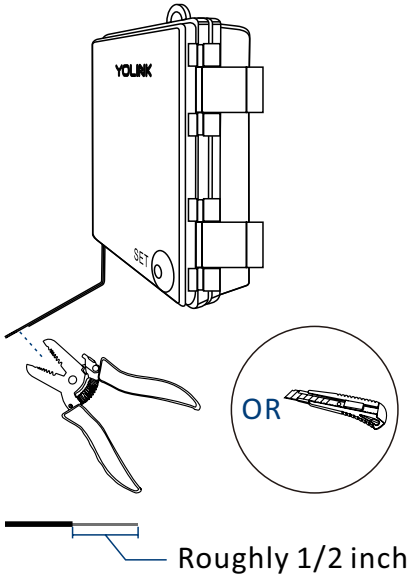


1. Using a scissors or utility knife, carefully remove the outer jacket/insulation on the cable. Use care to avoid cutting or nicking the internal conductors and the antenna

2. Use a wire cutter/stripper to remove the connector on the new controller. Use care to avoid cutting or nicking the antenna

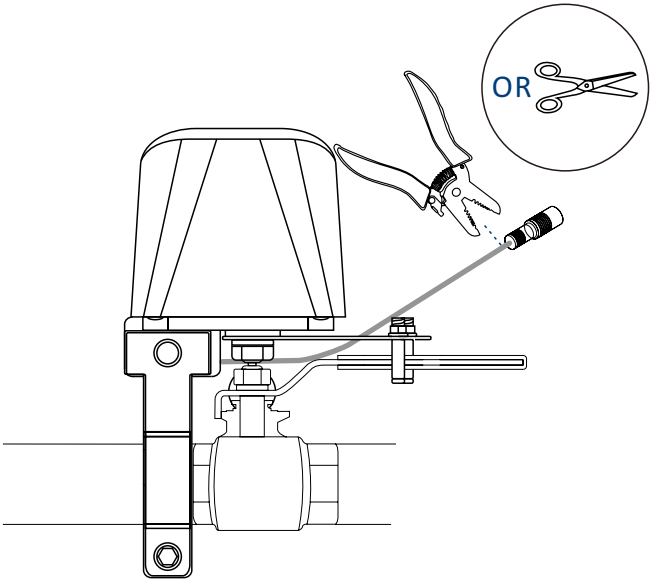


3. Using a wire stripper, remove the insulation on each conductor, leaving roughly half an inch of exposed conductor

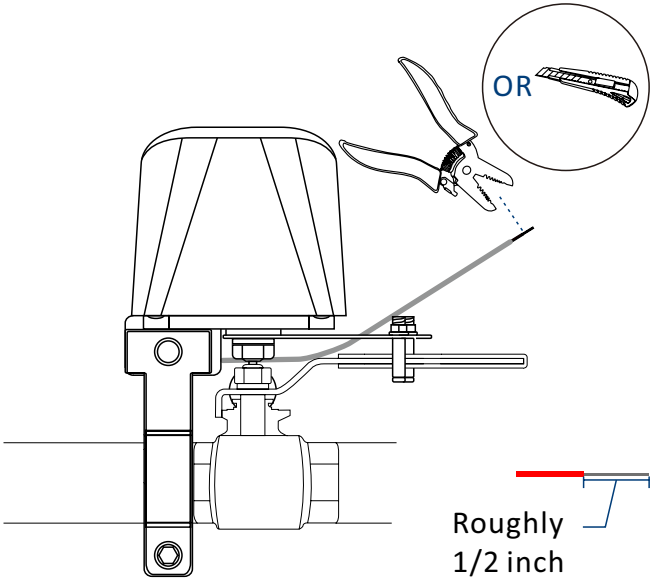


D-3-2. How to Prepare for Installation of the Manipulator

1. Use a wire cutter/stripper to remove the connector on the existing manipulator

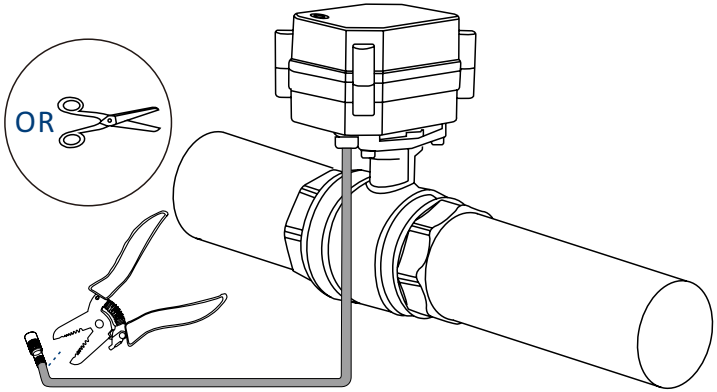


2. Using a wire stripper or utility knife, carefully remove the outer jacket/insulation on the cable. Use care to avoid cutting or nicking the internal conductors
   Using a wire stripper, remove the insulation on each conductor, leaving roughly half an inch of exposed conductor

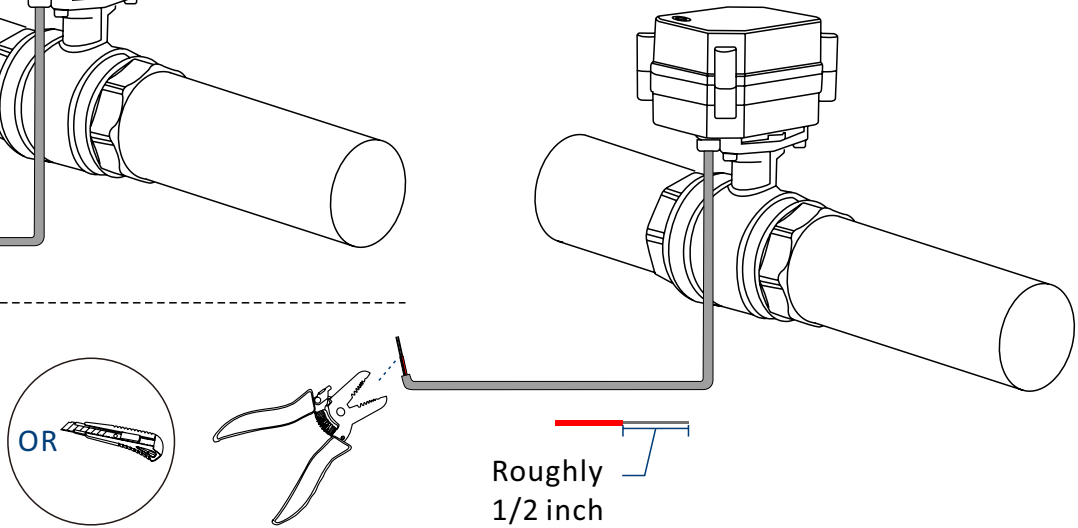


D-3-3. How to Prepare for Installation of the Motorized Valve

1. Use a wire cutter/stripper to remove the connector on the existing motorized valve



2. Using a wire stripper or utility knife, carefully remove the outer jacket/insulation on the cable. Use care to avoid cutting or nicking the internal conductors
   Using a wire stripper, remove the insulation on each conductor, leaving roughly half an inch of exposed conductor

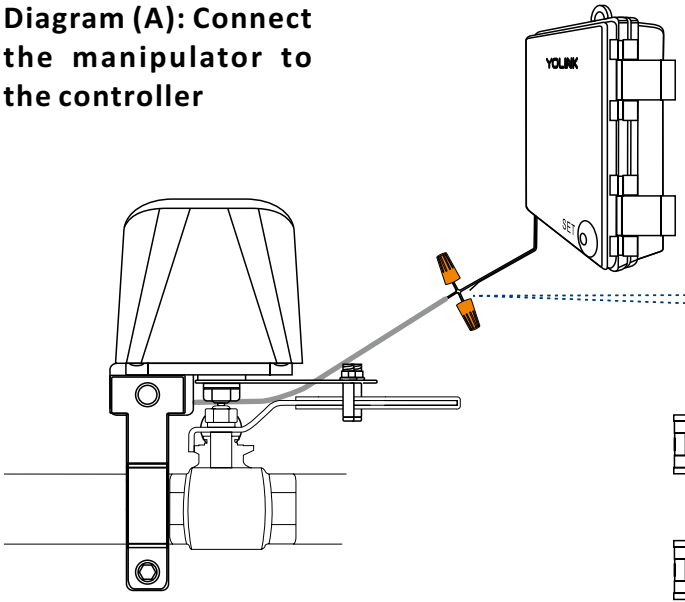


D-3-4. How to Connect the Manipulator/Motorized Valve to the Controller

1. Using a wire nut, twist the black wire with text marked “24AWG” (positive) wire from the controller together with the positive (red, typically) wire on the manipulator/motorized valve (wires may be white and black, with white positive and black negative)
2. Using a wire nut, twist the black with half white (negative) wire from the controller together with negative (black, typically) wire on the manipulator/motorized valve
3. Ensure there are no exposed wire conductors (visible copper). If so, redo the connections. You may optionally wrap the splices with electrical tape
4. Refer to “Install or Replace the Batteries (Gas/Water Valve Controller)” section on page 41 for the installation of batteries for the controller

! 1. Reversing the wiring connection may be required if the manipulator/motorized valve does not operate. Do this by moving each controller wire to the opposite wire on the manipulator/motorized valve
2. After the connection, proceed to page 23-25, for testing

Diagram (A): Connect the manipulator to the controller



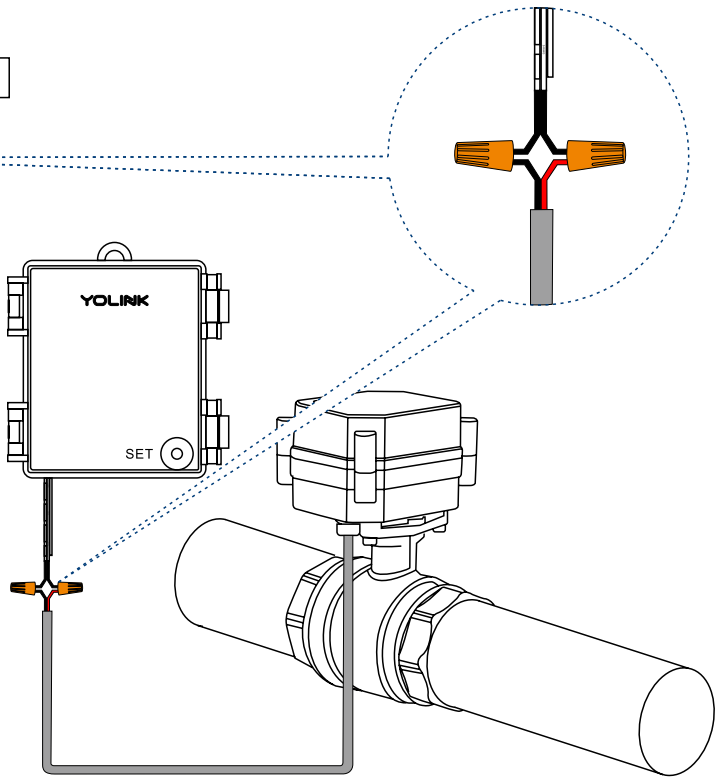
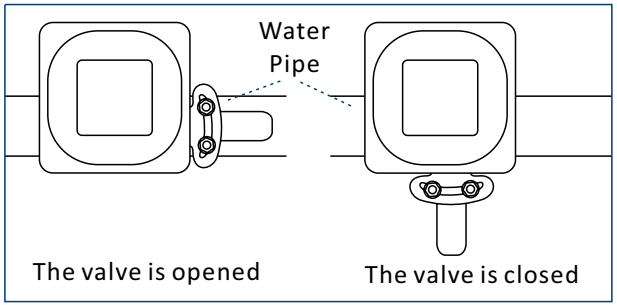


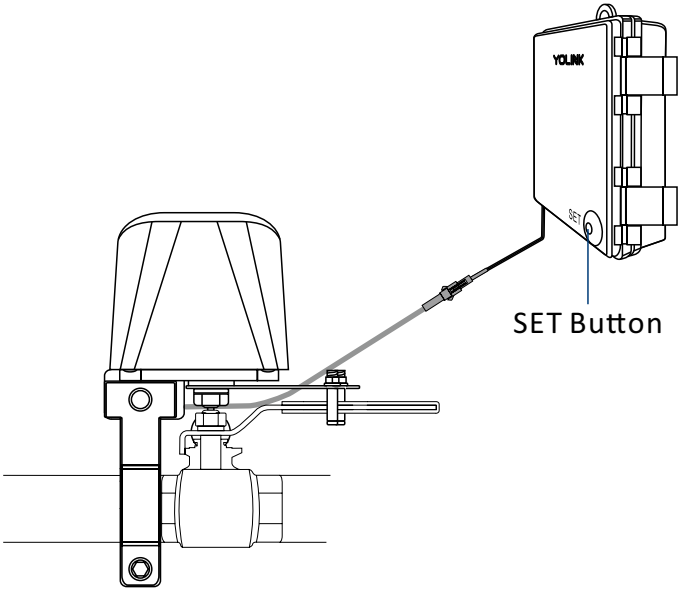
Diagram (B): Connect the motorized valve to the controller

D-4. Test the Controller and Manipulator/Motorized Valve

D-4-1. Test the Controller and Manipulator (*see Illustration Next Page*)

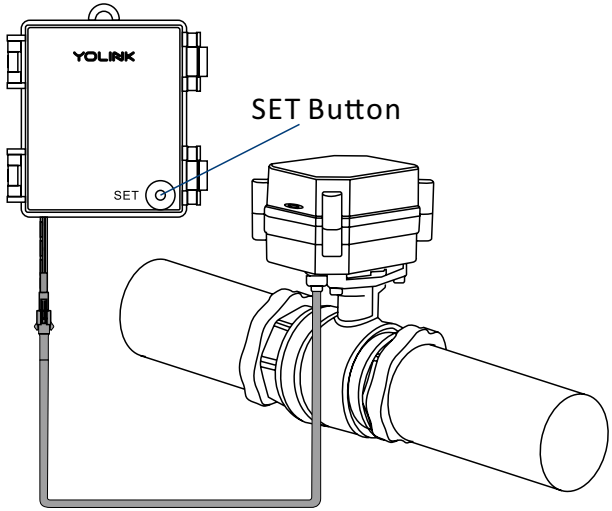
- Test the controller several times by pressing the SET button and watching for the smooth closing/opening of the valve. Then, use the YoLink app to open and close the valve
- If Not Working Properly:
  - Verify the handle can be rotated 90 degrees, otherwise the valve cannot be fully opened or closed
  - With the valve in the closed position, the screws holding the valve operating pins will be much more accessible, so this is a good time to readjust them so that they are grasping the valve handle securely. If needed, use a Phillips screwdriver to tighten the pins securely in place
  - If you are unable to get the controller and/or manipulator to operate correctly, double-check the installation as needed. Do not proceed to the next step until the manipulator opens and closes the ball valve properly
  - If it is still not working properly, Please refer to additional troubleshooting information on page 46, and Customer Service hours and contact information on page 51. For mechanical issues with the manipulator, sending us photos and/or a brief video of the issue may be beneficial in assisting you


Water
Pipe
The valve is opened
The valve is closed


YOLINK
SET
SET Button

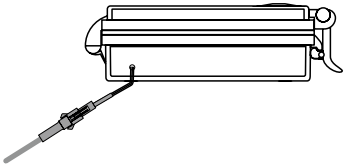
D-4-2. Test the Controller and Motorized Valve

- Turn on a water tap first, then test the controller several times by pressing the SET button to open or close the valve and confirming that water flow at the tap stops completely (while the valve should be closed) and flows with no loss of pressure (while the valve should be open). Then, use the YoLink app to open and close the valve
- If Not Working Properly:
  - If you are unable to get the controller and/or motorized valve to operate correctly, double-check the installation as needed. Do not proceed to the next step until the motorized valve opens and closes the ball valve properly
  - If it is still not working properly, Please refer to additional troubleshooting information on page 48, and Customer Service hours and contact information on page 51. For mechanical issues with the motorized valve, sending us photos and/or a brief video of the issue may be beneficial in assisting you



D-5. Installation Methods (Anywhere or Wall-mounting)

- Method A: Place anywhere

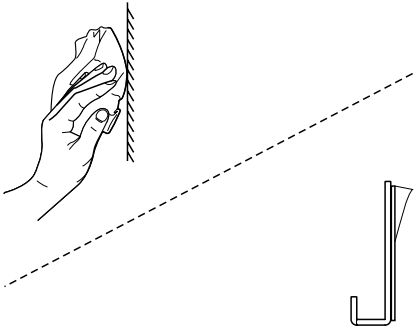


> Please refer to device environmental operating range information on page 42-47. Use this device outside the recommended ranges at your own risk

- Method B: Wall-mounting the controller

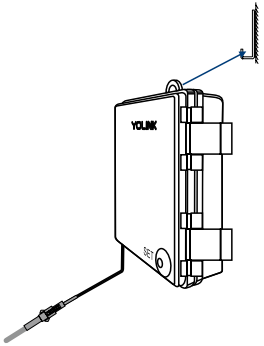
> Before installing the hook, place it in the appropriate position for hanging the controller. Ensure the controller connection cable and manipulator/motorized valve cable are connected securely

❶ Clean the installation area

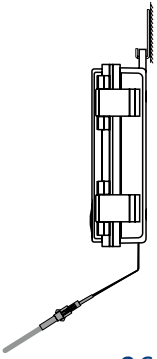


❷ Remove the protective layer on the double-sided tape on the bottom of the hook

❸ Place the hook at the pre-determined location then press it firmly for at least 5 seconds

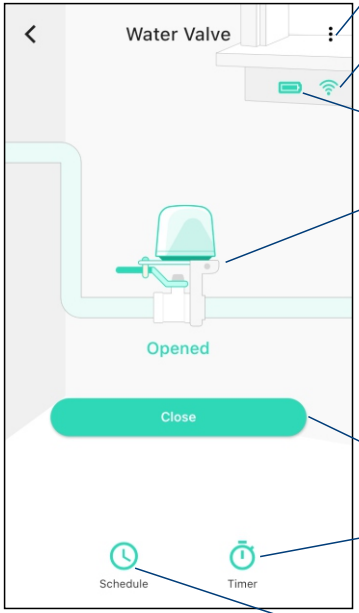


❹ Hang the controller on the hook



E. Using the YoLink App

E-1. Device page



Details
- Tap to go to Details page(refer to page 28)

Connection Status
of Gas/Water Valve Controller and Hub

Current Battery level
- Shown red if replacement is required

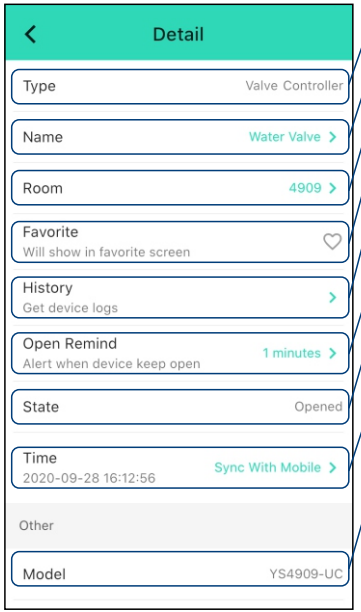
Real-time Status of Gas/Water Valve Controller:
Open or closed

Control Button of Gas/Water Valve Controller:
Open or close

Timer
Set the one-time-timer duration for the relay
(refer to page 31)

Schedule
Create on/off schedules to automate your relay
(refer to page 32)

E-2. Details page



a. Device Type

b. Rename the Device

c. Choose a Room for device

d. Add/Remove from favorites

e. Device History
Valve opened or closed, logged with date & time

f. Send Notification to you when the valve is left open for a set time

g. Device Status: Open or closed
- Power on again status is default set to Last State

h. Device Time
- Tap to sync with mobile

i. Device Model

j. Device EUI (unique)

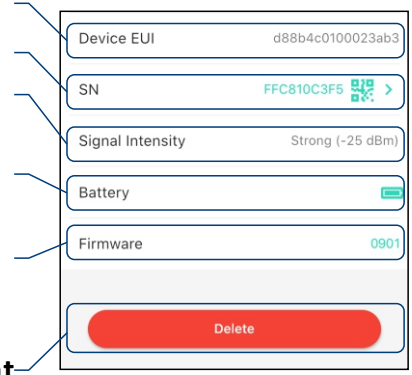
k. Device SN (unique)

l. Connection Signal Status
of controller and Hub: Strong; Good; Weak

m. Current Battery Level
- Shown red if replacement is required

n. Firmware Version
** "#### ready now" indicates a new update is available (refer to page 39)*

o. Remove Device From Current Account
** Tap to delete the device from your YoLink account*



E-3. Automation *(Set Up Rules For "If This Then Do That")*

The most popular use for our Gas / Water Valve Controller is to shut off water automatically in the event that a water leak has been detected. Generally, you have two options for this:

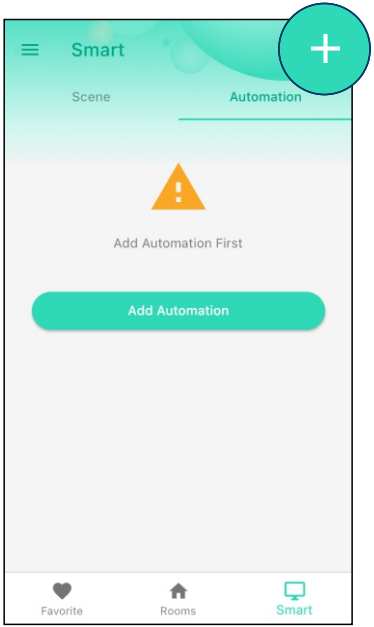
1. Configure an Automation in the app. Settings you make in the app will "tell" the valve controller to shut off the water is detected. In automation terms, this would be written out "IF a water leak is detected, THEN close the water valve." This is a simple process in our app, and if this is your first time with a smart device and with automation, we will explain it clearly in this section.

2. Utilize YoLink *Control* to "pair" one or more water leak sensors to the valve controller, so that the water is shut off as soon as a water leak is detected. YoLink *Control* is a unique device-to-device protocol that allows for this to work, without internet and even without power. YoLink *Control* is explained on page 35

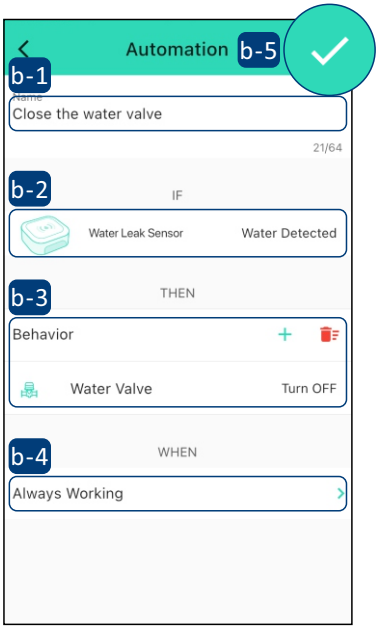
How to Set Up an Automation (*See Illustration Next Page*)

- Go to the "Smart" screen, tap "Automation"

> ! Gas/Water Valve Controller can be set as either a trigger or an action device, with two options: turn on or turn off

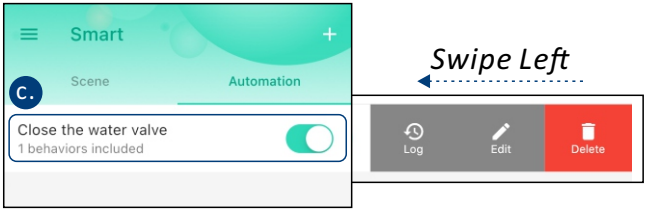


a. Tap the “+” icon to add an automation



b. Add an automation

b-1 Edit name
b-2 Edit trigger
b-3 Edit behavior *(You must have at least one action device, or you cannot set a behavior)*
b-4 Edit when *(Set a time range for the automation (always or during specific days or times)*
b-5 Tap to save the settings

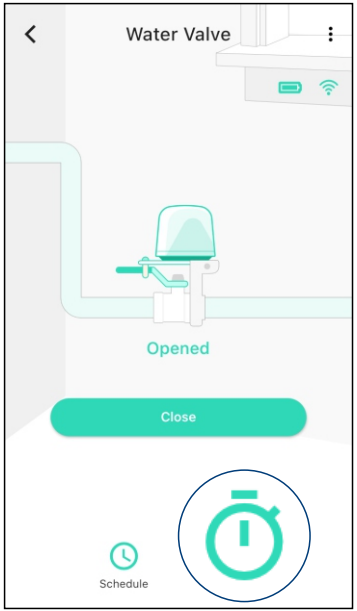


c. Click to edit the automation

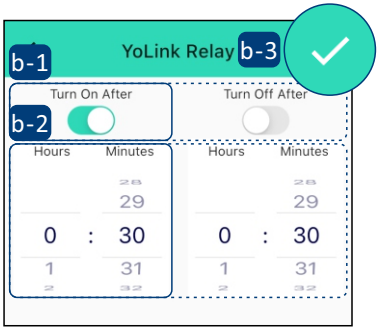
1. Tap “ ” button to enable or disable the automation
2. Swipe left to view the history logs and to edit or to delete the automation

E-4. Timer

The timer will run only once. You can set a new timer after the timer has already run or after you cancel it



a. Tap the "⏱" icon to edit the timer



b. Edit the timer

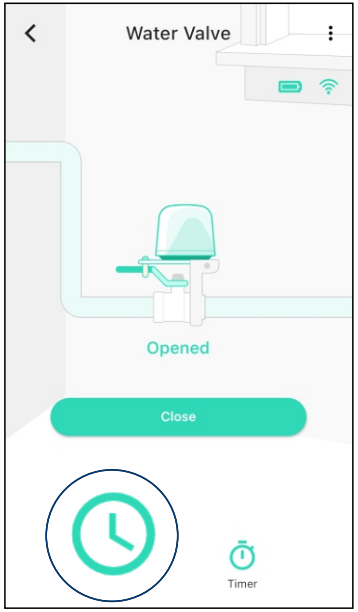
b-1 Enable "Turn On After" and (or) "Turn Off After"

b-2 Set the timer duration in "Hours and Minutes"

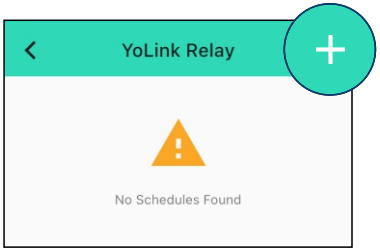
b-3 Tap to save the settings

E-5. Schedule

1. You can have a maximum 6 schedules at one time
2. You may add as many schedules as you want in Automation settings. Automation settings are saved in the cloud



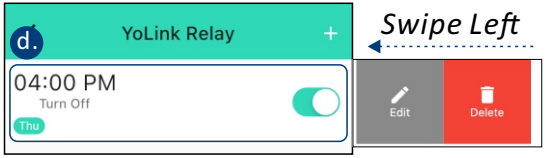
a. Tap the "" icon to go to Schedule Page



b. Tap the "+" icon to add a schedule

c. Add a schedule

c-1 Set the preferred state
"Turn On" and (or) "Turn Off"
c-2 Set the schedule time
c-3 Set the repeat frequency
c-4 Tap to save the settings



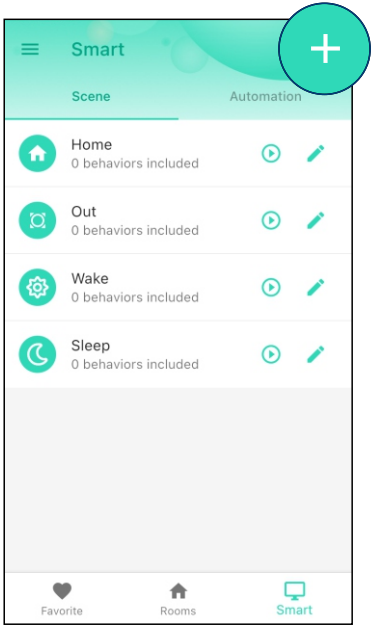
d. Click to edit the schedule

1. Tap " " button to enable or disable the schedule
2. Swipe left to edit or to delete the schedule

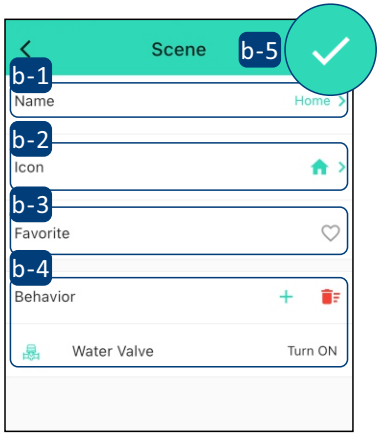
E-6. Scene

Go to the “Smart” screen, and default is “Scene” screen

There are four pre-set scenes, you can choose to either edit or delete each of them

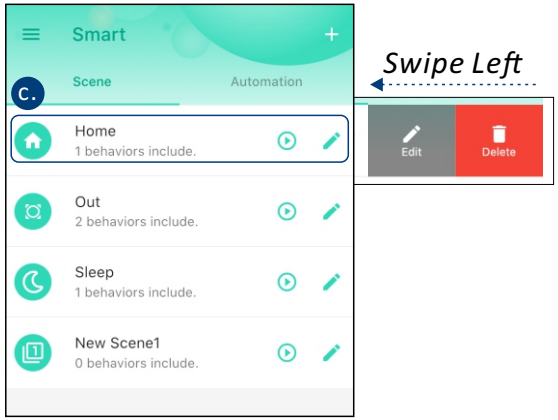


a. Tap the “+” icon to add a scene



b. Add a scene

b-1 Edit name
b-2 Select an icon
b-3 Add/remove from favorites
b-4 Edit behavior *(You must have at least one action device, or you cannot set a behavior)*
b-5 Tap to save the settings



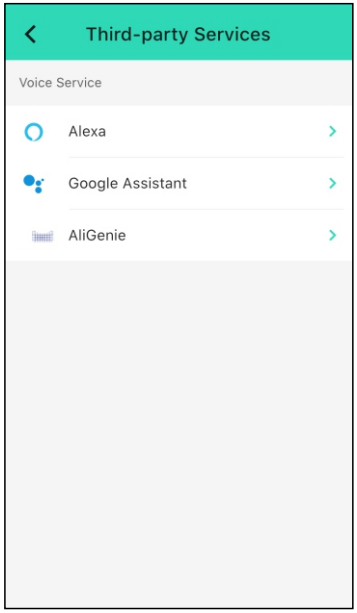
c. Click to edit the scene

1. Tap “ ▷ ” button to run the scene
2. Tap “ ✎ ” button to edit the scene
3. Swipe left to edit or to delete the scene

E-7. Voice Assistants

Connect YoLink with third-party voice assistants to control (turn on or turn off) or monitor the status of your devices through voice commands

- Tap " ☰ " in the upper left corner to go to My Profile
- Go to **Settings** > **Voice Assistants** for the applicable voice assistant integration guide



Gas/Water Valve Controller is integrated with Alexa and Google Assistant, and is also integrated with **IFTTT.com** (works as trigger devices using IFTTT)

F. About YoLink *Control*

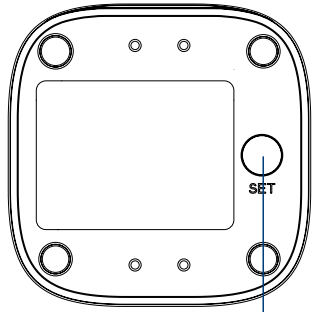
YoLink *Control* is our unique device-to-device control technology. Using YoLink *Control*, YoLink devices can be controlled without the Hub or an internet connection. (Use of YoLink *Control* is optional; you can use the Automation feature in the app OR use YoLink *Control*, but YoLink *Control* offers the benefit of operation without the Hub or internet connection.)

One device controls another, directly. A device that sends out commands is called the controller. A device that receives the commands is called the responder. Examples of a controller are a Water Leak Sensor, while examples of a responder are a Siren or a Gas/Water Valve (Controller)

The Water/Gas Valve Controller can only work as the responder of YoLink *Control* and can only set up YoLink *Control* with YS7903-UC Water Leak Sensor and YS7904-UC Water Leak Sensor 2

F-1. Pairing

1. To configure your Water Leak Sensor as a controller, Press and hold the SET button for 5-10 seconds until the LED quickly blinks green, then, release the button



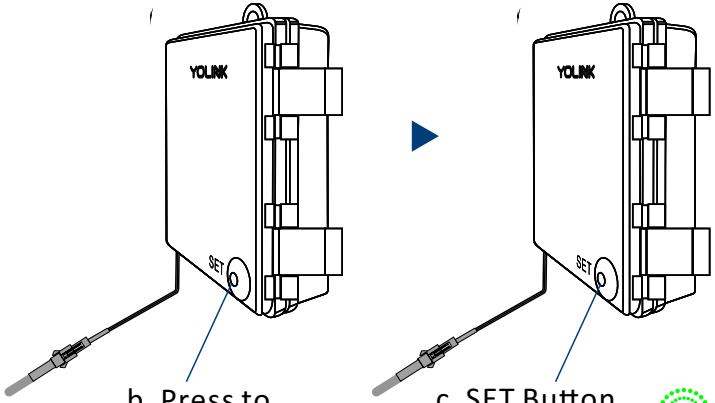
a. SET Button
(5-10 seconds)

Refer to the Water Leak Sensor manual for more information: YS7903-UC Water Leak Sensor

2. To configure a Gas/Water Valve Controller as the responder, close the valve using SET button or via YoLink app (verify the valve is shown to be Closed on the app). Press and hold the SET button for 5-10 seconds until the LED quickly blinks green, then, release the button

---

3. Upon pairing, the LED will stop blinking (this may happen after only blinking two or three times)

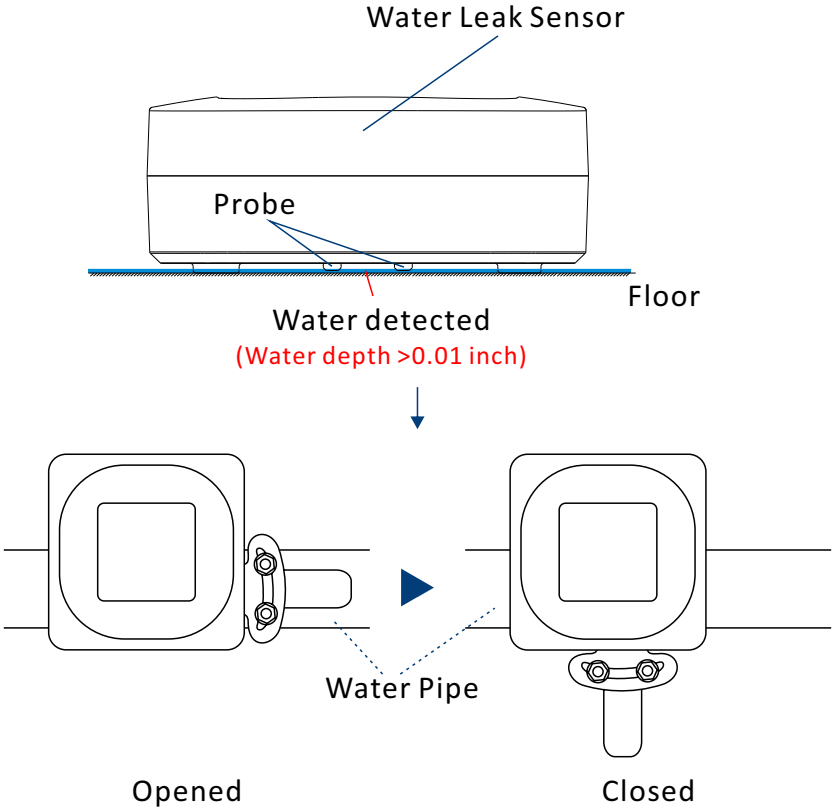


b. Press to close the valve

c. SET Button *(5-10 seconds)*

Operation

- When the Water Leak Sensor detects water, the YoLink Gas/Water Valve Controller will now immediately close the valve. The valve will remain closed until opened via the app or using the SET button; the restoral of the Water Leak Sensor to normal (no water detected) does not open the valve
- More advanced sequences, controlling multiple outputs (e.g. close valve and activate siren) are available via the YoLink app



F-2. Unpairing

1. At the Water Leak Sensor (controller), press and hold the SET button for 10-15 seconds until the LED quickly blinks green, then red, then, release the button

---

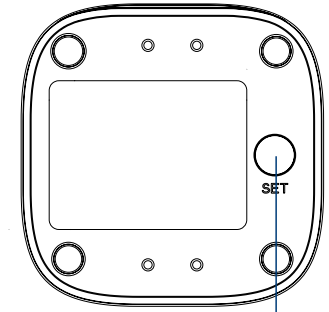
2. At the Gas/Water Valve Controller (responder), press and hold the SET button for 10-15 seconds, until the LED quickly blinks green, then red, then, release the button

---

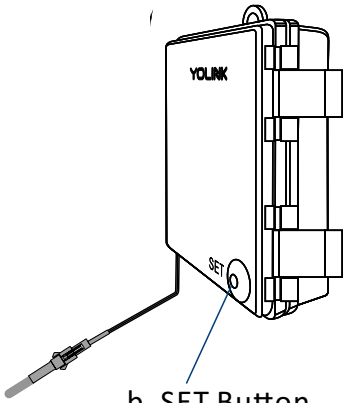
3. Upon un-pairing, either the Water Leak Sensor LED or the Gas/Water Valve Controller LED will stop blinking and turn off

---

4. The Gas/Water Valve Controller will no longer respond to the Water Leak Sensor



a. SET Button
(10-15 seconds)



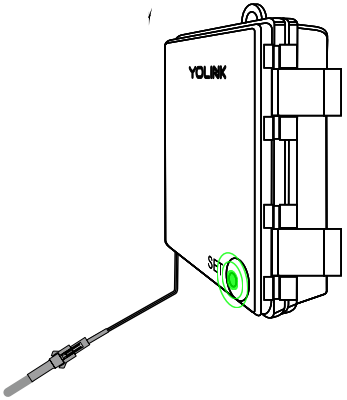
b. SET Button
(10-15 seconds)

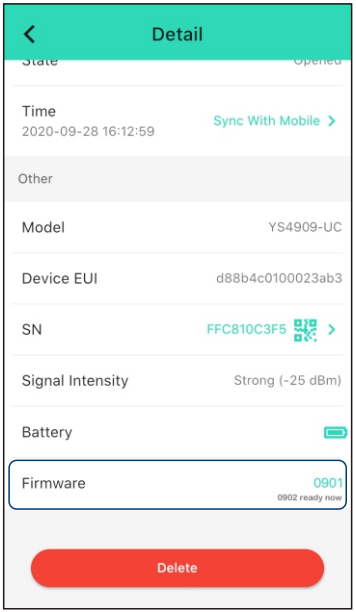
G. Maintenance

G-1. Firmware Update

To ensure our customers have the best user experience, we highly recommend you update to the newest version firmware when an update is available

- In “Firmware”, if a new version is listed as available (#### ready now), click it to start the firmware update process
- You may use your device during the update as it is performed in the background. The LED light will slowly blink green during the update and the process will be complete within 2 minutes after the light stops blinking

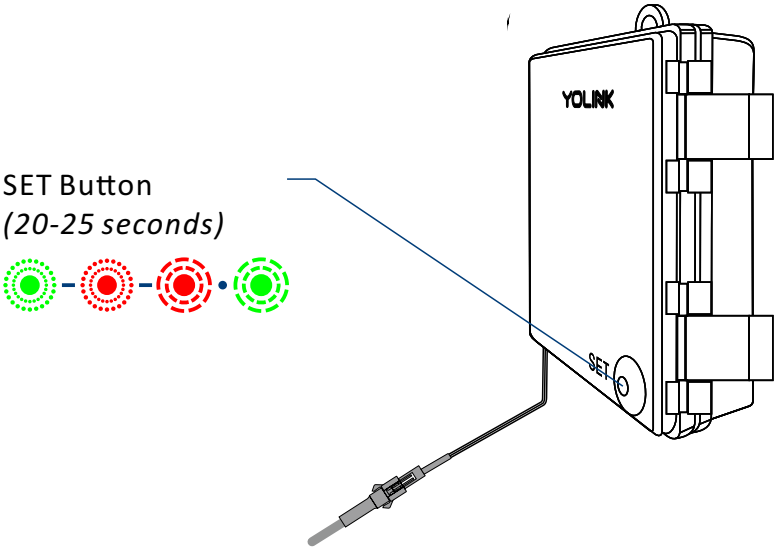




G-2. Factory Reset the Gas/Water Valve Controller

Factory reset will erase all of your settings and restore it to factory defaults. After the factory reset, your device will remain in your Yolink account

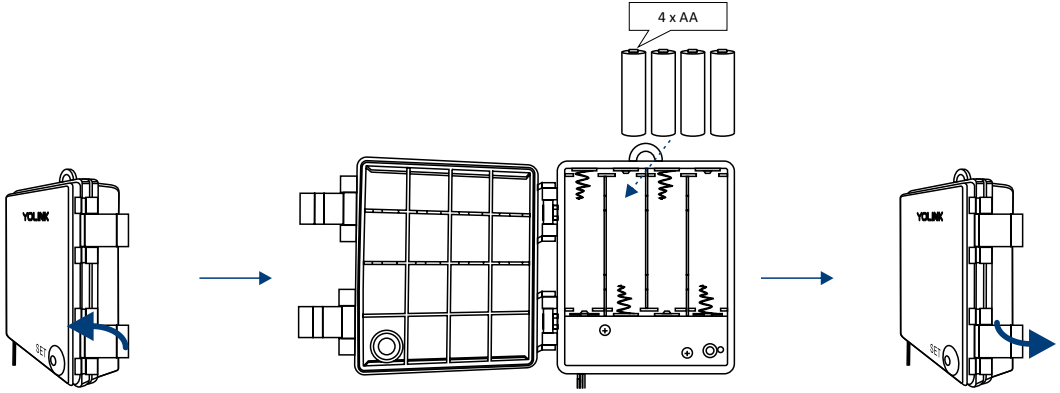
- Hold the SET button for 20-25 seconds until the status light blinks red and green alternately, then, release the button (*Hold the SET button longer than 25 seconds will ABORT the factory reset operation)*
- Factory reset will be complete when the status light stops blinking



G-3. Install or Replace the Batteries of Gas/Water Valve Controller

- With a lifting/prying action on the two clamp latches, open the cover on the controller (due to the rainproof design, this step may be slightly difficult)
- Install four new alkaline non-rechargeable AA batteries, and then close the two clamps of the controller
- Using the app, check the online status of the controller and verify there is no low-battery indicator
- Reconnect the controller with the manipulator

1. Do not press the SET button during the entire battery installation or replacement process
2. Do not mix old and new batteries



Open the cover | Install four new AA batteries | Close the cover

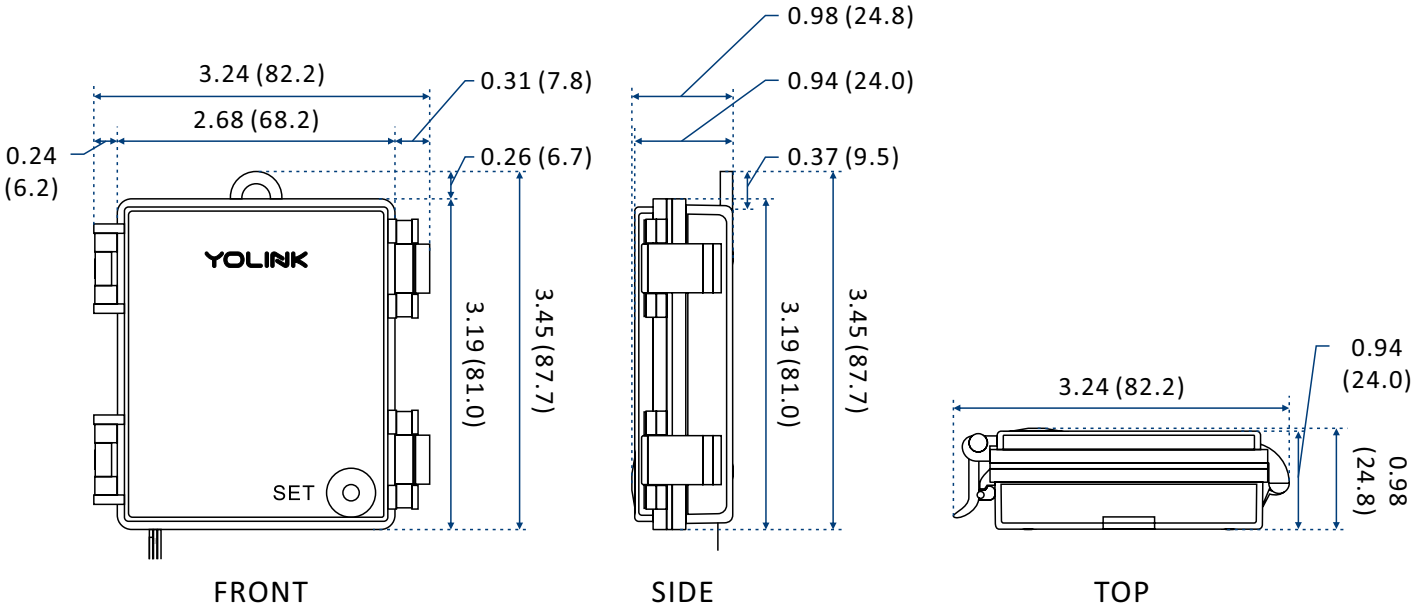
H. Specifications

H-1. Gas/Water Valve Controller

Battery:	6V DC (four alkaline non-rechargeable AA batteries)
Output Voltage:	12V DC
Device Current Draw:	≤ 160mA (on, without connecting with the manipulator/motorize valve), ≤ 90uA (standby)
IP Rating:	IP63 (Rainproof)
Manipulator Type:	Ball valve type, non-smart control
Environment:	Working Temperature: -4°F - 122°F (-20°C - 50°C) *(The pipe must not freeze)* Working Humidity: ≤95%, non-condensing

Dimensions:

Unit: inches (millimeters)

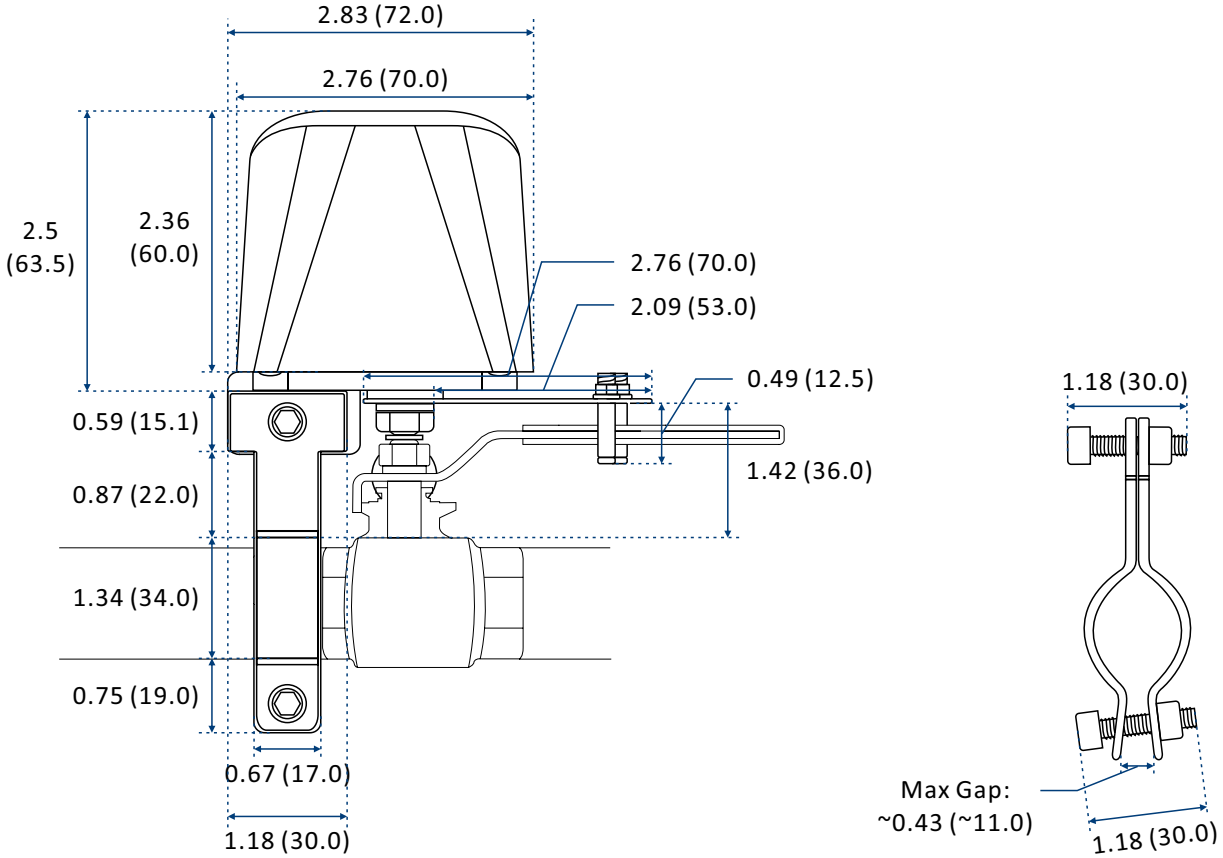


H-2. Gas/Water Valve Manipulator

Working Voltage:	8 - 14V DC
Valve Type:	Ball Valve
Valve Pressure:	80 - 106 KPa
Torque:	40kgf.cm
Electrical Valve Opening/Closing Time:	5 - 10 seconds (max 15 seconds)
Applicable Water Pipe Size:	1/2 inch (DN15), 3/4 inch (DN20), 1 inch (DN25)
Environment: (Indoor Use Only!)	Working Temperature: 14°F - 131°F (-10°C - 55°C) *(The pipe must not freeze);* Working Humidity: <95% Storage Temperature: -13°F - 131°F (-25°C - 55°C)

Dimensions:

Unit: inches (millimeters)



H-3. Motorized Valve

Working Voltage:	12V DC
Working Current:	Max 500mA (while valve is opening or closing)
Valve Type:	Ball valve
Suitable Media:	Water, air
Max Working Pressure:	145PSI (1.0Mpa)
Max. Torque Force For Actuator:	2N.m
IP Rating:	IP67 (waterproof)
Open/Closed Time:	5 - 10 seconds (max 15 seconds)
Thread:	NPT
Indicator:	Visual Position Indicator
Cable Length:	1.64 feet (0.5 meters)

Valve Body Material:	Brass
Actuator Material:	Engineering Plastics
Applicable Water Pipe Size:	1/2 inch (DN15), 3/4 inch (DN20), 1 inch (DN25), 1-1/4 inch (DN32)
Valve Dimension:	Dn15: 1/2" NPT female thread connection, 0.59inch (15mm) full bore DN20: 3/4" NPT female thread connection, 0.79inch (20mm) full bore DN25: 1" NPT female thread connection, 0.91inch (23mm) reduce bore DN32: 1-1/4" NPT female thread connection, 1.14inch (29mm) reduce bore
Environment: **(Indoor Use Only!)**	Working Temperature: 5°F - 122°F (-15°C - 50°C) *(liquid temperature:* 35.6°F - 194°F*(2°C - 90°C))*

Troubleshooting

Symptom:

1. Device is offline

- If valve is not connected to the cloud, press the SET button on Gas/Water Valve Controller once
- If Hub is offline, reconnect the Hub to the Internet and press the SET button on Gas/Water Valve Controller once
- If Hub is not on, power on the Hub again and press the SET button on Gas/Water Valve Controller once
- If valve is out of range with Hub, relocating the Hub may be required
- For a device with low-battery indicators or alerts or if the condition of the batteries is in question, replace the batteries with four premium “AA” alkaline batteries

2. Timer does not run

- The condition of the batteries is in question. Replace the batteries with four premium “AA” alkaline batteries. Press the SET button once to open/close the valve, also you can open/close the valve via YoLink app or set a new timer. (When you add a resetting/one-time-use timer this will need to be amended with that new information.)

3. Other issues, contact customer service, **1-949-825-5958 (M-F 9am - 5pm PST)** or email 24/7 at **service@yosmart.com**

Warning

- Please install, operate and maintain the Gas/Water Valve Controller and Manipulator (or Motorized Valve) only as outlined in this manual. Improper use may damage the unit and/or void the warranty
- Do not install or use the controller and manipulator outside of the temperature and humidity range listed in the Environmental section in Specifications, on page 42-47. Lithium non-rechargeable batteries, operating in a wider temperature range , are recommended for applications on the hotter or colder end of the controller's operating range (device environmental limitation can be extended to the range of -4°F - 176°F (-20°C - 80°C))
- While the controller is rainproof, to ensure optimal operation and lifetime of the controller, installing the controller with overhead protection from weather is suggested. Do not immerse the controller or allow it to be immersed in water
- Do not install or use the controller and manipulator where it will be subjected to high temperatures and/or open flame
- Install or use the controller and manipulator (or motorized valve) only in clean environments. Dusty or dirty environments may prevent the proper operation of this device, and will void the warranty
- If your Gas/Water Valve Controller or Manipulator does get dirty, please clean it by wiping it down with a clean, dry cloth. Do not use strong chemicals or detergents, which may discolor or damage the exterior and/or damage the electronics, voiding the warranty
- Do not install or use the controller and manipulator where it will be subjected to physical impacts and/or strong vibration. Physical damage is not covered by the warranty

- Power the controller only with four AA batteries (see below, regarding batteries)
- Use only new, name brand, alkaline non-rechargeable AA batteries
- Do not use rechargeable batteries
- Do not use zinc blend batteries
- Do not mix new and old batteries
- Do not puncture or damage batteries. Leakage can cause harm on skin contact, and is toxic if ingested
- Do not dispose of batteries in fire as they may explode! Please follow local battery disposal procedures
- To avoid damaging the controller, if storing the controller for an extended period, remove the batteries
- Please contact Customer Service before attempting to repair, disassemble or modify the device, any of which can void the warranty and permanently damage the device

If you have any difficulties installing or using your Gas/Water Valve Controller, please contact our Customer Service department during business hours:

US Live Tech Support: **1-949-825-5958** M-F 9am - 5pm PST

Email: **service@yosmart.com**

YoSmart Inc. 17165 Von Karman Avenue, Suite 105, Irvine, CA 92614

Warranty 1 Year Limited Electrical Warranty

YoSmart warrants to the original residential user of this product that it will be free from defects in materials and workmanship, under normal use, for 1 year from the date of purchase. User must provide a copy of original purchase receipt. This warranty **does not cover** abuse or misused products or products used in commercial applications. This warranty does not apply to Gas/Water Valve Controllers that have been improperly installed, modified, put to a use other than designed, or subjected to acts of God (such as floods, lightning, earthquakes, etc.). This warranty is limited to repair or replacement of the Gas/Water Valve Controller only at YoSmart's sole discretion. YoSmart will NOT be liable for the cost of installing, removing, nor reinstalling this product, nor direct, indirect, or consequential damages to persons or property resulting from the use of this product. This warranty only covers the cost of replacement parts or replacement units, it does not cover shipping & handling fees

To implement this warranty please give us a call during business hours at 1-949-825-5958, or visit www.yosmart.com

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio / TV technician for help

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) This device may not cause harmful interference

2) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifica ons to this equipment. Such modifica ons could void the user's authority to operate the equipment.

FCC RF Radia on Exposure Statement

"To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configura ons. The antennas used for this transmitter must be installed to provide a separa on distance of at least 20 cm from all persons and must not be co-located or opera ng in conjunc on with any other antenna or transmitter."