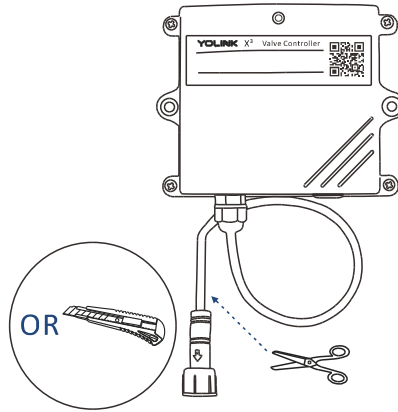
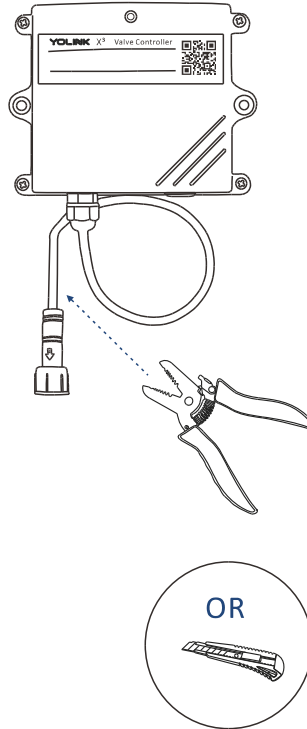


3. Prepare for Installation of the Valve Controller

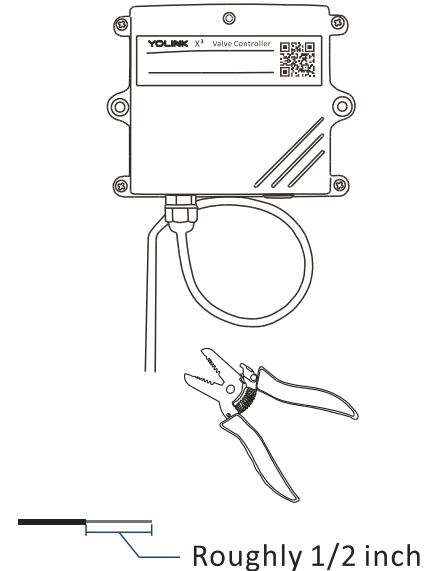


- 1 Using a scissors or utility knife, carefully remove the outer jacket/insulation on the cable.

- 2 Use a wire cutter/stripper to remove the connector on the new controller.

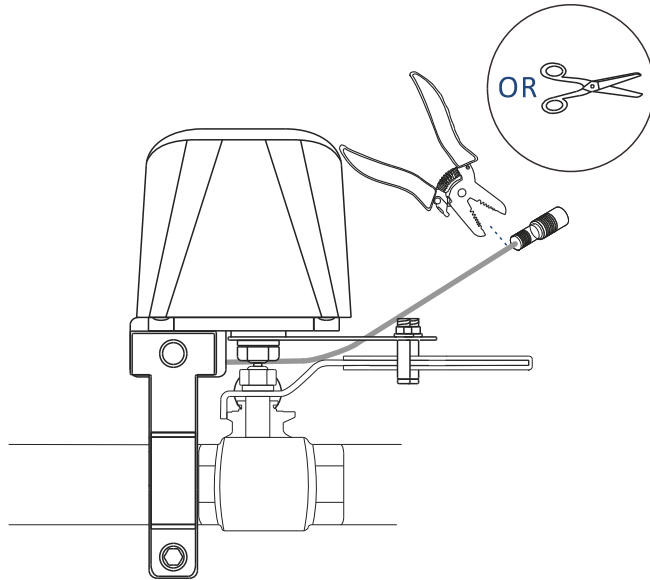


- 3 Using a wire stripper, remove the insulation on each conductor, leaving roughly half an inch of exposed conductor



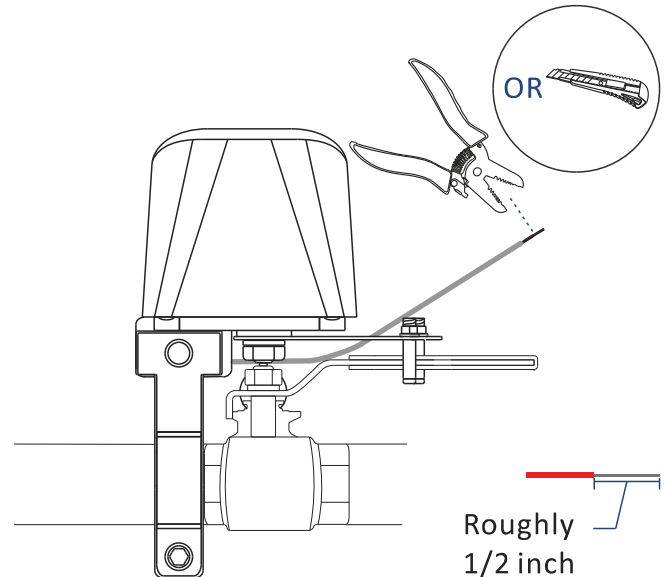
4. Prepare for Installation of the Manipulator

- 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

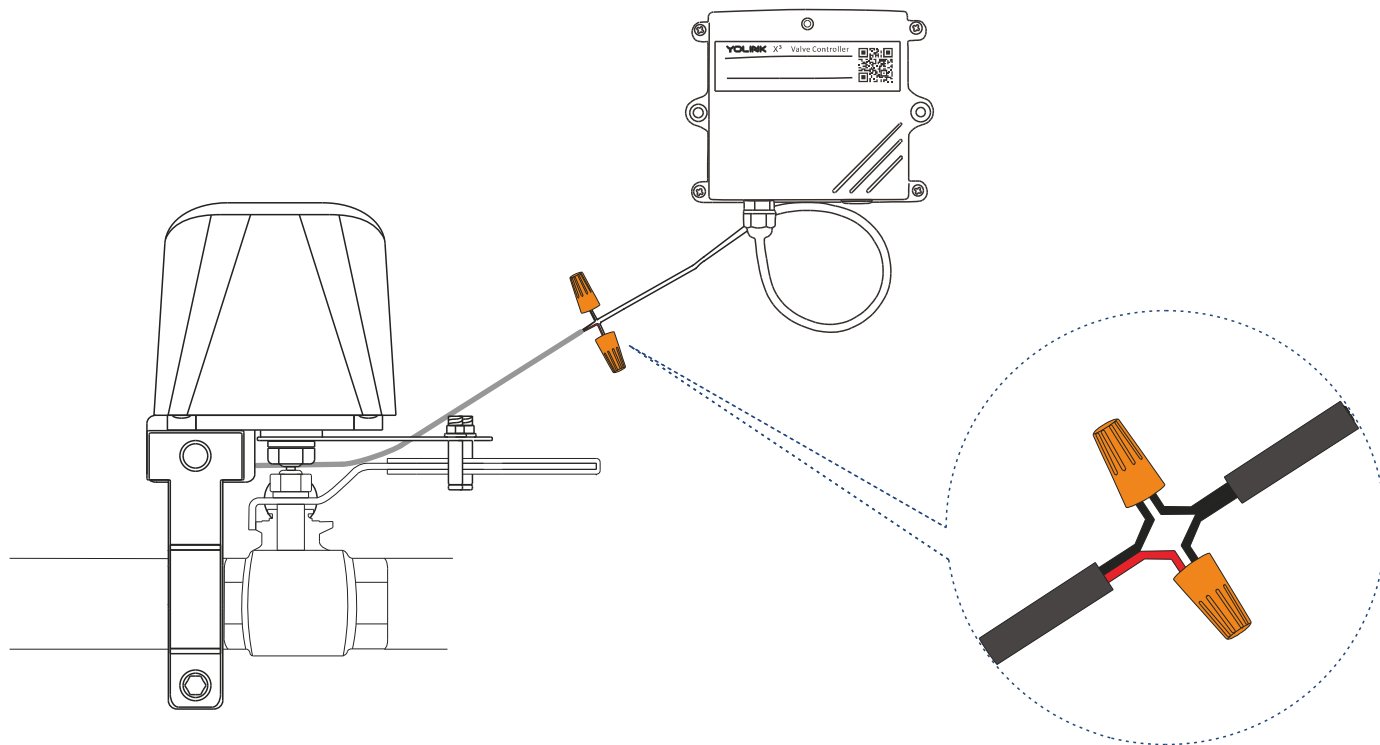


5. Connect the Manipulator to the Controller

- 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 (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
- 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 After the connection, proceed to page 46-48, for testing

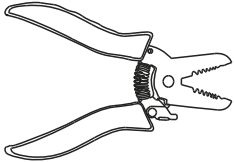


Reversing the wiring connection may be required if the manipulator does not operate. Do this by moving each controller wire to the opposite wire on the manipulator

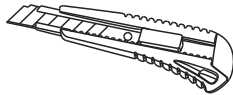


D-6. Instructions for installing the X3 Valve Controller for use with an existing Motorized Valve (Non-smart, 2-wire, 12VDC only!)

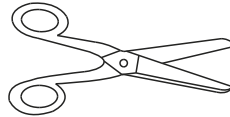
1. These Tools may be Required



Wire Cutter/Stripper



Utility Knife



Scissors



Wire Nuts
/Connectors (2)



Electrical Tape

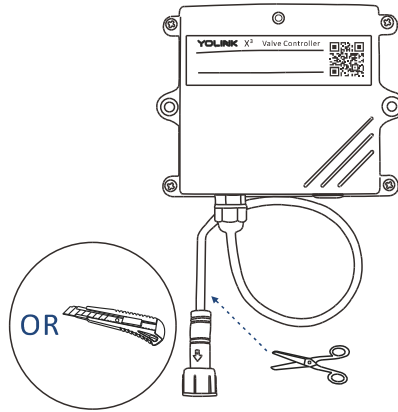


1. Your existing motorized valve must be 2-wire, 12 VDC, non-smart, and functional
2. Wire nuts (twist-on connectors) are the recommended wire splicing method. Other methods may be acceptable as long as they provide a secure electrical connection, with no exposed conductors

2. Get Ready

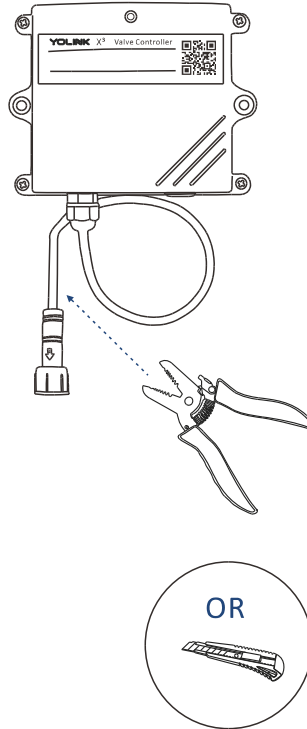
- ① Remove power from the motorized valve by disconnecting the connection cable
- ② Examine the connector on the motorized valve connection cable. If compatible with the controller's connection cable connector, connect the two cables together and proceed to page 46

3. Prepare for Installation of the Valve Controller

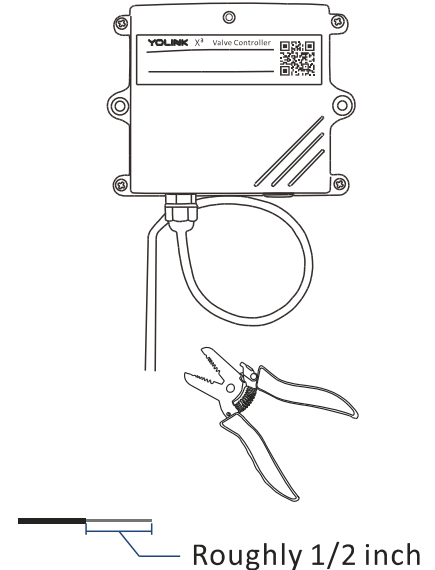


- 1 Using a scissors or utility knife, carefully remove the outer jacket/insulation on the cable.

- 2 Use a wire cutter/stripper to remove the connector on the new controller.

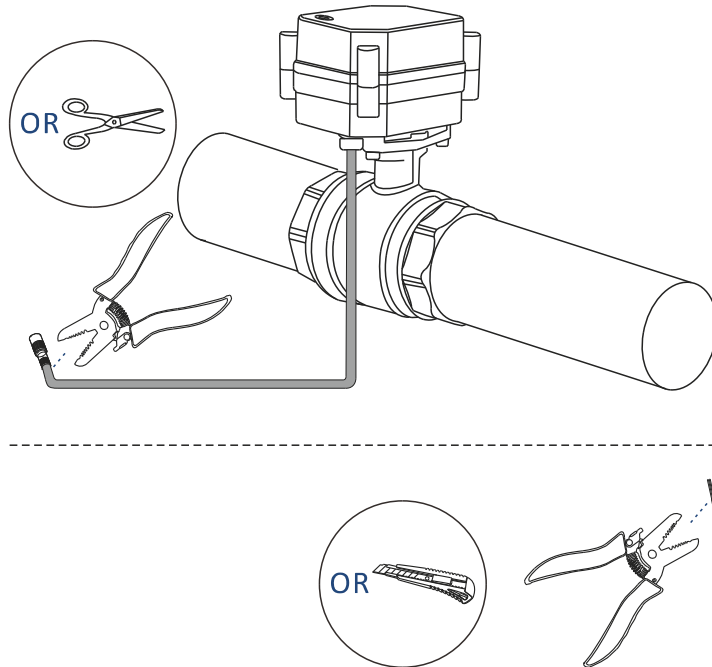


- 3 Using a wire stripper, remove the insulation on each conductor, leaving roughly half an inch of exposed conductor



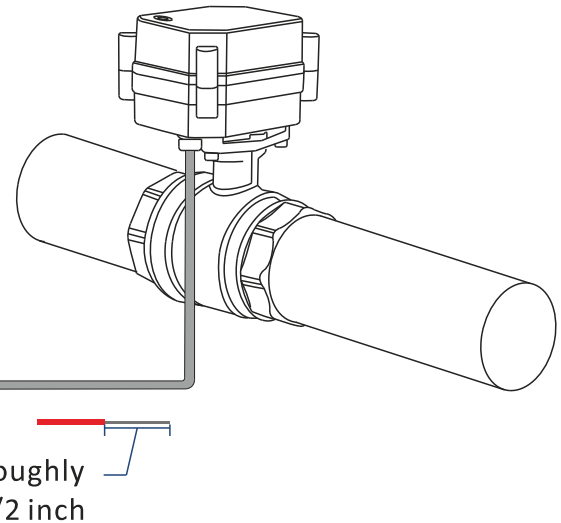
4. Prepare for Installation of the Motorized Valve

- 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

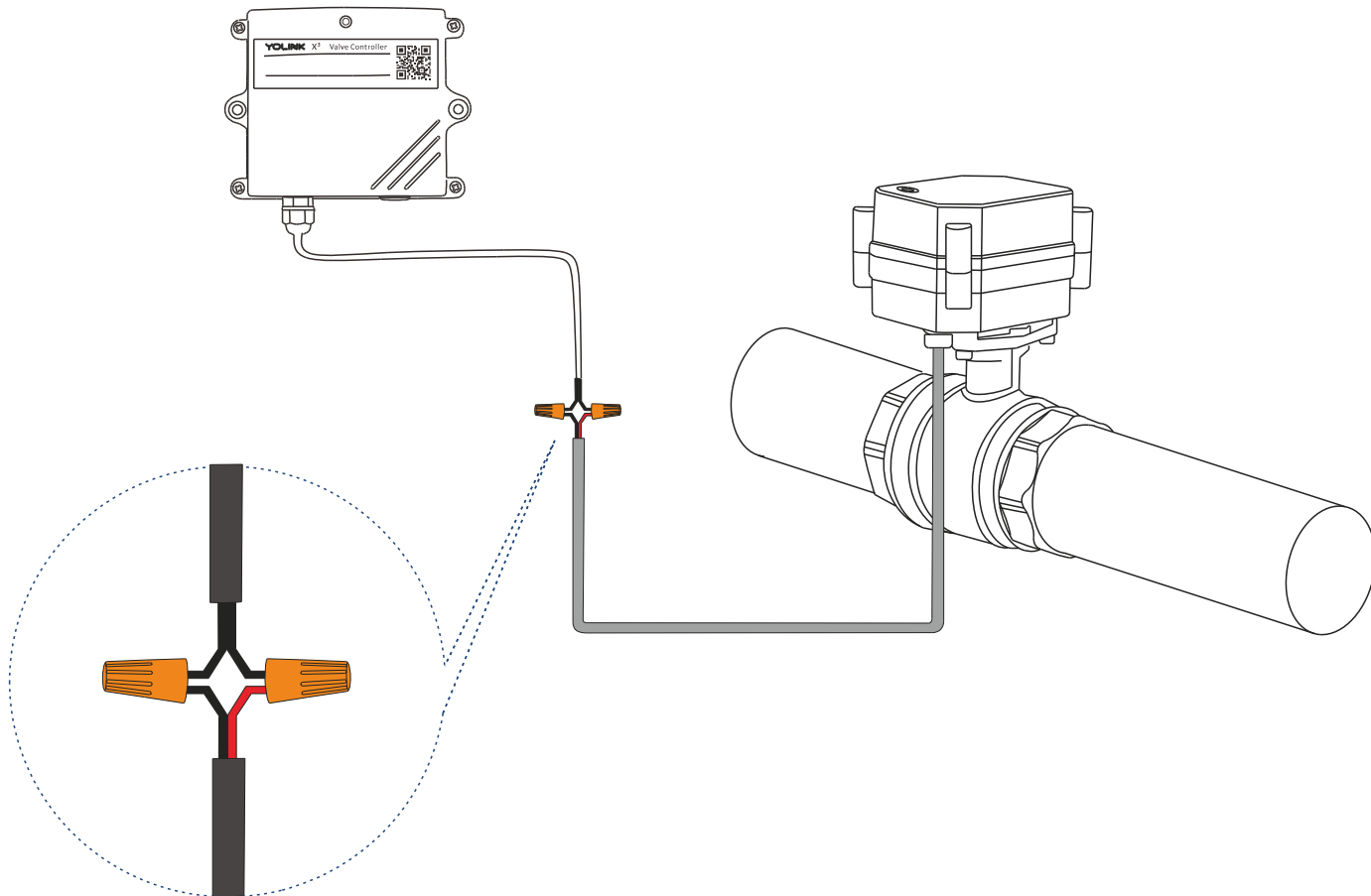


5. Connect the Motorized Valve to the Controller

- 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 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 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 After the connection, proceed to page 46-48, for testing



Reversing the wiring connection may be required if the motorized valve does not operate. Do this by moving each controller wire to the opposite wire on the manipulator

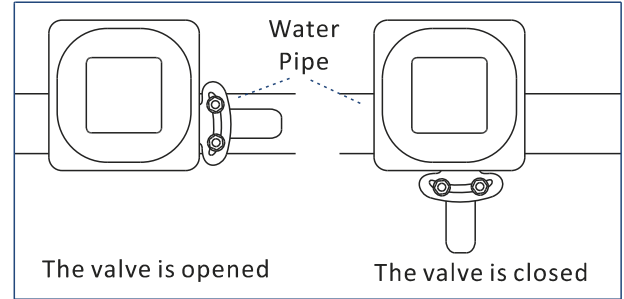
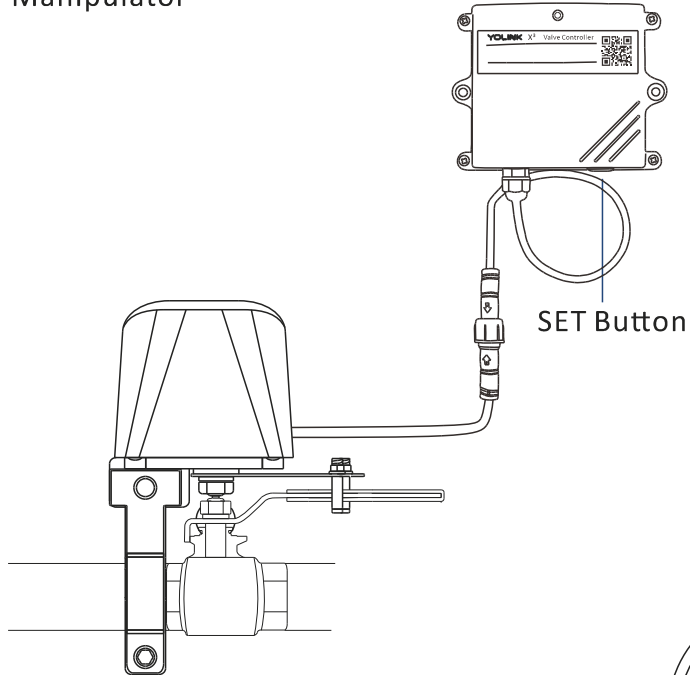


D-7. Test the Controller and Manipulator/Motorized Valve/Bulldog Valve Robot

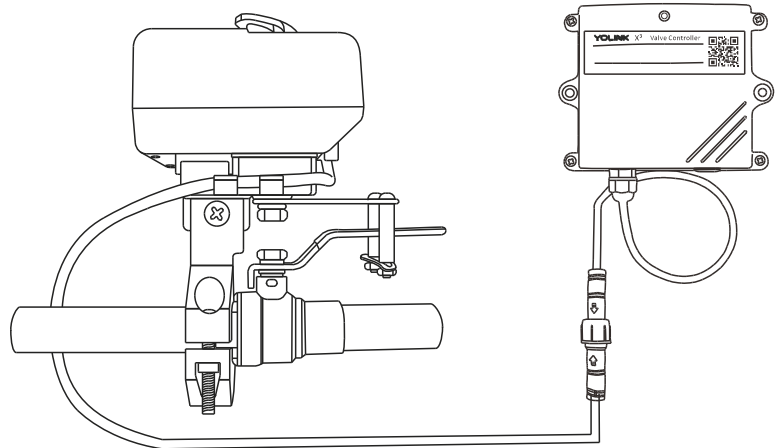
D-7-1. Test the Controller and Manipulator/Bulldog Valve Robot (*see Illustration Next Page*)

- 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/Bulldog Valve Robot to operate correctly, double-check the installation as needed. Do not proceed to the next step until the manipulator/Bulldog Valve Robot opens and closes the ball valve properly
 - If it is still not working properly, Please refer to additional troubleshooting information on page 72, and Customer Service hours and contact information on page 75. For mechanical issues with the manipulator/Bulldog Valve Robot, sending us photos and/or a brief video of the issue may be beneficial in assisting you

A. Test the Controller and Manipulator

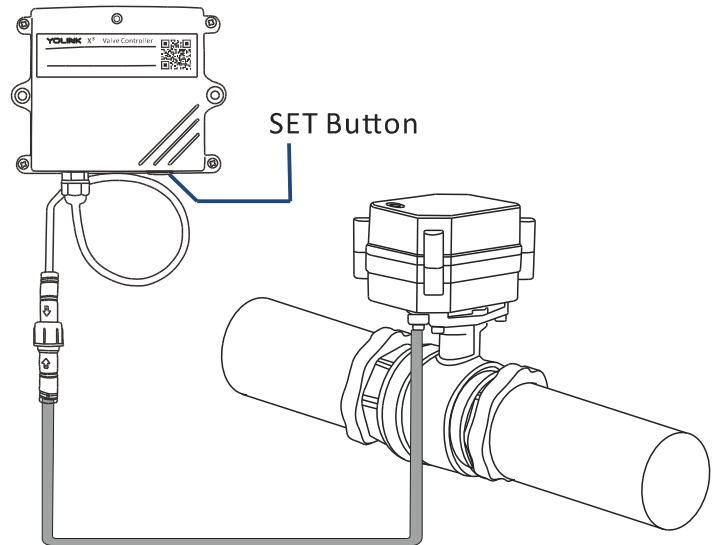


B. Test the Controller and Bulldog Valve Robot



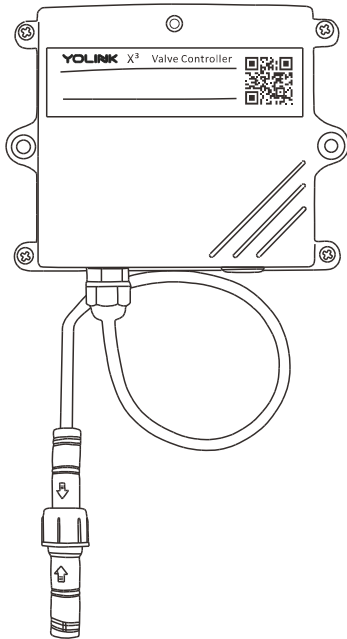
D-7-2. Test the Controller and Motorized Valve

- 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 72, and Customer Service hours and contact information on page 75. 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-8. Installation Methods

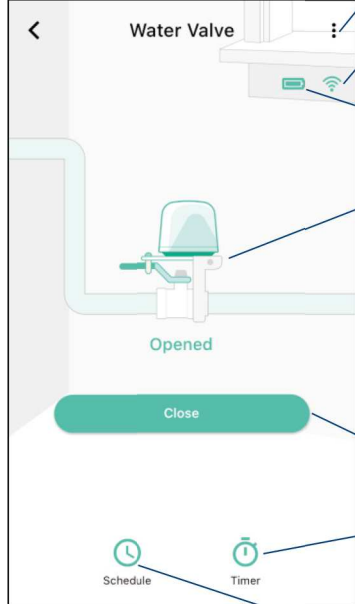
Securely mount the controller to the wall surface, using appropriate screws and fasteners (not included)



Please refer to device environmental operating range information on page 66, 68, 71. Use this device outside the recommended ranges at your own risk

E. Using the YoLink App

E-1. Device page



Details
- Tap to go to Details page (refer to page 51)

Connection Status
of X3 Valve Controller and Hub

Current Battery level
- Shown red if replacement is required

Real-time Status of X3 Valve Controller:
Open or closed

Control Button of X3 Valve Controller:
Open or close

Timer
Set the one-time-timer duration for the relay
(refer to page 54)

Schedule
Create on/off schedules to automate your relay
(refer to page 55)

E-2. Details page

< Detail

Type Valve Controller

Name Water Valve >

Room 4909 >

Favorite Will show in favorite screen

History Get device logs >

Open Remind Alert when device keep open 1 minutes >

State Opened

Time 2020-09-28 16:12:56 Sync With Mobile >

Other

Model YS4909-UC

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 63)

o. Remove Device From Current Account

* Tap to delete the device from your YoLink account

Device EUI d88b4c0100023ab3

SN FFC810C3F5 >

Signal Intensity Strong (~25 dBm)

Battery

Firmware 0901

Delete

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

The most popular use for our X3 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:

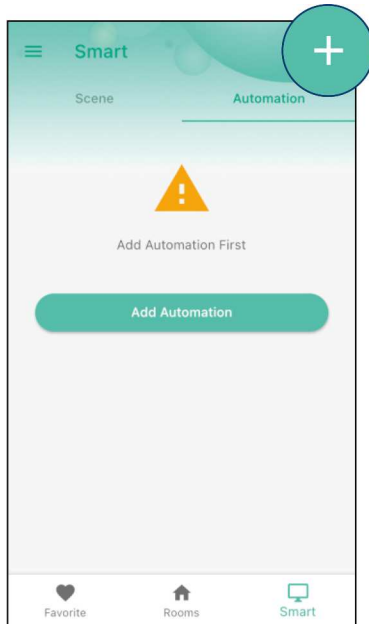
1. Configure an Automation in the app. Settings you make in the app will “tell” the valve controller to shut off the water is detected. In automation terms, this would be written out “IF a water leak is detected, THEN close the water valve.” This is a simple process in our app, and if this is your first time with a smart device and with automation, we will explain it clearly in this section.
2. Utilize YoLink Control-D2D 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-D2D is a unique device-to-device protocol that allows for this to work, without internet and even without power. YoLink Control-D2D is explained on page 59

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

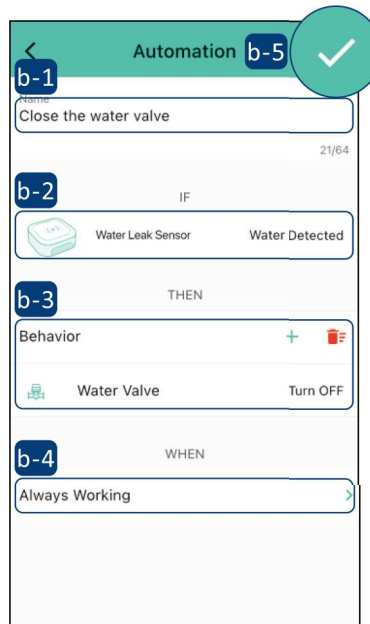
- Go to the “Smart” screen, tap “Automation”



X3 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

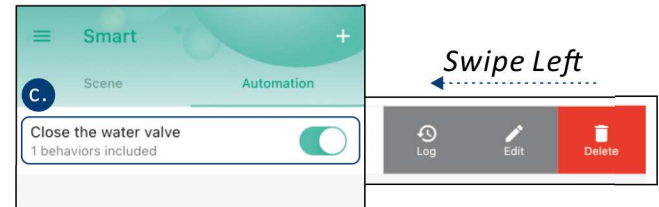
b-1 Edit name

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

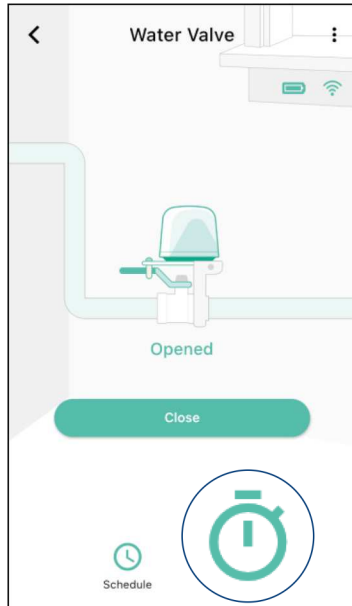
1. Tap “” button to enable or disable the automation

2. Swipe left to view the history logs and to edit or to delete the automation

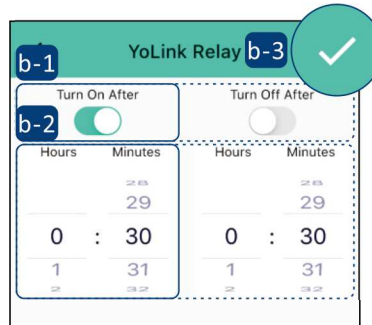
E-4. Timer



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”

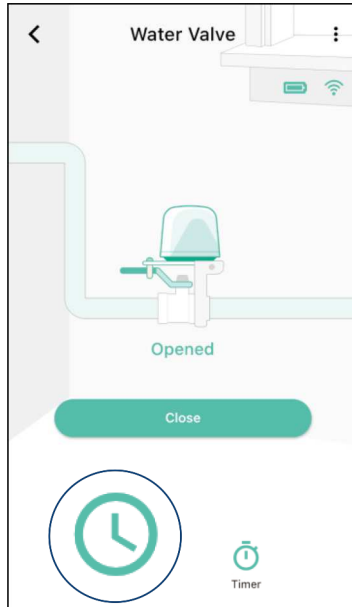
b-2 Set the timer duration in “Hours and Minutes”

b-3 Tap to save the settings

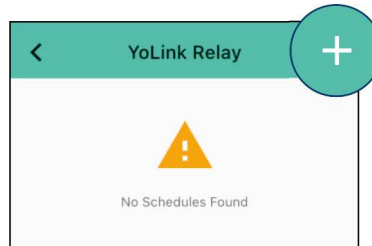
E-5. Schedule



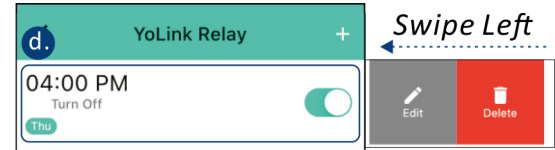
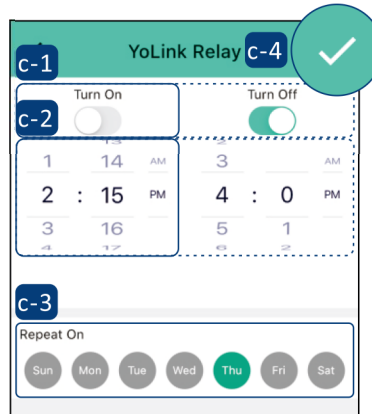
1. You can have a maximum 6 schedules at one time
2. You may add as many schedules as you want in Automation settings. Automation settings are saved in the cloud



a. Tap the “⌚” icon to go to Schedule Page



b. Tap the “+” icon to add a schedule



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

c. Add a schedule

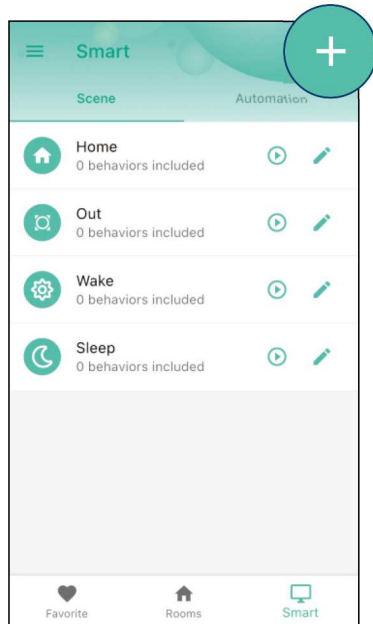
- c-1 Set the preferred state “Turn On” and (or) “Turn Off”
- c-2 Set the schedule time
- c-3 Set the repeat frequency
- c-4 Tap to save the settings

E-6. Scene

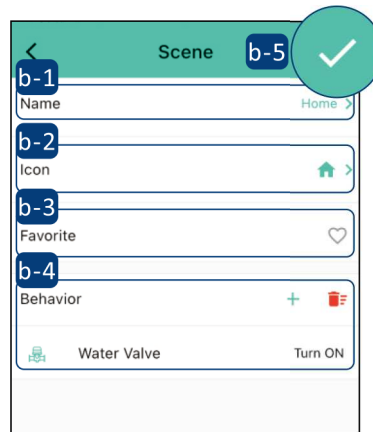
Go to the “Smart” screen, and default is “Scene” screen



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

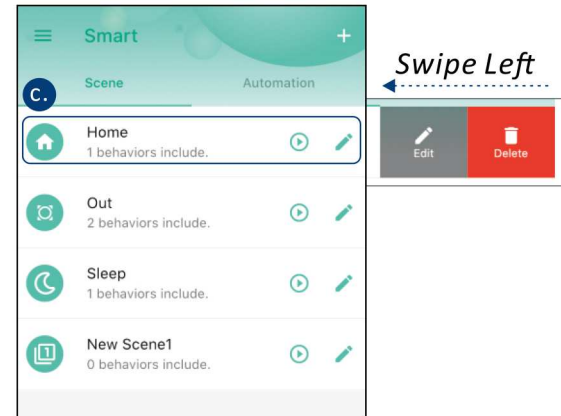
b-1 Edit name

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. Third-Party Services

With third-party services connected to your YoLink account, your valve controller can be used as action device in automations, routines and applets with smart home/IoT devices and services from third-party (non-YoLink) brands

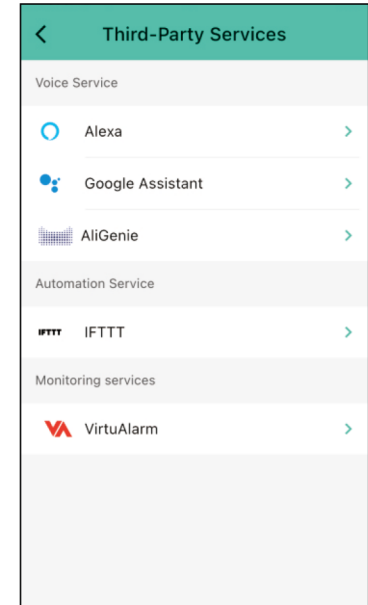
- Tap “☰” in the upper left corner to go to My Profile
- Go to **Settings > Third-Party Services** and select the applicable service
- Follow the instructions, to authorize and add the connection to your YoLink account



Refer to the associated app or website for additional information specific to the third-party service. Additional information may also be found on our website at www.yosmart.com/support-and-service or by contacting Customer Support (refer to page 75 for contact information)

E-7-1. IFTTT

- The X3 Valve Controller can be used as an action device for custom applets. Visit www.ifttt.com for more information and pricing



E-7-2. Alexa

- Open/close the valve by voice command as well as the associated app (For example, “Alexa, turn on/turn off the Water Valve”
- Turned on/turned off status can be queried by voice command as well as the associated app (For example, “Alexa, what is the status of the Water Valve?” -- “The Water Valve is turned on/turned off”
- The X3 Valve Controller can be used as an action device for Alexa routines with two options: turn on/turn off

E-7-3. Google Assistant

- Open/close the valve by voice command as well as the associated app (For example, “OK, Google, turn on/turn off the Water Valve”
- Turned on/turned off status can be queried by voice command as well as the associated app (For example, “OK, Google, what is the status of the Water Valve?” -- “The Water Valve is turned on/turned off”
- The X3 Valve Controller can be used as an action device for Google routines with two options: turn on/turn off

E-7-4. VirtuAlarm

- Monitoring service provided by VirtuAlarm (optional subscription service)

F. About YoLink Control-D2D

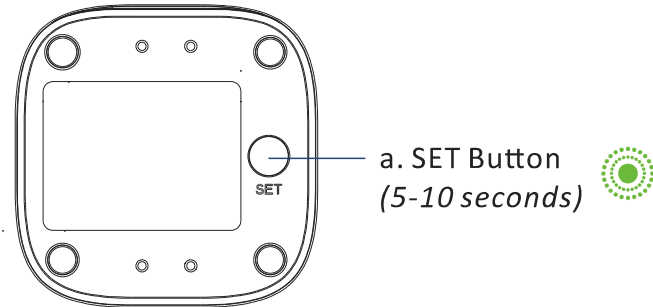
YoLink Control-D2D is our unique device-to-device control technology. Using YoLink Control-D2D, YoLink devices can be controlled without the Hub or an internet connection. (Use of YoLink Control-D2D is optional; you can use the Automation feature in the app OR use YoLink Control-D2D, but YoLink Control-D2D 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 Valve Controller

The Outdoor Alarm Controller can only work as the responder of YoLink Control-D2D and can only set up YoLink Control-D2D with YS7903-UC Water Leak Sensor (firmware version V030C or above) 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



Refer to the Water Leak Sensor manual for more information:



YS7903-UC
Water Leak
Sensor