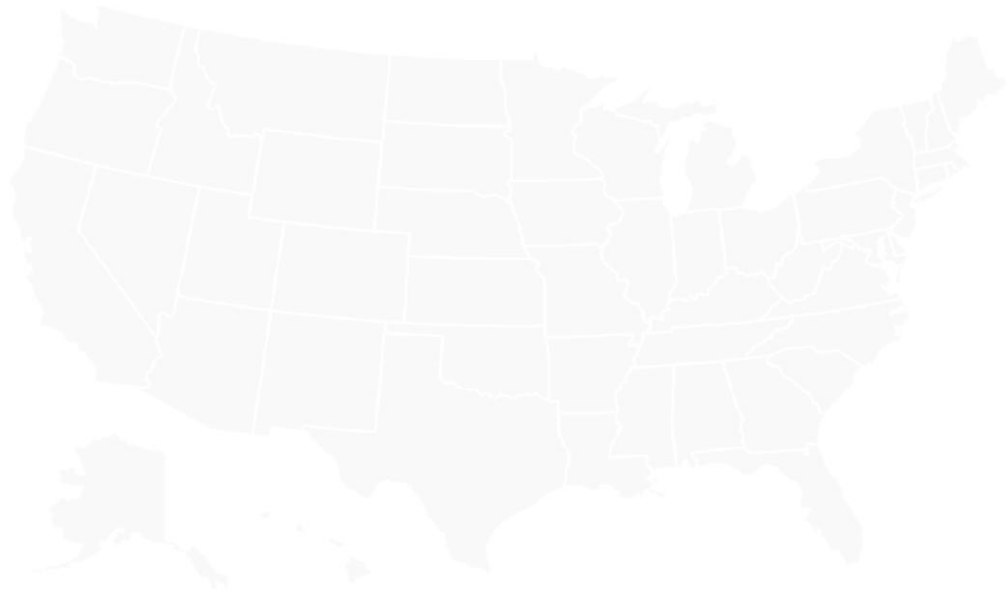




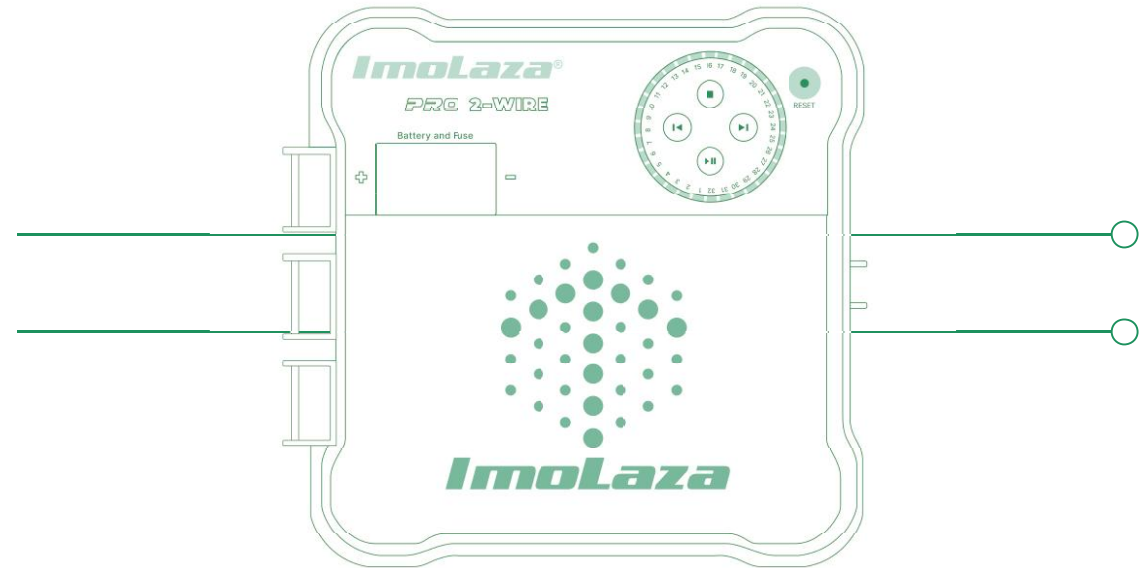
✉ support@imolaza.com

🌐 pro.imolaza.com/2wire

For any issues or questions regarding the use of this product, please contact our technical support team at support@imolaza.com with a detailed description of your problem. We will do our best to resolve it as soon as possible.



User Guide



Imolaza[®] PRO **2-WIRE**

2-WIRE Decoder AI Smart Sprinkler Controller
Real-Time **Evapo**Transpiration Master



Remote Control



Support 4G USB Dongle



Smart Watering



Faulty Alerts

Table of Contents

*Operation Guide	2
Download the ImoLaza App	3
Add the New Controller	4
iOS Adding	5
Android Adding	6
Help Center	7
Wi-Fi Network Indicator	8
Solve the Network Issues	9
Manual Watering	10
Short Circuit Indicator	12
FAQ	13
More Help	22
*Installation Guide	23
What's in the Box	24
What You'll Need	25
Remove Your Old Controller	26
Install ImoLaza Controller	27
Connect Wires	28
Irrigation System Diagram	30
Sensor Wiring	31
Pump Start Relay (PSR)	34
Other Wiring Instruction	35
*FCC	36

ImoLaza® PRO **2-WIRE**

Operation Guide

Download the ImoLaza App

1. Download the ImoLaza app from the Apple App Store or Google Play, or scan the QR code below.
2. Create an account by following the instructions in the app.
3. Sign in to the ImoLaza app with your account.



Notice: "Apple" and "the Apple logo" are trademarks of "Apple Inc." and "App Store" is a service mark of "Apple Inc.". "Google Play" and "the Google Play logo" are trademarks of "Google LLC".

Add the New Controller

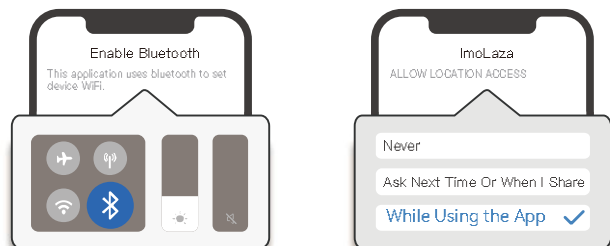
The ImoLaza App will guide you through the process of adding and setting up the controller.

Notice:

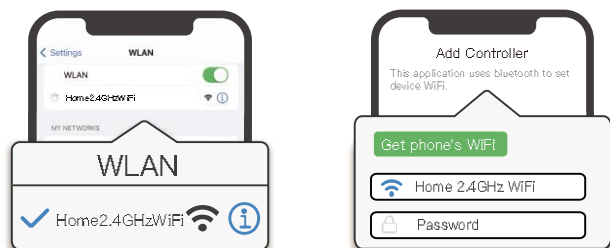
- 1) Please allow ImoLaza App to access your location.
- 2) Please allow ImoLaza App to access nearby devices.
- 3) Please allow ImoLaza App to access bluetooth.
- 4) Keep your phone within 10 feet of the device to ensure a stable connection.
- 5) Connect 2.4GHz WiFi.

iOS Adding

1. Open the Control Center and turn on Bluetooth service.
2. In your phone's "Privacy & Security" settings, allow the ImoLaza App to access your Location Services.



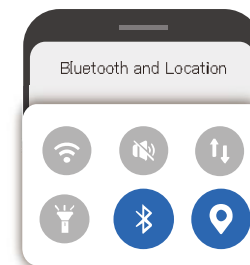
3. Power on the device, open the upper panel and perform a RESET.
4. In the app "Scan Controllers" page, select the one with the same MAC address as your device.
5. Either manually input your 2.4GHz WiFi information or select **Get phone's WiFi** to access your phone's network, then enter the password to connect.



6. Enter your exact address info for accurate sunrise time and weather data updating.
7. Select your preferred weather station that is close to your location and reflects your yard's weather conditions.

Android Adding

1. Open the Control Center and turn on Bluetooth and Location services.



2. Power on the device, open the upper panel and perform a RESET.
3. In the app "Scan Controllers" page, select the one with the same MAC address as your device.
4. Enter your 2.4GHz WiFi details manually, or tap **Switch Wifi** to select a suitable network for your ImoLaza controller to connect to.



5. Enter your exact address info for accurate sunrise time and weather data updating.
6. Select your preferred weather station that is close to your location and reflects your yard's weather conditions.

Notice: If the Wi-Fi connection is lost, the watering schedules will still run as programmed. However, you need to reconnect the controller to regain full functionality.

Help Center

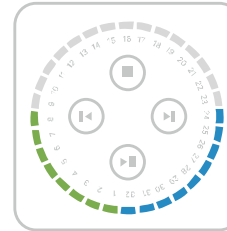
Wi-Fi Network Indicator

The ImoLaza controller undergoes regular updates to introduce new features and enhance user experience. As a result, slight variations may exist between the manual and the actual operation. For precise guidance, always refer to the prompts and instructions provided within the app.

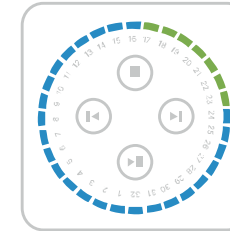
For assistance with installation or setup, please scan the QR code below.



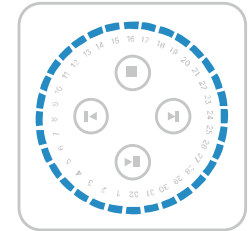
pro.imolaza.com/2wire



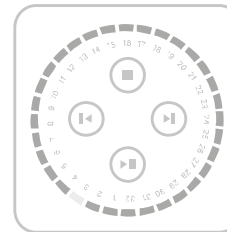
Connecting to Wi-Fi



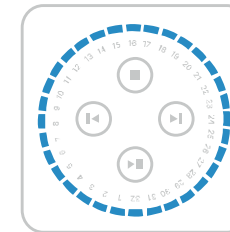
Connecting to ImoLaza server



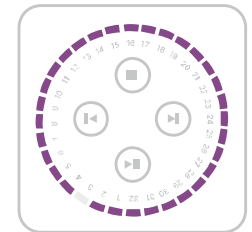
Controller activated (blue light flashing)



Watering (white light flashing)

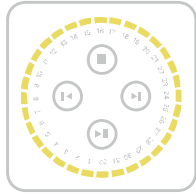


Light failure (steady blue)

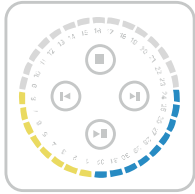


Controller disconnected (purple light rotating)

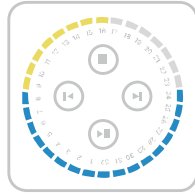
Solve the Network Issues



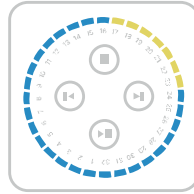
Wi-Fi no service



Wi-Fi connection failed



Wi-Fi no network or unavailable



ImoLaza server connection failed

Common solutions to fix Wi-Fi network issues:

1. Restart the controller: Disconnect it from the power source, wait for 30 seconds and then reconnect it.
2. Power cycle your router: Unplug it for a few seconds and plug it back in.
3. If you have changed the Wi-Fi name or password, replaced a router, or experienced a network failure, please reset the controller by pressing and holding the "RESET" button for 5 seconds. Then, go to "Settings" - "Controller Settings" - "Update Device WiFi" to update your Wi-Fi.
4. Try to place your router closer to the controller or use a Wi-Fi extender to boost the signal.

For more information, visit pro.imolaza.com/2-wire/network. If the above solutions do not work for you, please contact our support team. Provide a brief description of the problem you are facing and, if possible, attach photos of the indicator lights for faster assistance.



Manual Watering

Water a Specific Zone

Press   to select the specific zone, then press  to begin watering.

Start/Pause Watering

Press  to start/pause watering anytime.

Stop Watering

Press  to stop watering & exit the current watering state.

Advanced Watering

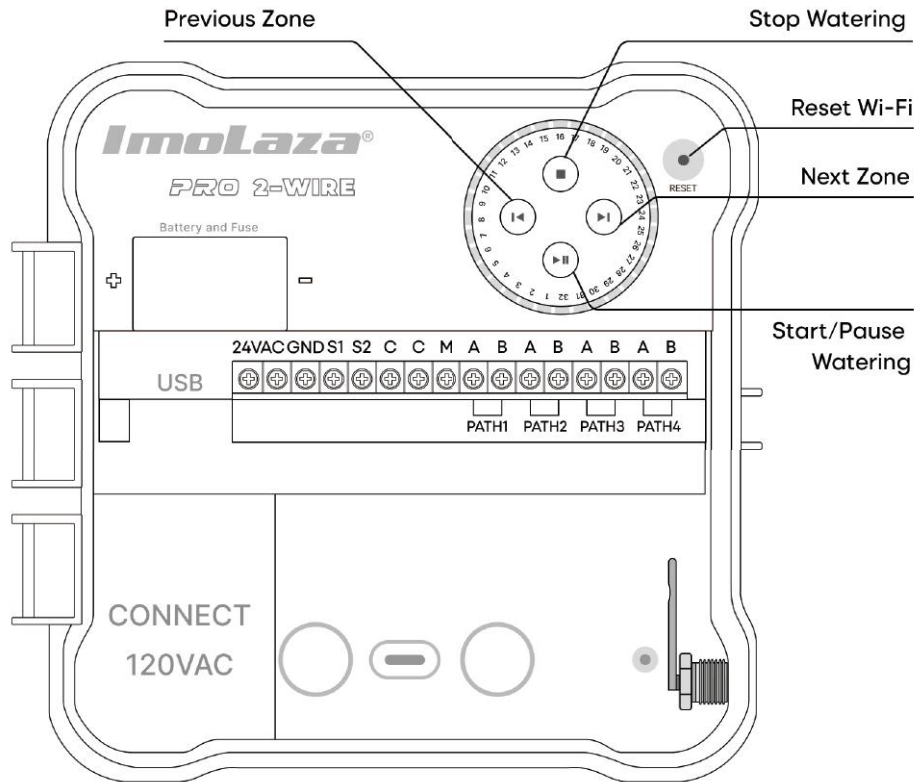
You can activate the sequential watering mode for all zones, and adjust the zone default watering duration. For details, please scan the QR Code:



RESET Button

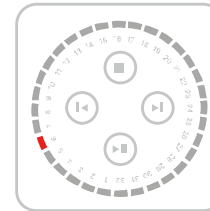
To add a device or update the Wi-Fi settings when the device is offline, press and hold the "RESET" button for 5 seconds, and then follow the instructions in the app to complete the process.

Manual Watering

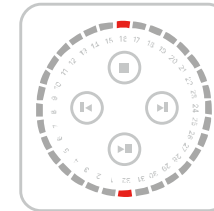


Short Circuit Indicator

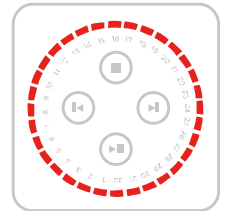
When your ImoLaza PRO 2-WIRE displays red lights, it indicates the detection of a short circuit.



Zone Short Circuit
(Red Light on
zone indicator)



"M" Short Circuit
(Red lights on upper
& lower middle LEDs)



Main Line Short Circuit
(All red lights on the
LED ring)

FAQ

1. I haven't received the activation email, what should I do?

- (1) Check your inbox, including your junk and spam folders.
- (2) Make sure your mailbox is not full or near its storage limit.
- (3) If you still haven't received the activation email after resending it, please try another email for registration or contact ImoLaza for further assistance.

2. Unable to add the device even after multiple attempts to scan the QR code, how can I proceed?

- (1) Make sure the controller is connected to a 2.4GHz Wi-Fi network and within the Wi-Fi coverage range.
- (2) Make sure you have entered the correct Wi-Fi password, and there are no extra spaces before/after it.
- (3) Try to manually enter the device's MAC address to add it.
- (4) Close the app from the background and reboot the router, then try adding the device again.
- (5) If the problem persists, contact ImoLaza for manual device binding assistance.

3. Which type of Wi-Fi is compatible with ImoLaza?

The ImoLaza Sprinkler Controller supports 2.4GHz Wi-Fi only. 2.4GHz networks offer wider coverage and better penetration, which together grant a stronger signal connection and ensure a more stable network. If you have trouble connecting to a multi-band Wi-Fi, please do the following:

- (1) Split your Wi-Fi network into separate networks and rename them. You can name them as "Home 2.4G" and "Home 5G".
- (2) Choose the 2.4GHz network for connection with your controller.

FAQ

4. How to set up the 4G Wi-Fi Dongle with ImoLaza PRO 2-WIRE?

Plug the 4G Wi-Fi Dongle into the device's USB port (5V DC, 1A) to power it on. It will automatically broadcast a Wi-Fi signal. During device setup in the ImoLaza app, in the network connection page, select this Wi-Fi network. The network name (SSID) and password are usually printed on the back of the dongle.

Notice: For reliable connectivity, ensure strong 4G signal coverage in your area.

5. Why is the watering duration for ET Smart Schedule so long?

- (1) The "ET Smart Schedule" automatically generates the watering durations based on the specific parameters of each zone.
- (2) You can update zone parameters by going to "Zones", selecting the zone and clicking the "Edit" button in the upper right corner. Then, you can adjust the parameters to match your zone conditions.
- (3) ET schedule waters less often but for longer durations. This promotes deep root growth, enhances drought resistance, and boosts plant health.

6. How to add and manage multiple controllers?

Go to the "My ImoLaza" section on the homepage to add a new device or switch between different devices for management.

7. How do I share my account with others?

Navigate to "Settings" and click  which is located in the upper right corner. Access "Shared Access Management" to add the desired account for sharing.

8. How do I share my controller with others?

App: "Settings" - "Controller Settings" - "Device Access Management" - click "+" to add an account to share your device with.

9. How to activate the Valve Monitoring function and get alerts of high/low current?

- (1) Go to "Zones" and select the zone you want to monitor. Turn on "Valve Monitoring" and run the "Recalibrate" process to get the exact amperage value of the solenoid valve in the selected zone. Set your preferred percentage value for high/low current warning.
- (2) Go to "Settings" - "Events & Alerts" - "Alerts Settings" - "Solenoid Valve" and click "+" to add monitoring.
- (3) When an abnormality is detected in the amperage value, you will receive a notification through the app as follows:
 - Open Line Error for Zone xx.
 - Low Current Alert for Zone xx.
 - Electrical Short Error for Zone xx.
 - High Current Alert for Zone xx.

10. How to set up Seasonal Adjustment?

- (1) For "ET Smart Schedule", ImoLaza will adjust watering for you intelligently, no need to manually set up.
- (2) For "Fixed Schedule", you can customize each zone's seasonal adjustment by adjusting the watering percentage for each month, ranging from 0% to 200%.
- (3) In case of controller in offline mode due to poor Wi-Fi or no Wi-Fi yet, you can also set up the offline seasonal adjustment, by going to "Settings" - "Controller Settings" - "Offline Water Budget".

11. How to change and apply Default Watering Triggers?

- (1) Go to "Settings" - "Controller Settings" - "Default Watering Triggers", to easily change the default values, or turn on/off each trigger.
- (2) You can apply the watering triggers freely to your schedules.

12. How to customize each zone's Cycle & Soak?

- (1) Go to "Zones" and select the zone you want to customize. Find the "Cycle & Soak" and click to continue.
- (2) Choose "Manual Cycle & Soak" and enter your preferred water and soak time; or choose "Smart Cycle & Soak" to let ImoLaza help you calculate based on your zone soil type/sprinkler type/slope.
- (3) If the zone does not need soak, you can select "No Cycle & Soak" instead.

FAQ

13. How to temporarily adjust watering amount if it looks too dry/wet? I don't want to change my watering schedules.

Go to "Zones" and select the zone you want to adjust watering amount.

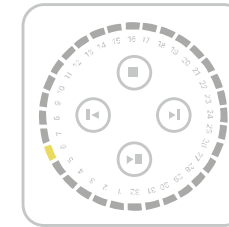
Find the "Watering Adjust" and click to continue. You can increase or decrease the % value to change the watering amount. A higher value means more water, and a lower value means less water.

14. Why is the schedule running but no water is spraying out?

- (1) Make sure the wiring is properly connected and secure.
- (2) Check your nozzles or zone valves for any blockages. If you find any, remove the nozzles, clean them well, and put them back. Or, if it is a valve, take it apart, clean all parts, and put it back together correctly.
- (3) Check if there is an issue with the solenoid valve. Go to your controller and verify if the corresponding running zone indicator is displaying a red light. A red light indicates a short circuit in the solenoid valve of that zone. If both the upper-middle and lower-middle lights are red, it indicates a short circuit in the Master Valve/Pump Start Relay.
If there is a short circuit with certain zone or the Master Valve /Pump Start Relay, you will get a corresponding notification in the "Settings" - "Events & Alerts" - "Events".

FAQ

- (4) Check if there is an issue with the 2-wire. If the LED light all shows red color, it means a short circuit detected with the main line. It will also be recorded in the App: "Settings" - "Events & Alerts" - "Events".
- (5) Check if there is an issue with the decoder. If the zone light shows yellow during watering, it means there is an response error with the decoder. Please check further.



Decoder Response Error
(Yellow light on zone indicator)

15. What should I do if the indicator light goes out?

Please try the following troubleshooting steps. If the issue persists, contact us at support@imolaza.com for further assistance.

- (1) Disconnect the device from the power source, wait for 30 seconds and then reconnect it.
- (2) Utilize a multimeter to measure the voltage between the 24VAC terminals to check for any power issues.

16. How to winterize my sprinkler system?

- (1) Close the main valve and the backflow preventer valve. Make sure to close both valves to stop water from entering the system and freezing and damaging it.
- (2) Set ImoLaza to "Standby" mode: Go to "Settings" - "Standby Mode", and adjust the standby duration as you wish. When the controller is in standby mode, it will not run any watering schedules, which helps save energy and protect the system components.
- (3) Drain the pipes. To prevent water from freezing and expanding in the pipes, it is recommended to contact a local irrigation expert to do this task. They can use proper methods to drain the pipes completely and remove any water.
- (4) Insulate above-ground components. If the backflow preventer and valves are above the ground, you can use insulation tape to wrap them and provide extra thermal protection.

17. How to activate the Flow Monitoring function?

- (1) After you connect the flow sensor to the controller, please go to "Settings" - "Controller Settings" - "Sensor" to enable the corresponding terminal.
- (2) Go to "Settings" - "Events & Alerts" - "Alert Settings" - "Flow Meter" and click "+" to add monitoring.

18. How to Reset to Factory Defaults?

Go to "Settings" - "Controller Settings" - "Factory Reset", to reset your device to its factory defaults status.

19. Remote Lock Function (Anti-Tampering Protection)

The ImoLaza PRO 2-WIRE AI Smart Controller features remote lock capability to prevent unauthorized operation.

App: "Settings" - "Controller Settings" - "Lock Controller"

20. Battery Replacement

The ImoLaza PRO 2-WIRE AI Smart Controller comes pre-installed with a CR2032 3V coin cell battery, located in the compartment marked "Battery and Fuse" on the controller's upper middle cover. This battery typically has a 5-year lifespan - please replace it promptly when depleted.

Replacement Procedure: Open the controller's top cover -> Remove the lower middle cover -> Press the compartment with your middle three fingers and gently slide downward to open -> Remove the old battery -> Insert the new CR2032 battery, observing correct polarity ("+" side on the left & "-" side on the right)

Notice: Failure to replace a depleted battery while the device is offline may cause system time errors, and then cause a disruption of scheduled irrigation programs.

21. How to Replace the Fuse

The ImoLaza PRO 2-WIRE AI Smart Controller comes with a pre-installed fuse to protect its internal power supply. If the current exceeds 1A and causes the fuse to blow, the controller will automatically power off.

Replacement Procedure: Locate the compartment labeled "Battery and Fuse" and open the cover. -> Use the tweezer to remove the blown fuse -> Insert the new fuse (included spare) -> Close the cover securely.

Notice: The package includes 2 spare fuses (standard glass tube type, 5×20mm, 250V, 1A fast-acting)

1. To access the latest product manual or documents, please scan below QR Code:



pro.imolaza.com/docs/2-wire

2. To access the user manual of the 2-WIRE decoder, please scan below QR Code:



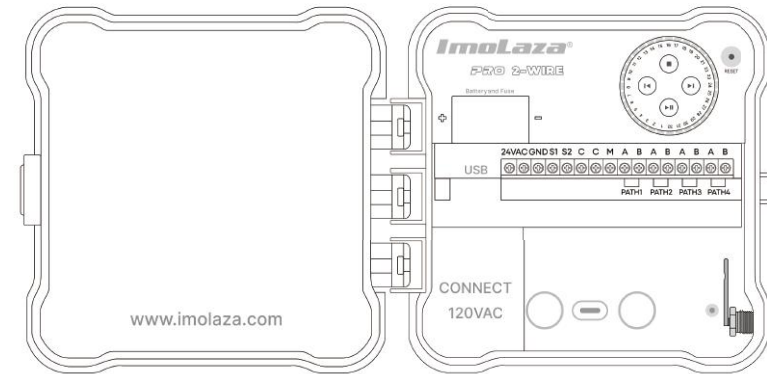
pro.imolaza.com/docs/decoder

3. For more help, please scan below QR Code:



pro.imolaza.com/2wire

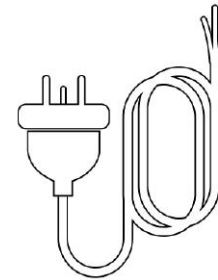
What's in the Box



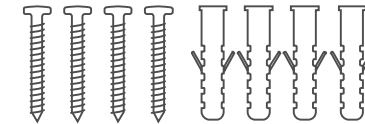
ImoLaza PRO 2-WIRE AI Smart Controller

ImoLaza® PRO 2-WIRE

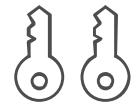
Installation Guide



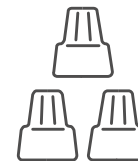
Power Cord



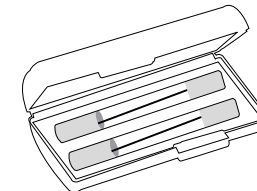
Wall Screws
with Anchors



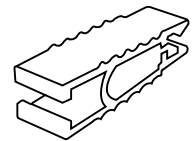
Door Keys



Wire Caps



Spare Fuses



Tweezer

What You'll Need



Wi-Fi Access
(2.4GHz)



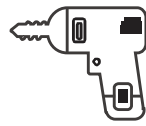
Smartphone
or Tablet



Cross
Screwdriver



Hammer
(Drywall Installs)



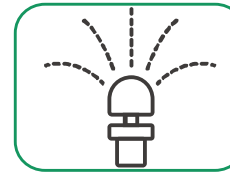
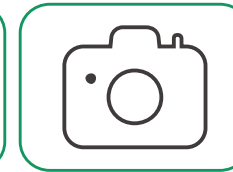
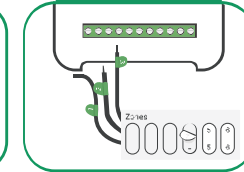
Drill and Drill Bit
(Drywall Installs)

Electrical Specifications

Input		120V AC 60Hz
Output	M Terminal	24V AC, 600mA
	2-WIRE	35V DC, 2800mA
	USB	5V DC, 1000mA

Remove Your Old Controller

1. Test the old controller to make sure that the irrigation system is functioning properly;
2. Take a photo of the existing wiring to serve as a reference during the installation of the new controller;
3. Power down the old controller and disconnect all wires from both the controller and the power source. Ensure to affix corresponding labels to each wire for easy identification and seamless reconnection when installing the new controller;
4. Unmount the old controller from the wall.

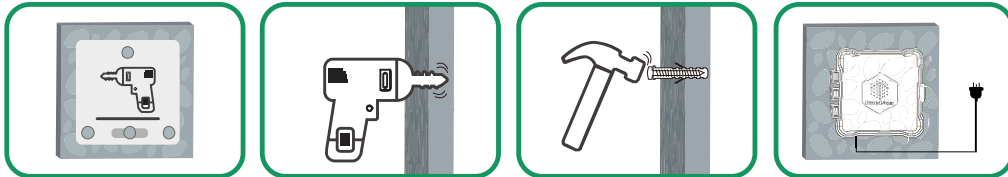


Notice: Before removing the old controller, always turn off the power to prevent injury or fire damage.

Install the New Controller

1. Use the mounting positioning paper to accurately mark where the new controller will be installed;
2. Use a suitable drill bit to create holes at the marked spots, then insert plastic anchors and secure them firmly with a hammer;
3. Insert the upper screw, slide the controller over the screw head, and proceed to insert & fasten the remaining screws;
4. Connect each wire labeled with the corresponding tag to the appropriate terminal on the controller;
5. Establish the power connection for seamless functionality.

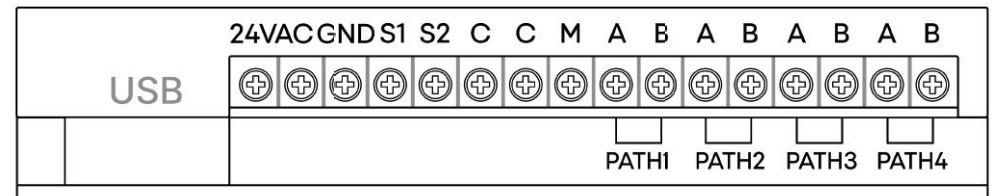
Pro tip: If you are replacing a conventional controller with our Wi-Fi controller, make sure to mount the new controller within the range of the Wi-Fi network.



Connect Wires

Using the photo of your previous wiring as a reference, attach the common wire to either "Common"(C) terminal, and connect the remaining wires to individual numbered terminals, making sure that each terminal has only one wire attached.

Insert the wire and tighten the screw by turning it clockwise.



Notice: The USB port (5V DC 1A) is only for powering the 4G USB Wi-Fi Dongle.

Connect Wires

1) Common Terminal:

ImoLaza PRO 2-WIRE provides 2 "C"(Common) terminals. You may connect the common wire to either terminal.

2) 2-WIRE Connection Terminal:

Use 14 AWG or 12 AWG 2-wire cables. Connect wires to the corresponding terminals as labeled. Maximum capacity: Up to 4 sets of 2-wire cables.

3) Master Valve/Pump Start Relay Terminal (M):

If your irrigation system uses a master valve or pump start relay, connect its wire to the controller's "M" terminal.

UT Crimp Terminal Wiring Guide:

1) Prepare the Wire

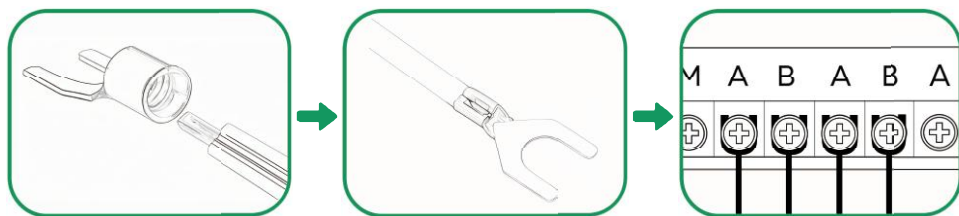
Strip the wire and insert the bare copper conductor fully into the UT crimp terminal until it reaches the front end.

2) Crimp the Terminal

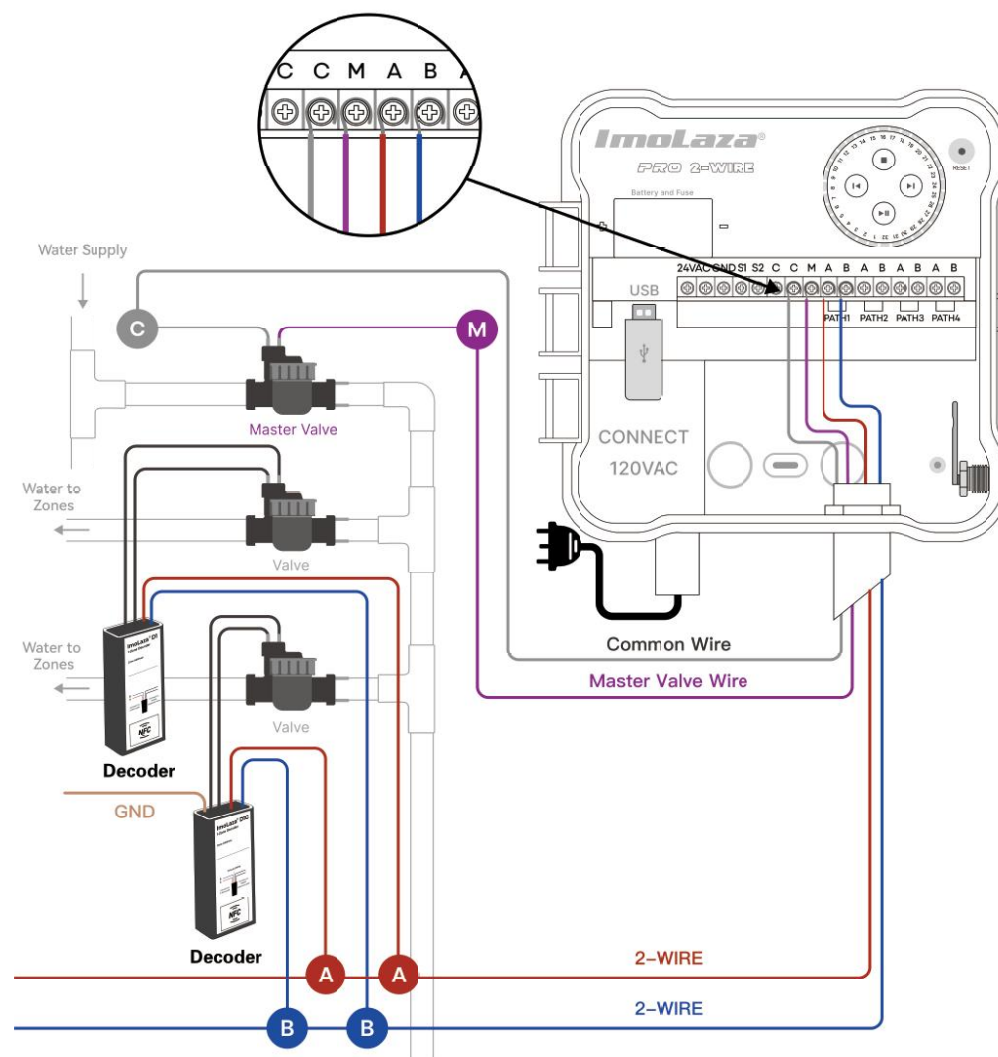
Use a crimping tool to securely fasten the terminal to the wire.

3) Secure the Connection

Insert the crimped terminal into the corresponding wiring terminal. Tighten the terminal screw to ensure a solid electrical connection.



Irrigation System Diagram



Notice: The ImoLaza PRO 2-WIRE AI Smart Controller cannot directly power solenoid valves. You must use the dedicated ImoLaza Valve Decoder to operate valves.

Decoder must be zone-configured via NFC before installation. For detailed decoder instructions, refer to the manual included with the decoder package.

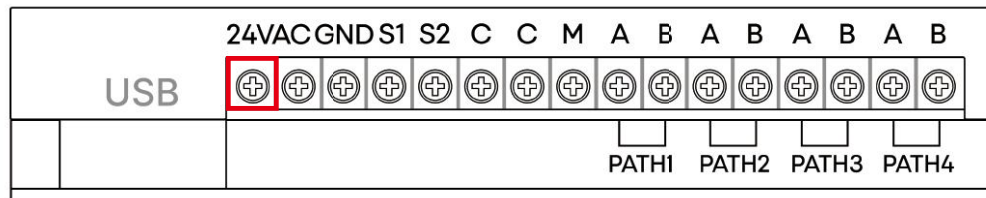
Sensor Wiring

1.Rain Sensor

You may connect the rain sensor to your controller using the "S1" and "C" (Common) terminals.

2.Flow Sensor

You may connect the flow sensor to your controller using the "S2" and "24VAC" terminals. (24VAC terminal is the one marked red as below)



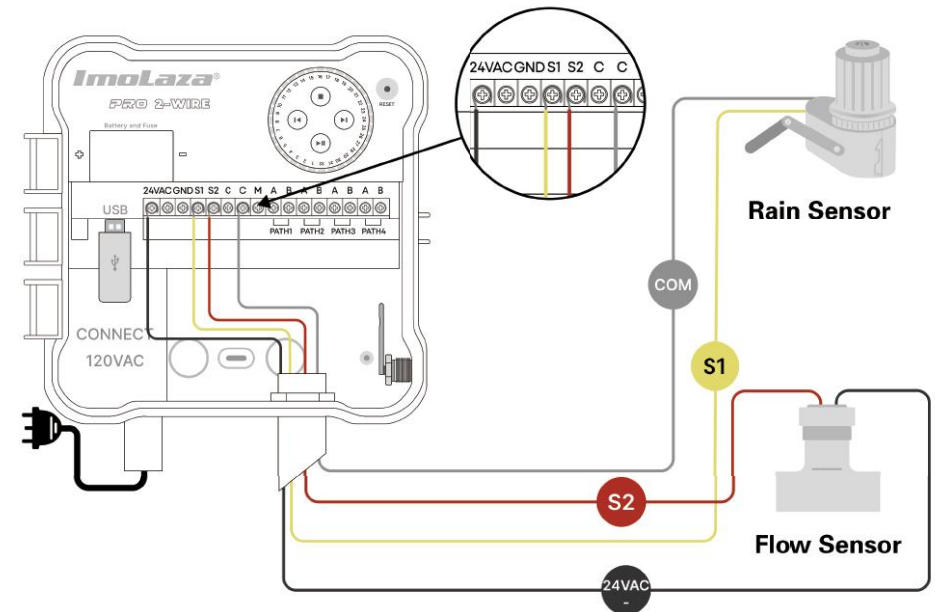
If you have connected a sensor, please go to "Settings" - "Controller Settings" - "Sensor" to enable the corresponding terminal.

For more information, scan the QR code below:

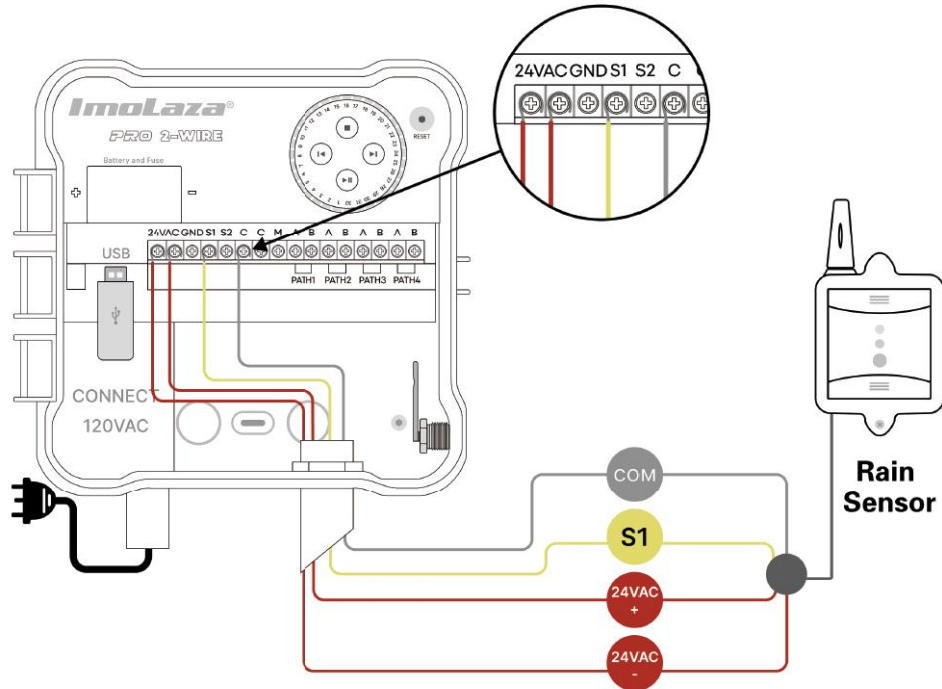


pro.imolaza.com/2-wire/sensors

Wired Sensor Wiring



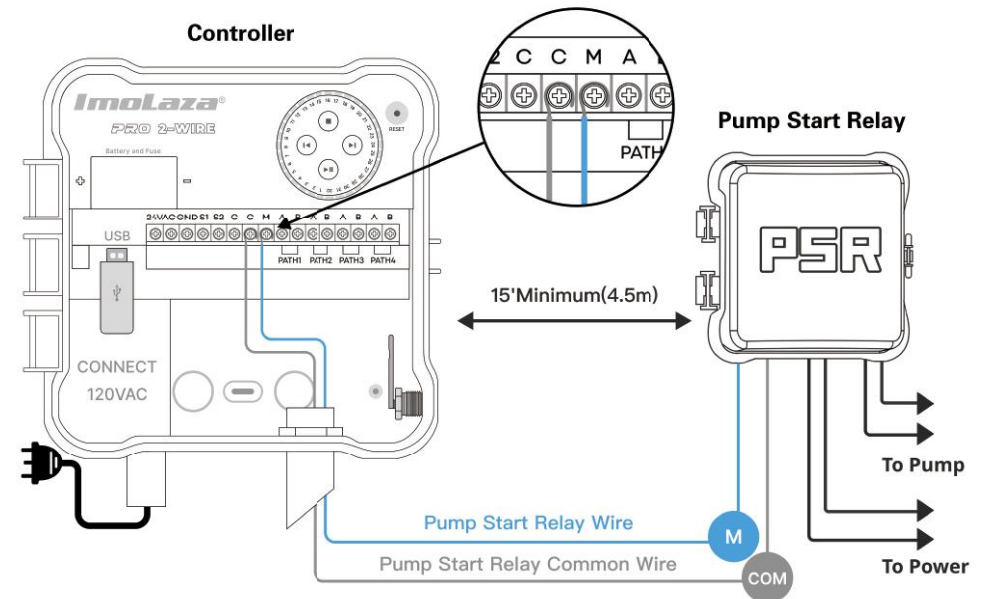
Wireless Rain Sensor Wiring



Pump Start Relay (PSR)

Imolaza controller works with pump-dependent sprinkler systems. Connect the pump start relay's two wires to the "C" and "M" terminals on the controller, then link the relay to the pump. Remember to select the correct option in "Settings" - "Controller Settings" - "Advanced Wiring (M Terminal)".

Notice: Do not connect the water pump directly to the controller.



Other Wiring Instruction

FCC

Proper Decoder Installation & Wiring Guidelines

For Optimal Performance:

- Use high-quality twisted-pair cables for reliable signal transmission.
- Install high-quality waterproof connectors on all red/blue wire loop connections.
- Leave 5ft of slack wire at each junction to prevent tension damage.

PRO 2-WIRE Controller Loop Wiring Specifications:

- Supports up to 4 separate 2-wire loops.
- Please use 14 AWG or 12 AWG twisted-pair cables.
- With 32 decoders evenly distributed, support up to 3km (1.86mi) control range and can activate 2 valves simultaneously at the farthest point.

Notice:

- 1) Decoder-to-valve distance must not exceed 150ft.
- 2) Every 12 decoders or 1000ft, install 1 grounded decoder.
- 3) Ground rods must be placed ≥ 16 ft away from wiring.
- 4) Reduced control distance if using cables < 14AWG.

FCC Statement

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.

FCC Warning:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note:

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.

The FCC RF Exposure Information

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

