HYDRAWISE IRRIGATION CONTROLLER WITH INTERNET CONTROL

HARDWARE INSTALLATION AND CONFIGURATION GUIDE

Thanks for purchasing a Hydrawise controller. This guide takes you through initial configuration of your controller and information on each of the controller's screens.

This guide does not cover configuration of the app. Our website at http://hydrawise.com/support contains many How-To guides covering configuration.

Hardware Installation

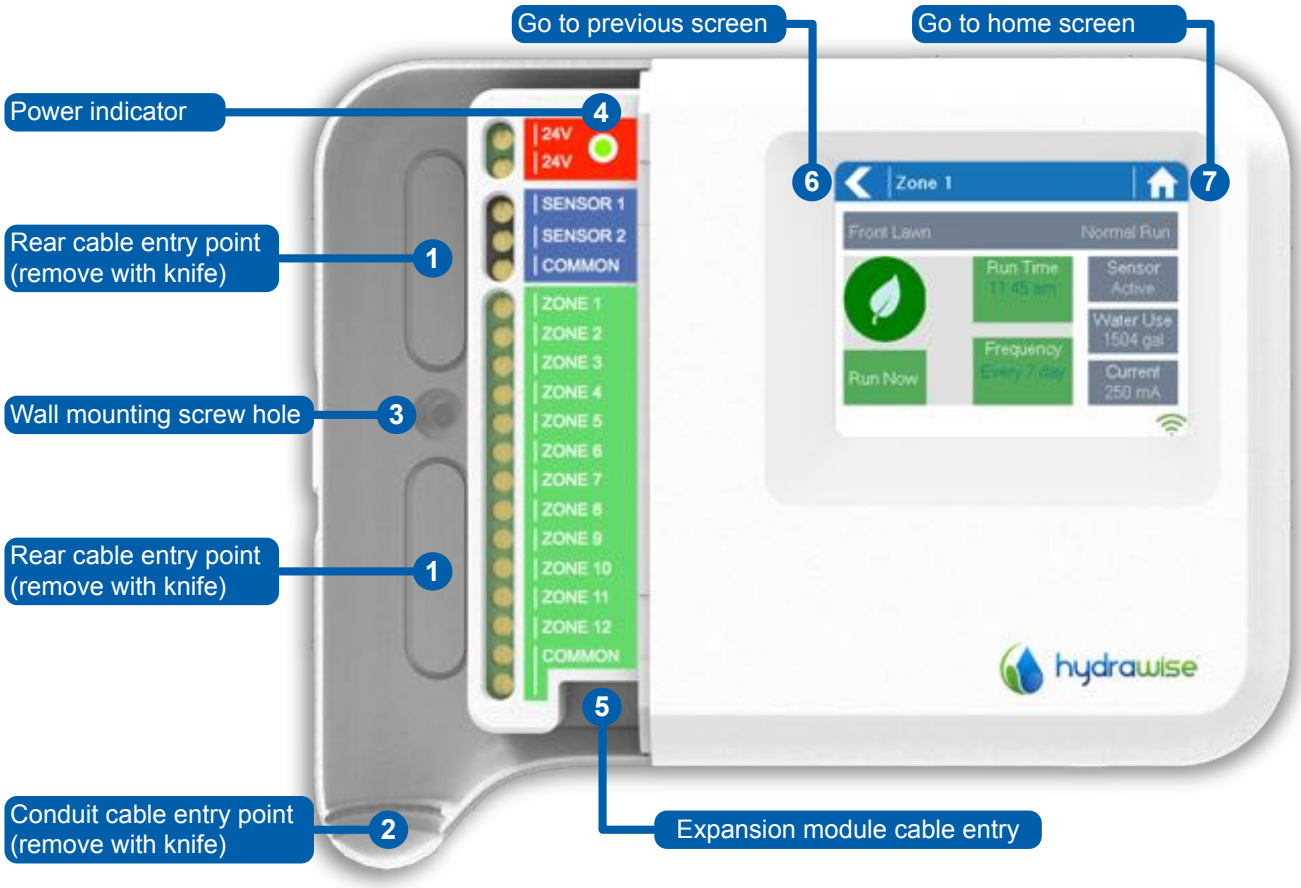
Controller Location

The Hydrawise Controller is designed for installation in a protected location.

The chosen location must have WiFi coverage. WiFi coverage can be easily checked using an iPhone or smart phone that has WiFi connectivity or on the Hydrawise unit itself (signal strength is shown when you select a wireless name).

Cable Entry

The controller has 2 cable entry options – from the rear of the case or via a conduit from the bottom of the controller.



Entry from rear of controller

Using a sharp knife remove the 2 cutouts on the rear of the controller as indicated on the diagram as ❶

Entry via ¾ inch conduit

Using a sharp knife cut around the semi-circular line on the controller as indicated on diagram as ❷. Cut around the matching line on the blue controller wiring cover

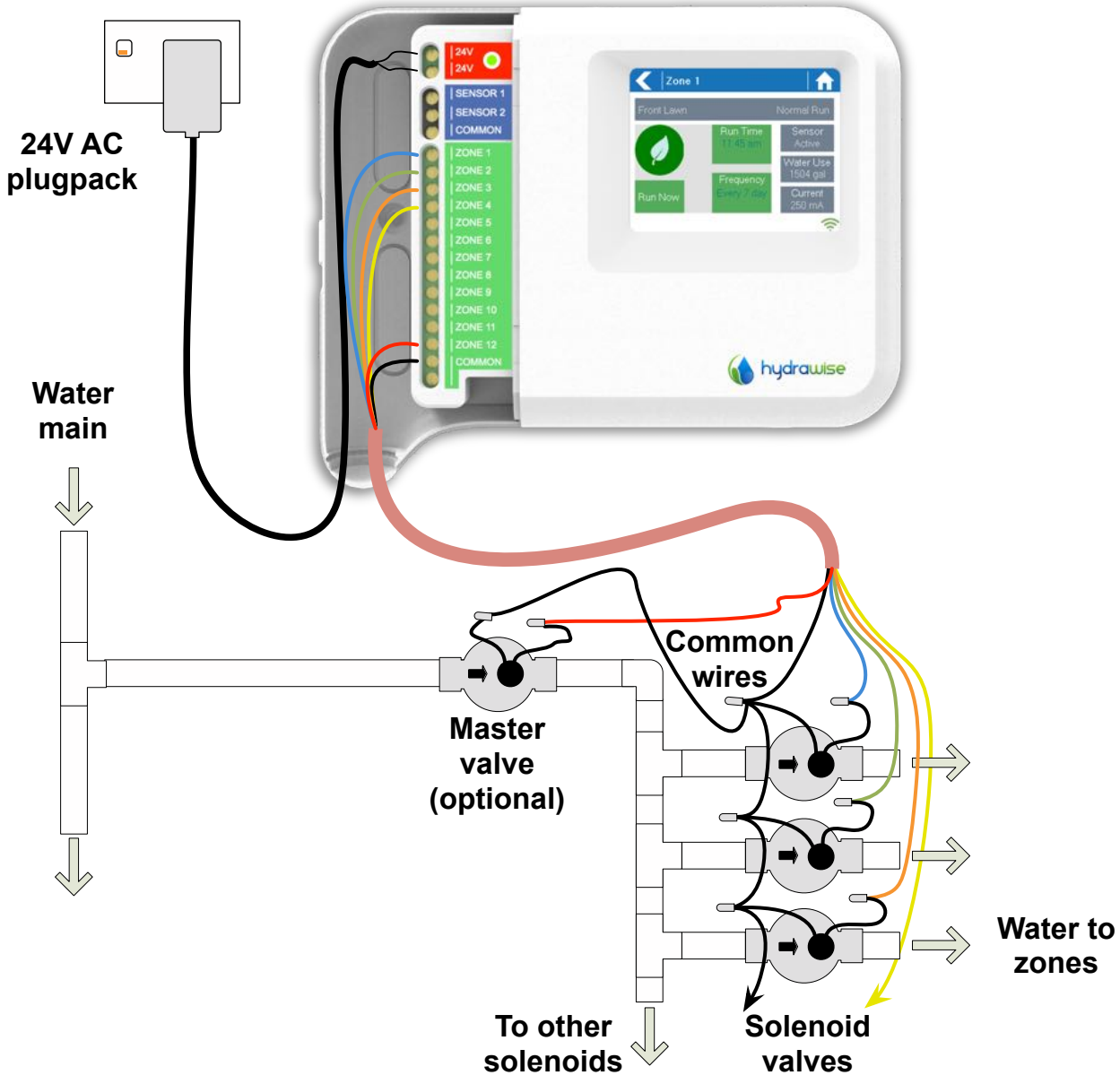
Mounting the Controller

1. Using a drill bit of 3/16 inch diameter, drill a hole of to a depth of 1 inch (25mm).
2. Insert plastic anchor so it is flush with the surface of the wall.
3. Screw 1 inch screw into plastic anchor leaving the head protruding about 1/8 inch.
4. Slide the controller case over the screw head.
5. Mark second mounting point (see ❸ in diagram), remove controller, drill hole, insert plastic anchor, slide controller case over first screw head and screw into place.

Connecting Solenoid Valves

Your controller has either 6 or 12 zones depending on the model you have purchased. There are 3 COMMON wiring points for convenience – any or all of them can be used.

Refer to the diagram below when connecting your solenoid valves to the controller.



Solenoid Valve Wiring

1. Take one wire from each solenoid, twist together and connect to the common (usually black) wire of your multi-core irrigation cable.

   Hydrawise recommends that all connections be soldered and sealed against moisture for long term reliability.

2. Connect each of the other individual solenoid wires to a different wire in the multi-core cable and seal. Record zones against wire colour for later reference.
3. Connect the common wire from the multi-core cable (usually black) to any of the three terminals on the controller marked COMMON.
4. Connect each of the other solenoid wires to one of the ZONE inputs.
5. If a master valve (sometimes labelled as MV on other controllers) is installed this can be connected to any spare zone as any of the zones can be assigned as a master valve output. Configuration of the master valve in the Hydrawise app is required.
6. Click the blue wiring cover into place to seal the controller and protect the wiring.

Connecting the Plug Pack

7. Use the plug pack supplied and connect the wires to the red AC terminal blocks on the unit marked as 24V. Polarity of the wiring is not important.
8. Turn the power on. The power indicator will light up (see ❹ on previous page).

Connecting Sensors or Flow Meters (optional)

Hydrawise supports most open/close contact type of sensors such as standard rain sensors and soil moisture sensors.

1. Connect one sensor wire to COMMON on the controller.
2. Connect the Normally Closed or Normally Open wire from the sensor to SENSOR1 or SENSOR2 on the controller and configure in the Hydrawise app.

Wiring for standard Hydrawise 0.75 inch (20mm) or 1 inch (25mm) flow meters is as follows:

Flow Meter Wire	**Label on Controller**
Blue	Sensor 1, 2
White	Common
Red	Not connected

Wiring for open/close contact sensors is as follows:

Sensor Wire	**Label on Controller**
Normally Open / Normally Closed wire	Sensor 1, 2
Second (common) wire	0V

Once you've wired your rain or moisture sensor don't forget to configure it in your Hydrawise account.

For full details, refer to the instructions provided with your sensor or flow meter. See Configuring Sensors for instructions on configuring the controller for a sensor from the app.

Troubleshooting Zone Issues

- Try running a zone from the controller's touchscreen. If it works from the controller and doesn't work from the app then check that you have linked your controller's serial number to your account (see previous section for details) and check your controller's wireless status.
- If your old controller had a master valve (sometimes referred to as MV) then you must configure a master valve in the app and wire this to a spare zone on the controller. Detailed instructions can be found on the Hydrawise website.
- Check that your wiring is correct. If no zones start then check that your **COMMON** wire is correctly cabled.

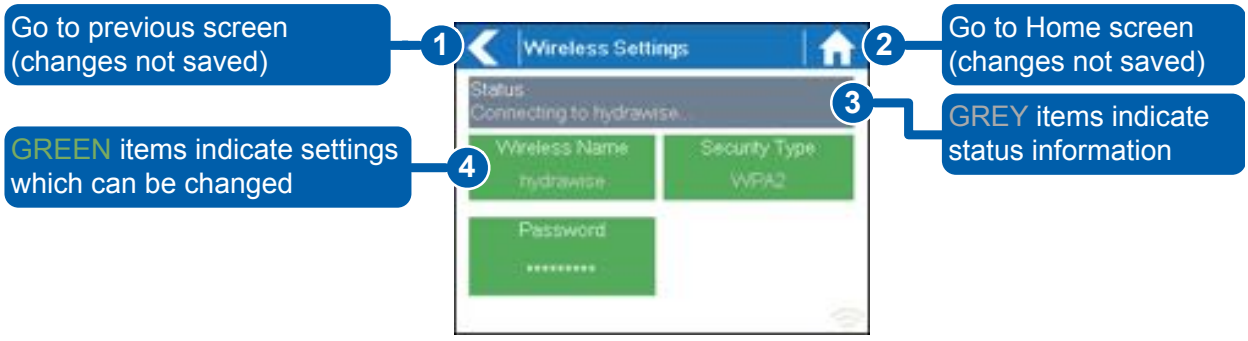
Configuring the Controller

Navigating Through the Controller Screens

The controller features a full color touchscreen making navigation easy.

The Home screen, shown below, has 3 buttons allowing you to view and run your irrigation zones, change controller settings or view status information.

Each screen (except for the home screen) has two buttons at the top of the page allow you to quickly navigate to the Home screen or the previous screen.



All items on each screen are color coded to indicate which screen elements are buttons and which screen elements indicate status information.

GREEN screen items indicate settings that can be changed. If you touch on the GREEN color item then you'll be able to change that setting.

GREY colored items indicate status information. Touching on these has no effect.

Note

If you're entering information into the controller and use the Home or Back buttons then your changes on that screen will not be changed.

Connecting to a WiFi network

When your controller is first powered on it will run a short wizard to connect your controller to your wireless router.

If you're not using the initial startup wizard then go to the section Viewing Wireless Settings to change your wireless settings.

Using The Wizard

1. Select your wireless network from the list shown on the controller display and press the **Confirm** button on screen.

   If your network is not listed then check that the unit is within wireless range.

2. Enter your wireless password and press the **OK** button on keyboard.

   Make sure you press the OK button after you've entered your password. Pressing the Home or Back buttons will not save your changes.

   When connecting to your wireless, the WiFi Icon at the bottom right of the controller screen will flash. Connecting takes about 30 seconds and when successfully connected the WiFi Icon will stop flashing and stay on.

If you have issues connecting to wireless then the section Viewing Wireless Settings has more troubleshooting information.

Viewing Wireless Settings

From the Home screen navigate to the Wireless Settings by pressing Settings➔Wireless Settings.

To successfully connect the Hydrawise unit to your wireless router you will need to correctly select your wireless router, wireless security mode and enter your wireless password.

The current status of the controller's connection to your wireless router is shown at the top of the screen. The controller will automatically attempt to connect to the configured access point if a connection is lost (for example, after power failure).

Touch on any of the green buttons to change the wireless type, security type or password.

Configuring Wireless Name

Touching on the currently configured **Wireless Name** will automatically start a scan of all local wireless routers and allow you to choose a new one.

After about 5 seconds a list of found wireless networks will be listed. To select a wireless name, touch on the wireless name and then touch **Confirm**. Do not press the **Home** or **Back** buttons after selecting your wireless router name – these options will not save your router name.

Each time you touch a wireless name the signal strength will be shown at the bottom of the screen.

If your wireless router is not shown then check the following –

- Your Hydrawise controller is within range of your wireless.
- Your access point is configured to accept connections from 802.11b/g wireless clients.

If your wireless router is hidden you may manually enter it by selecting **Manually enter wireless** and typing in the name.

Configuring the security type

The security type configured on the controller must match the security type configured in your wireless router. The Hydrawise unit can attempt to automatically detect this if you choose **Auto Detect** as the security type.

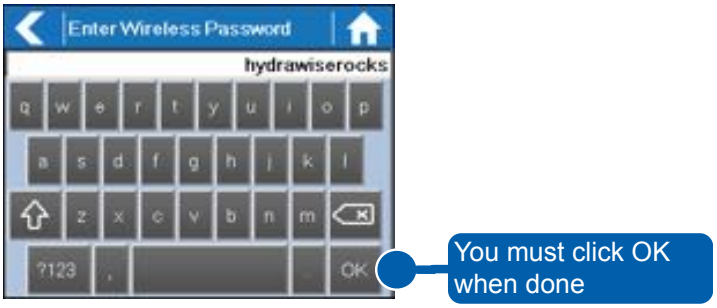
Hydrawise supports the following security types –

- Open
- WPA Personal
- WPA2 Personal
- WPA Auto

After choosing the security type press the **Confirm** button.

Setting your password

For any security mode (except for Open) your wireless router password must be entered. Wireless passwords are a minimum of 8 characters and are case sensitive.



After typing in your password press the **OK** button. Do not press the **Home** or **Back** buttons – these options will not save your password.

Wireless Connection Status Messages

The controller will show different status messages whilst connecting to your wireless router.

Looking for Wireless…	Controller is currently scanning for local wireless networks.
Connecting to…	Controller is currently trying to connect to your wireless router.
Waiting for IP	Controller has connected to your wireless router and is waiting for your wireless router to give it an IP address. Your wireless router must be configured as a DHCP server.
Connected	All is good. Controller has successfully connected to your wireless router.
Local Connection Only	Controller is acting as a local wireless router

Troubleshooting Wireless Connection Issues

After entering your wireless settings the controller will connect to your access point. The connection process takes about 30 seconds.

Upon successful connection the wireless status will show **Connected**.

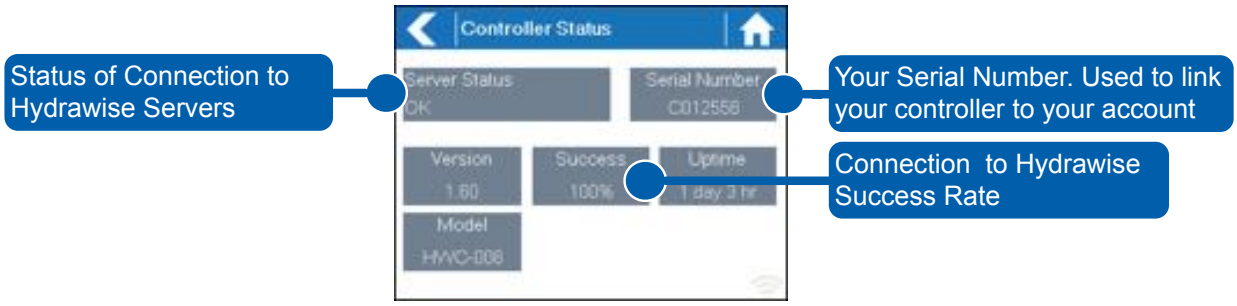
If your controller fails to connect to your wireless router check the following –

- Your password is entered correctly. It is case sensitive and must be at least 8 characters long.
- Check that the wireless security types match between the controller and your wireless router. Hydrawise recommends use of WPA2 security between the controller and your wireless router.
- We have additional troubleshooting steps in the **Support** section of our website.

Viewing Controller Status

From the Home screen navigate to the Controller Status by pressing Status➔Controller Status.

The controller status screen shows your controller's connection to Hydrawise servers for synchronising schedule and weather information.



Server Status

A successful connection to the Hydrawise servers is indicated by **Sync'd** as the Server Status.

Different types of status messages are shown below –

Sync'd All is good. Controller has a connection to Hydrawise servers.

No Internet Controller has connected to wireless but is unable to connect to Hydrawise servers. Check that your internet is OK by connecting another device to the same wireless router. If this is OK then go to Status➔Network and select **Test Network** to perform a diagnostics test.

Wireless Down Controller has not connected successfully to your wireless. Go to Settings➔Wireless Settings to check the wireless status.

Checking The controller is checking connection to Hydrawise.

Error XXX The controller received an error whilst connecting to the Hydrawise server.

Success

The success percentage shows the percentage of time the controller successfully connects to Hydrawise servers to synchronise weather and schedule related information.

A low success percentage will indicate a poor wireless connection between the controller and your access point.

To improve your wireless signal strength you could try the following –

- Move the controller closer to your wireless router.
- Remove any obstacles in a direct line of sight between the controller and your wireless router such as metal items (metal is an extremely good isolator for WiFi signals).
- Move your wireless router closer to the controller.
- Install a higher gain antenna on your wireless router.
- Use Ethernet to a location closer to the controller and install a new wireless router.
- Consider a WiFi repeater between your wireless router and the Hydrawise controller to boost the signal strength.
- Consider moving the controller away from potential sources of interference, including
    - Microwave ovens
    - Cordless telephones operating in the 2.4GHz range – you could also change the channel your phone uses
    - Nearby base stations using adjacent channels

Note that the Hydrawise unit is designed to work in poor wireless environments. However, if you wish to manually run or stop a zone and the wireless signal is down then these actions will fail.

Offline Mode

If the controller loses internet for more than 24 hours you'll receive a notification email.

The controller will go into an offline mode. In offline mode your controller won't be able to access local weather conditions such as rainfall or evaporation and will revert to a pre-defined program.

- For Smart Watering zones, the controller will adjust each zone's watering length based on your offline watering budget and will water at each zone's configured peak watering frequency.
- For Time Based Watering zones, the controller will adjust each zone's watering length based on your offline watering budget and will water at each zone's configured watering frequency.
- Note that Cycle & Soak is not supported in Offline Mode and each zone will water for its full watering length without pausing.
- The controller will only water at your configured Program Start Times.

Saving Settings

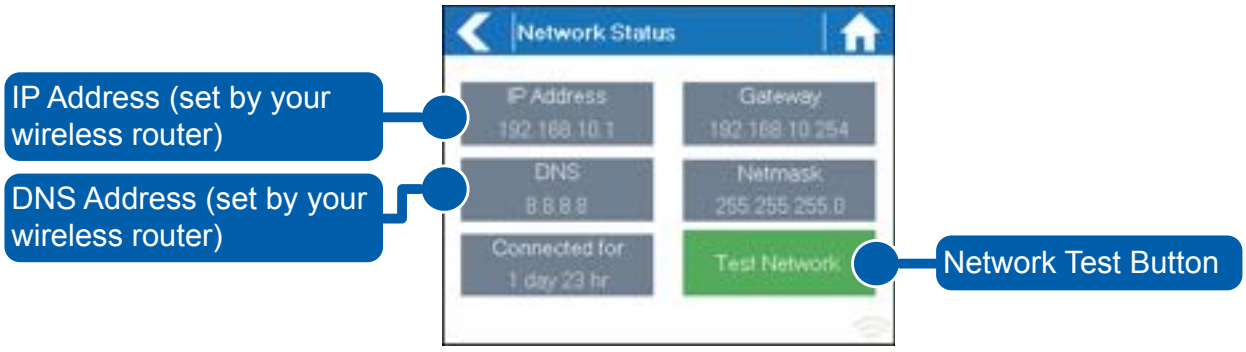
The controller doesn't have a battery backup – settings are stored in non-volatile RAM which is preferable as batteries need to be periodically replaced.

Serial Number

The serial number is used to link your actual controller with your Hydrawise account. This number is also printed on the rear of the controller.

Viewing Network Information and Testing Internet Connectivity

From the Home screen navigate to the Network Status by pressing Status➔Controller Status.



All settings on this page are provided to the controller by your wireless router when it first connects via a protocol known as DHCP. If any of these setting appear incorrect please change them in your wireless router.

Once the controller has successfully connected to your wireless router the Test Network button can be used to test network connectivity for troubleshooting purposes. The network test will verify connectivity to 4 destinations –

Checking WiFi Performs a ping test to the Gateway address listed in the Network Status screen. If this test fails check that you don't have MAC address filtering enabled on your router.

Checking DNS Performs a ping test to the DNS address listed in the Network Status screen. If this test fails check that the DNS address is correct – if it is wrong then correct the DNS address under DHCP Settings on your wireless router. It is possible that this test may fail if the DNS server doesn't not accept ping requests which does not indicate an issue.

Checking Internet Performs a ping test to the Google server at IP address 8.8.8.8. This is a well known server which accepts ping requests on the internet. If this test fails then it indicates an issue with the internet configuration of your wireless router.

Checking Hydrawise Performs a ping test to the Hydrawise servers. If this test fails then it may indicate an issue with the internet configuration of your wireless router.

Viewing Time and Date

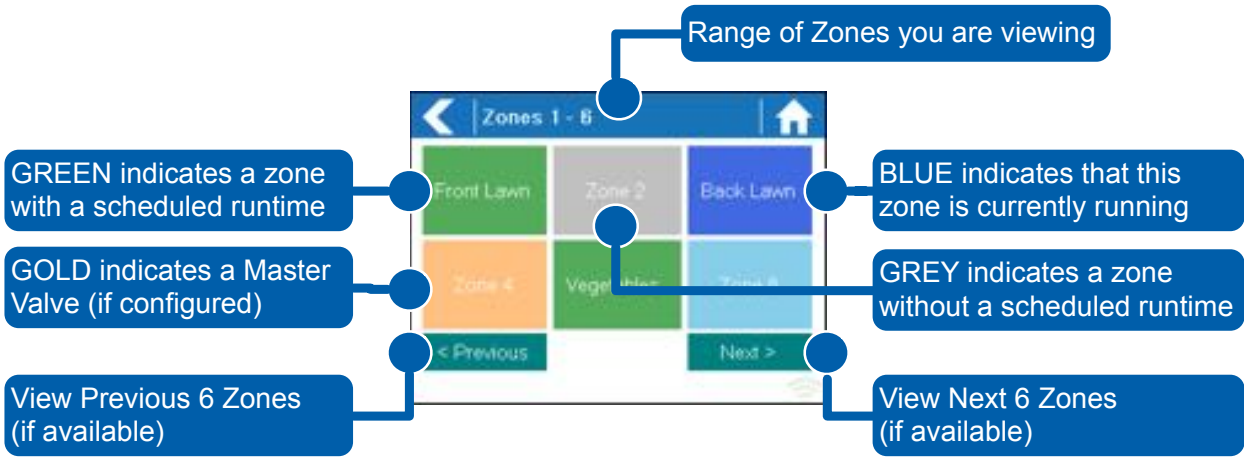
Time and date settings are synchronised with the settings that you configure in the Hydrawise app. The timezone is set based on the location you entered during the app wizard.

Controlling Zones From the Controller

Zone Summary

From the Home screen navigate to the Zone Summary screen by pressing Zones.

The Zone summary screen shows the status of 6 zones at a time. To view the next or previous group of zones use the **Next** and **Previous** buttons. The current range of zones that you are viewing is indicated at the top of the screen.



Each zone is color coded to indicate the current status of the zone as follows –

Green Zone is scheduled to run at some time in the future.

Grey This zone is not scheduled to run in the future.

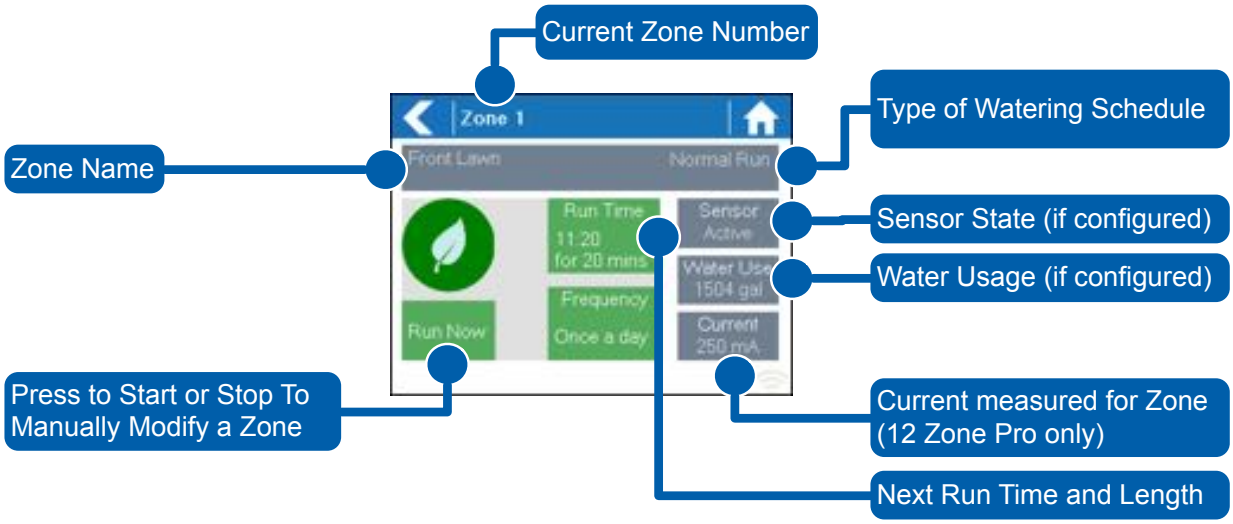
Blue (dark) Zone is current active.

Blue (light) Zone is waiting for another zone to finish watering and then will start immediately.

Gold This zone is a master zone.

Viewing Zone Information

From the Zone Summary screen touch the zone you wish to view.



The Zone Status screen allows you to view the following information –

Zone Name This is the name of the Zone you've configured in the Hydrawise app.

Sensor The current sensor state if configured in the Hydrawise app.

Water Usage Water usage for this zone run. This is only shown if you have a flow meter installed and the zone is currently running.

Current Indicates the current that all solenoids are using (including a master solenoid if configured). Generally speaking, this value ranges from 200mA to 600mA depending on the number of solenoids attached to a single zone output. The controller has a built-in failsafe to automatically stop your zone if more than approximately 800mA is detected as this may indicate a faulty solenoid or wiring.

The Zone Status screen also allows you to manually start a zone using the **Run Now** button. When started, the zone will run for the zone's default configured run length. This can be overridden by clicking on **Run Time** prior to manually starting the zone.

When a zone is running the **Run Now** button will change to **Stop**, allowing you to stop a running zone.

Hydrawise App Configuration

Below is a quick list of steps to get your controller connected to your Hydrawise app.

This guide covers some configuration of your irrigation settings in the app or via the website. Please see our How-To guides online at http://hydrawise.com/support for more information.

Register for an account online

1. If you have not already done so, create an account at the Hydrawise web site. Go to http://hydrawise.com/try-now and register for an account.

Log into your account

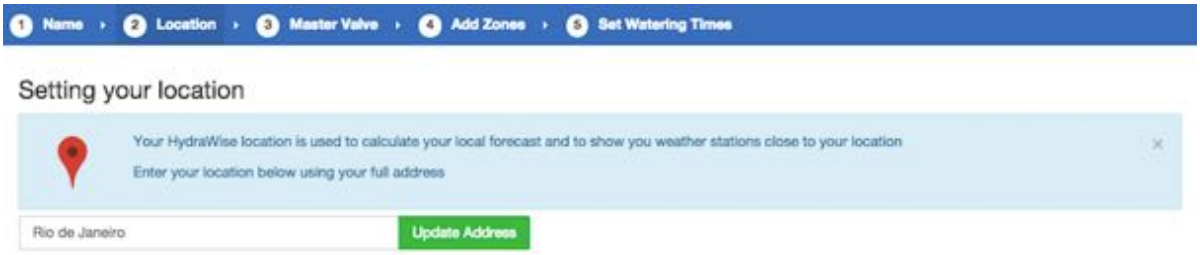
2. Log into your account. If this is the first time that you have logged in you will be guided through a setup wizard to help you with initial configuration of your controller.

Setting The Controller Name and Serial Number

The wizard will ask you to give your controller a name and also to enter the serial number. If you're setting up a test account and you don't yet have a controller you can leave the serial number blank.

Controller Location

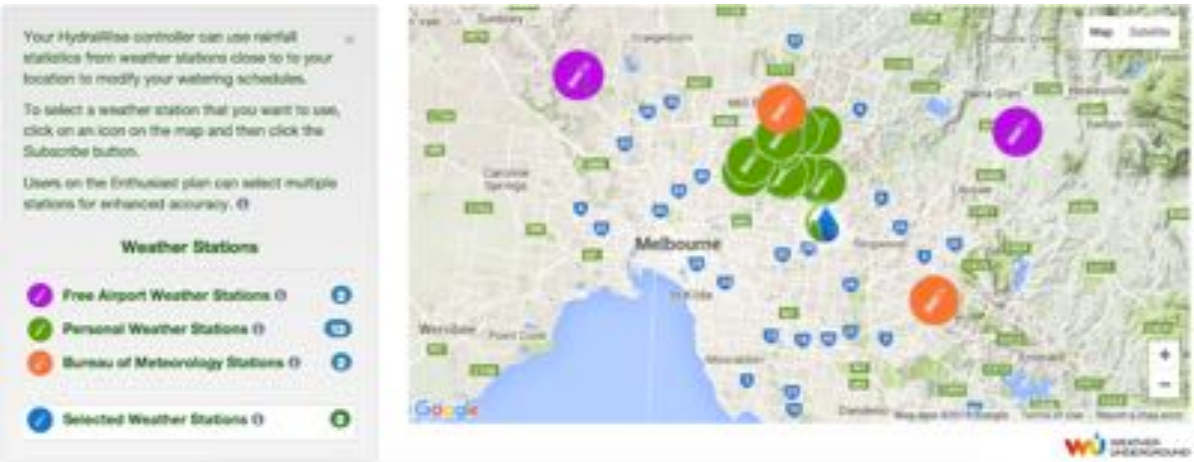
Set the address where your controller is located. Your controller will use this address for forecasts



When you click Update Address you will see local weather stations that you can subscribe to.

You can subscribe to one or more weather stations by clicking on them and choosing Subscribe. The weather stations that you've subscribed to will display in blue.

You can subscribe to one of the two closest airport stations for free – these will be updated daily. If you have an Enthusiast plan you can subscribe to up to 5 personal, airport or other official stations. The advantage of subscribing to multiple weather stations is that the results will be evaluated to remove any particularly high or low readings which might be inaccurate.

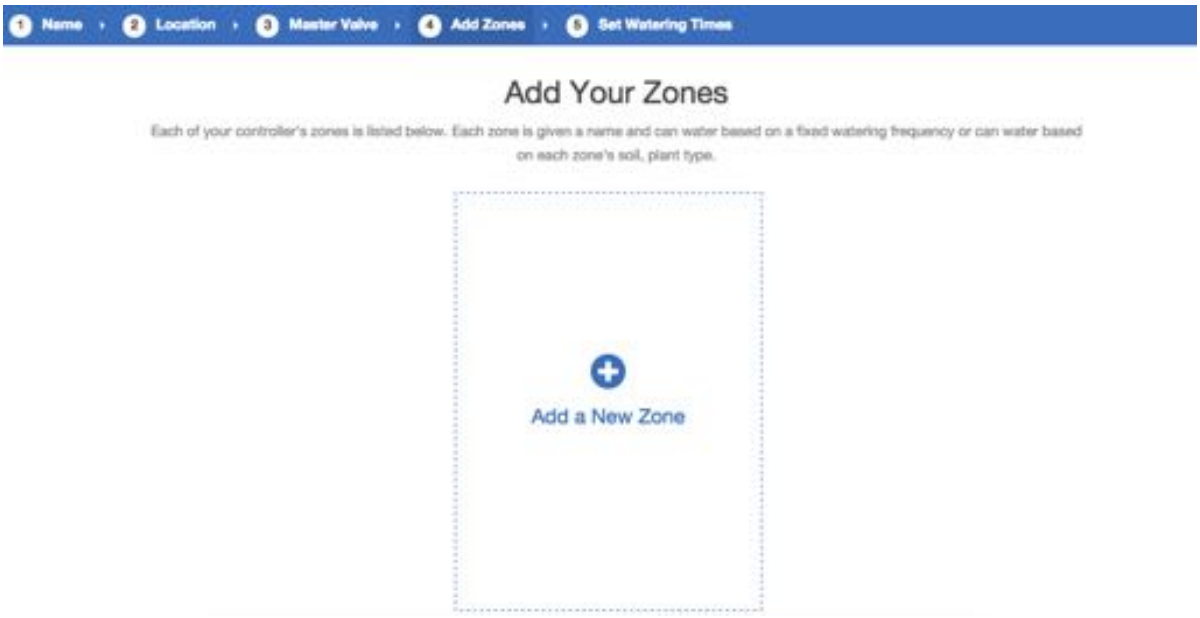


Configuring a Master Valve

If your irrigation system has a master valve then configure it here. For more details on what a master valve is see Configuring a Master Valve.

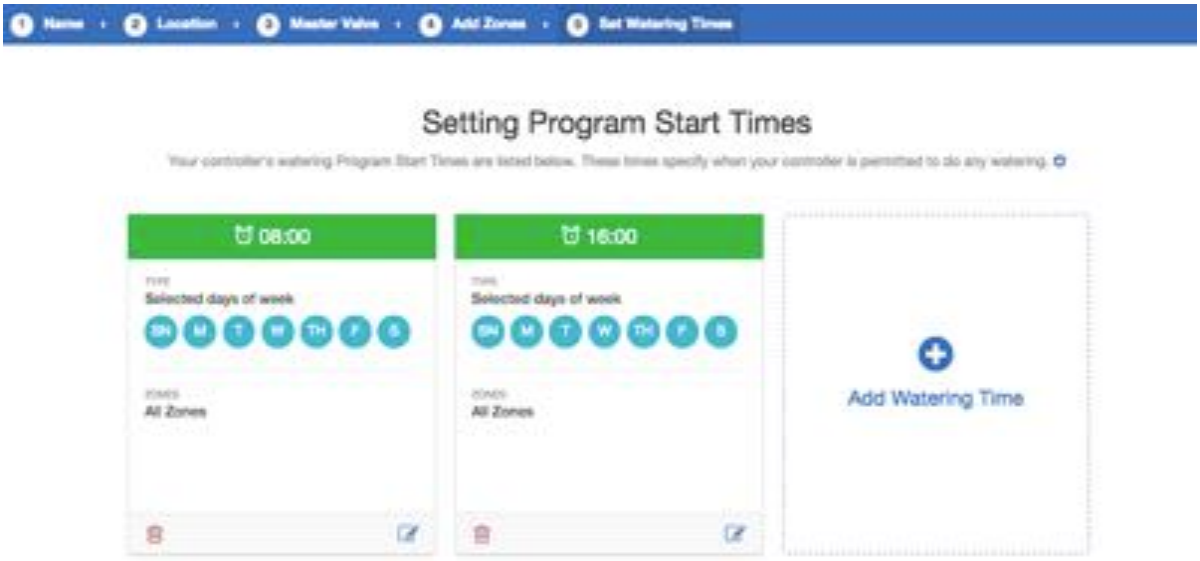
Adding Zones

Now you can add the zones for the various parts of your garden. For more detail on how to add zones, see Adding a Zone.



Setting Program Start Times

The last step in configuring your controller is to set up your Program Start Times. These will tell your controller when it's allowed to water. You can set specific days of the week or use odd/even watering days. You can also set the time of day and then link the program start times to particular zones and schedules.



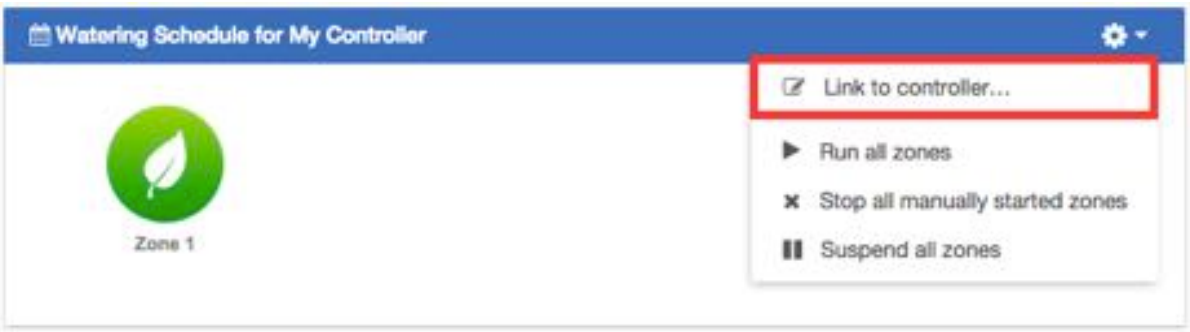
Your controller is now configured and ready for use.

Link your controller to your account

You must link your Hydrawise controller to your account before it will start watering.

If you entered your controller's serial number during the wizard then your controller is already linked and you don't need to follow these steps.

1. In the Hydrawise App or web browser, go to your **Dashboard**. Click on the Settings icon ⚙ on the blue 'Watering Schedule' bar and then click the **Link to controller** menu item (see below).



2. Enter the serial number of your controller. The serial number can be found on the rear of the unit or on the **Controller Status** screen in the Hydrawise unit.

Configuring Your Controller from the App or Website

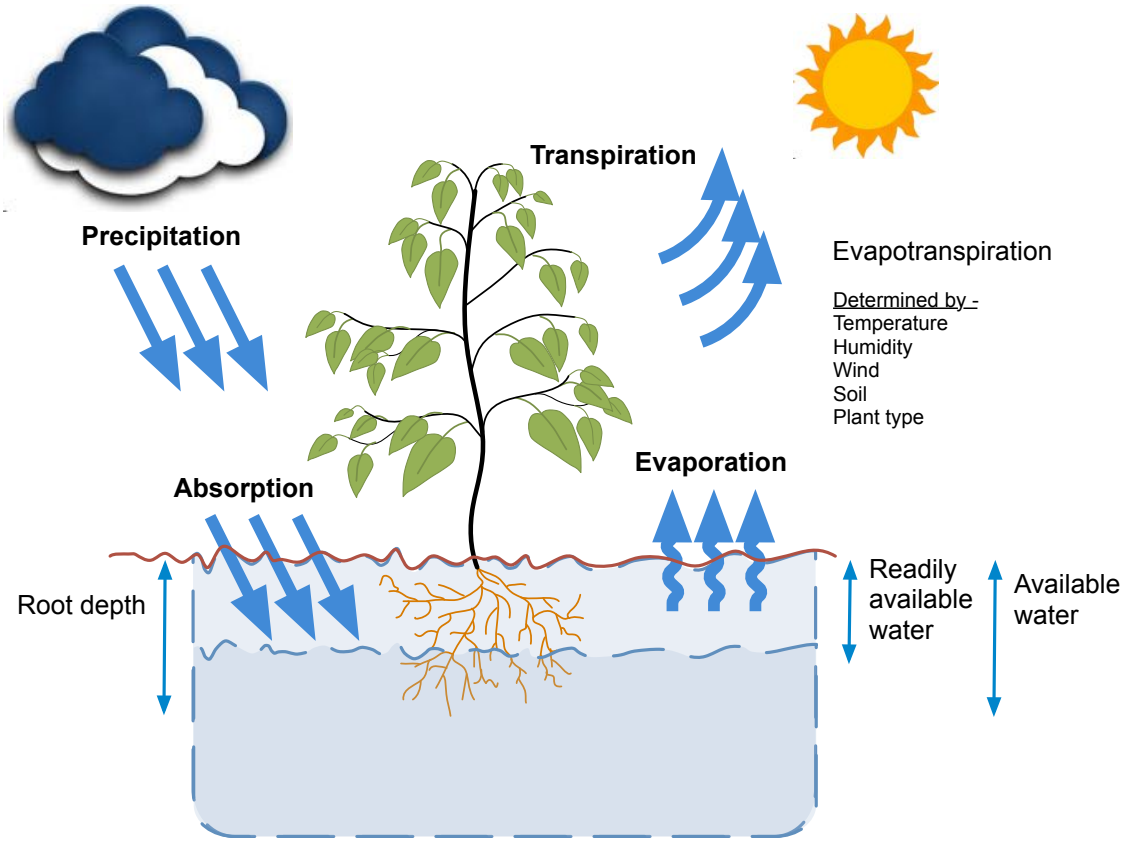
For each zone you can choose from Smart Watering or Time Based Predictive Watering.

Time Based Predictive Watering

For Time Based Predictive Watering you decide the watering frequency and length, either by entering the information directly or choosing a pre-saved watering schedule from when you created a previous zone. The controller will use the Watering Triggers you've set to automatically adjust its watering schedule.

Smart Watering

Smart Watering is an automated watering schedule that uses information about environmental conditions to ensure your plants get the optimum amount of water. Evaporation will draw moisture from your garden, while rainfall and irrigation will add moisture. Understanding these conditions allows Hydrawise to decide when the time is right to water your garden.



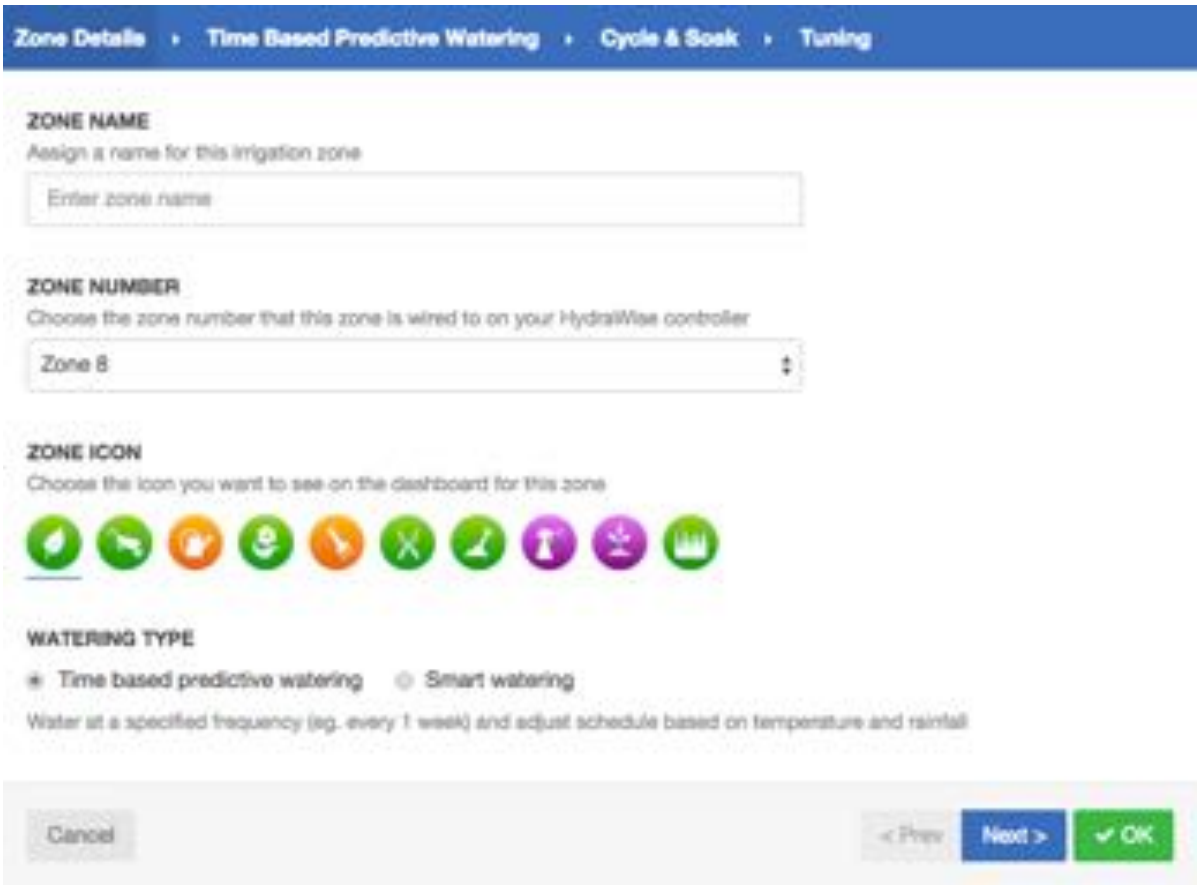
For each zone, we'll ask you to specify the watering length and peak watering frequency:

- The watering length is how long watering needs to run to fully water your zone.
- The peak watering frequency is how often you would normally water this zone during your peak irrigation period.

The controller will vary your watering frequency based on actual evaporation and rainfall in your area on a day to day basis.

Adding a Zone

To add an irrigation zone navigate to the **Zones & Schedules** page in your Hydrawise account and click on **Add a New Zone**. The Zone wizard will be displayed.



Fill in the Zone Details:

Zone Name Use a meaningful name for each irrigation zone. Zone names are displayed on the Hydrawise controller and are used in your Hydrawise account to show run times and allow manual modification of watering schedules.

Zone Number The zone number for each irrigation zone should match the number you have used when wiring the controller.

Zone Icon Choose an icon which will be used to display the zone on the dashboard.

Watering Type Select a watering mode for this zone. A zone can use Smart Watering or Time Based Predictive Watering, which are described below.

Depending on the type of watering you chose, fill in the details for Smart Watering or Time Based Predictive Watering.

Smart Watering

Watering Type Choose whether to set the information manually or choose from a list of schedules.

- **Enter Time and Frequency**: allows you to manually set the watering length and frequency.

- **Use a preconfigured Watering Schedule**: add a watering schedule or use one you've previously created.

Enter Time and Frequency

If you choose to enter the time and frequency, the following fields are available:

Watering Length — The number of minutes this zone will run for each time.

Peak Season Watering Frequency — How often the zone will normally run during your peak irrigation period. This frequency will be automatically adjusted throughout the year based on actual evaporation and rainfall.

Use a preconfigured Watering Schedule

If you choose to use a preconfigured Watering Schedule you can either choose from a list of schedules you've previously created, or add a watering schedule by entering the watering length and frequency and schedule modifications.

Note that the Schedule Adjustment option in a preconfigured Watering Schedule is not used for Smart Watering zones.

Cycle and Soak — Cycle and Soak is the ability to break the watering time for a zone into periods of watering (cycle) and pause (soak) to allow the water to soak into the soil without runoff.

You can enable or disable Cycle and Soak. If you enable it, you need to specify the cycle and soak periods:

- Cycle Time: the maximum number of minutes the zone can run for
- Soak Time: the minimum time between zone waterings to allow the water to soak into the soil

Tuning — Adjust the watering time for this zone from the calculated time. This allows you to fine tune your watering if your zone appears to be too dry or wet.

Time Based Predictive Watering

Watering Type — Choose whether to set the information manually or choose from a list of schedules.

- **Enter Time and Frequency**: allows you to manually set the watering length and frequency.
- **Use a preconfigured Watering Schedule**: add a watering schedule or use one you've previously created.

Enter Time and Frequency

If you choose to enter the time and frequency, the following fields are available:

Watering Length The number of minutes this zone will run for each time.

Watering Frequency Choose how often to water the zone.

Schedule Adjustment Choose how to adjust the watering time based on your weather triggers.

Use a preconfigured Watering Schedule

If you choose to use a preconfigured Watering Schedule you can either choose from a list of schedules you've previously created, or add a watering schedule by entering the watering length and frequency and schedule modifications as per the fields above.

Cycle and Soak Cycle and Soak is the ability to break the watering time for a zone into periods of watering (cycle) and pause (soak) to allow the water to soak into the soil without runoff.

You can enable or disable Cycle and Soak. If you enable it, you need to specify the cycle and soak periods:

- Cycle Time: the maximum number of minutes the zone can run for
- Soak Time: the minimum time between zone waterings to allow the water to soak into the soil

Tuning Adjust the watering time for this zone from the calculated time. This allows you to fine tune your watering if your zone appears to be too dry or wet.

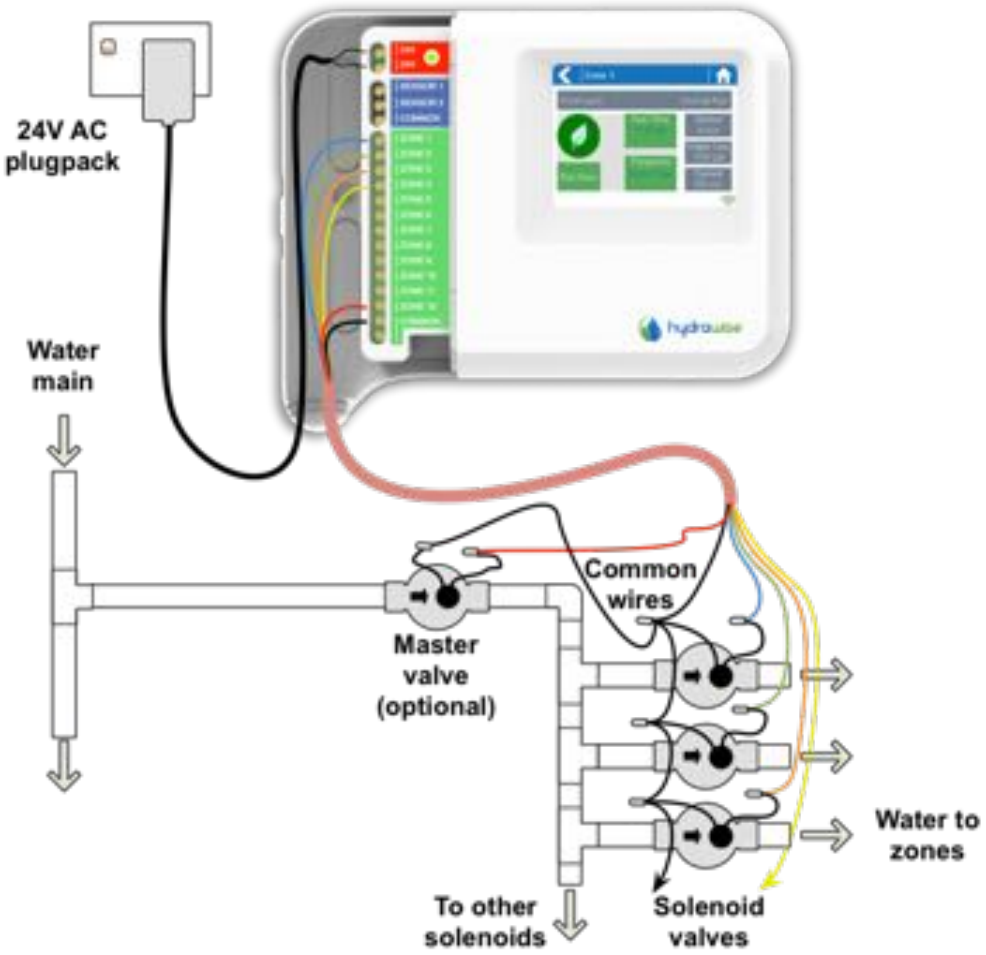
Configuring a Master Valve

A master valve is an automatic valve that is installed at the point where the irrigation system connects to the water supply. (Sometimes this circuit is called a "pump start circuit". Both types of circuits work similar or identical, and can be used for a pump and/or a master valve.) The controller turns the master valve on and off.

How does it work?

Zone valves are the individual valves that operate a group of sprinklers or drip emitters. A Hydrawise controller supports 6 or 12 zone valves, depending on the model. Typically one zone valve is turned on at a time, and controls the irrigation in a specific area of your garden. Whenever one of the irrigation zone valves is told to open by the controller, the controller also signals the master valve to open. So the master valve is a little like a back up valve, or a fail-safe valve. The purpose of the master valve is to shut off the water to the irrigation system when none of the zone valves are operating.

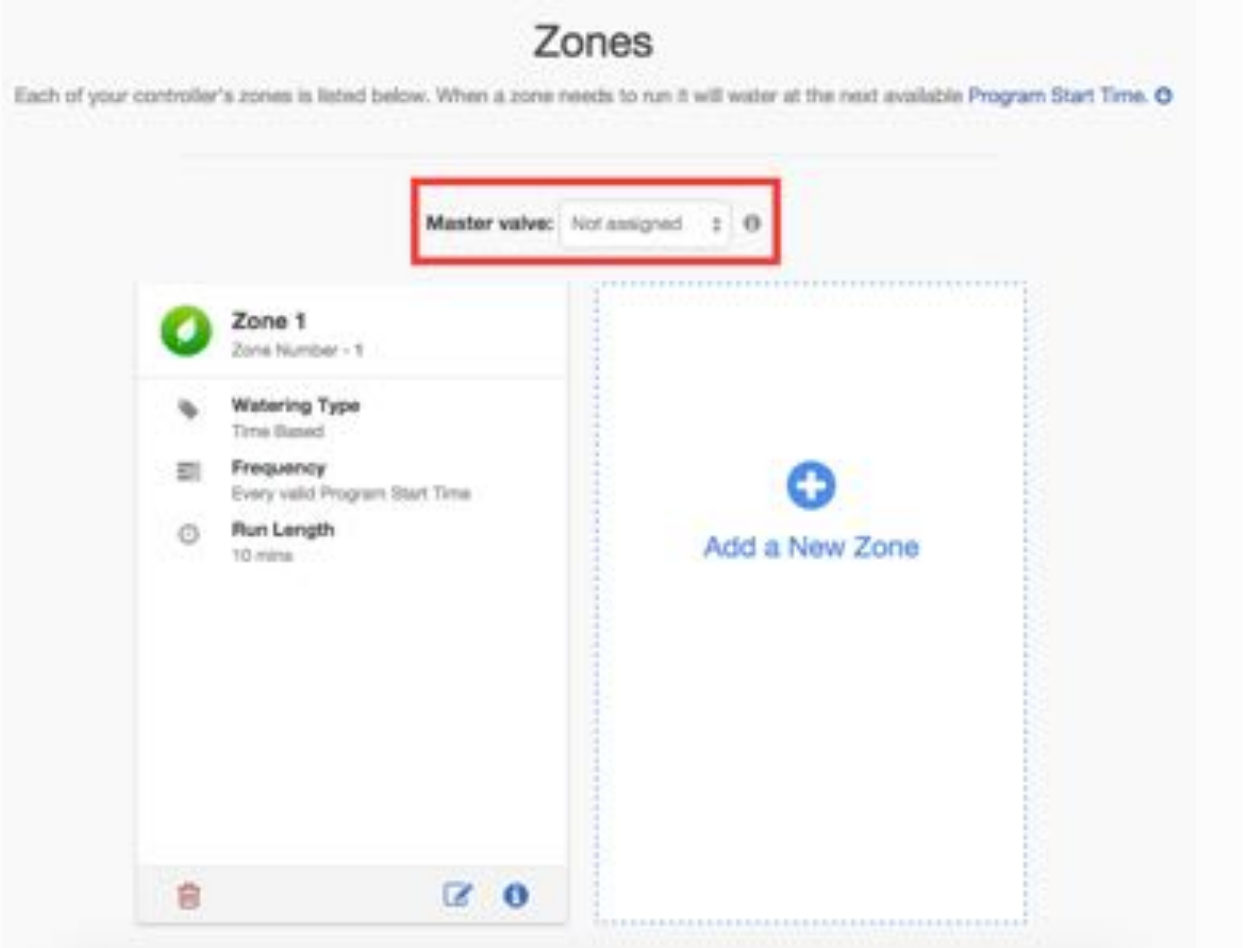
The image below shows a master valve operating connected to Zone 12 on a Hydrawise controller.



How is it configured?

With a Hydrawise controller, any one of your ordinary zones can be configured to act as a master valve.

The master zone is configured on the Zones & Schedules page underneath your list of irrigation zones as highlighted in the image below.



Initially there is no master valve configured and all zones on the controller can be used as normal zone valves. To select a master zone just click next to the text which says **Master Valve** and choose the zone number you will use as a master valve.

Configuring Sensors

Hydrawise supports two types of sensors:

1. Flow sensors (meters) which measure water usage for an irrigation zone (or zones).
2. Rain sensors or moisture sensors which allow you to suspend watering cycles for a zone (or zones).

Flow Meters

Flow meters measure the amount of water going onto each zone. This is really useful for understanding water usage and monitoring issues such as broken pipes or zones not running.

Hydrawise reporting allows you to see how much water is used for each zone and how much water is used across your system.

With a flow meter you can also create alerts for flow issues which will keep you up to date on what's happening – particularly important for unattended homes. See Creating Alerts for more information.

Rain/Moisture Sensors

Hydrawise also supports standard open/closed contact rain sensors and soil moisture sensors. In fact, you can use any generic type of sensor which has a open/close contact.

These sensors use 2 wires and are usually labelled as normally open (sometimes called NO) or normally closed (sometimes called NC).

A rain or moisture sensor is usually used to stop irrigation, however you can also create your own custom sensor types to start irrigation or for other advanced applications. See Create a Custom Sensor for more information.

Sensor Configuration

There are 2 steps to get your sensor working for each of your zones:

1. Create a new sensor in your Hydrawise account under Sensors.

   Sensor Name Give the sensor a name.

   Type of Sensor Choose the type of sensor or Create a Custom Sensor. Standard sensor types are:

   Flow meter with ¾ inch coupling

   A Hydrawise ¾ inch flow meter

   Flow meter with 1 inch coupling

   A Hydrawise 1 inch flow meter

   Rain Sensor (Normally Closed)

   A standard rain sensor – use this if you have wired the rain sensor's normally closed wire to the controller

   Rain Sensor (Normally Open)

   A standard rain sensor – use this if you have wired the rain sensor's normally open wire to the controller

   Soil Moisture Sensor (Normally Closed)

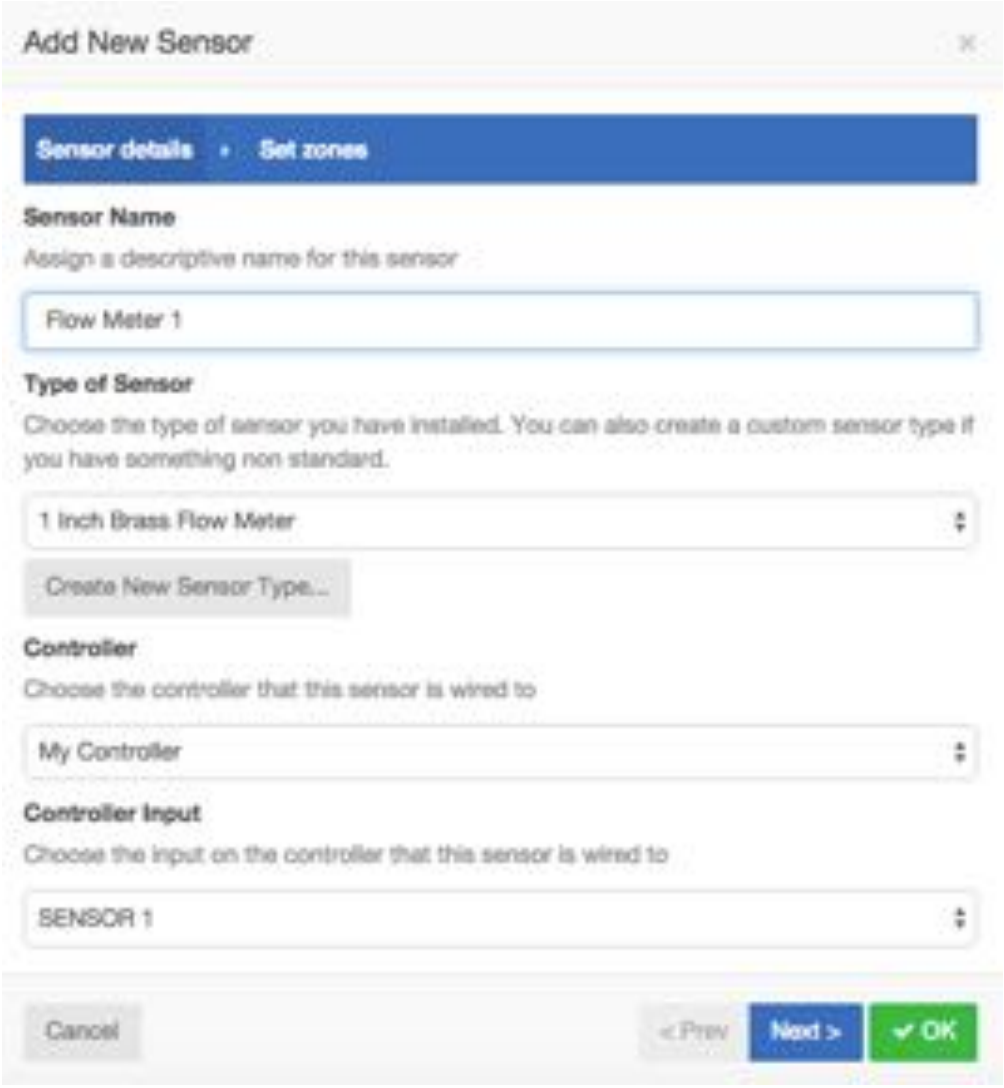
   A standard soil moisture sensor – use this if you have wired the soil moisture sensor's normally closed wire to the controller

   Soil Moisture Sensor (Normally Open)

   A standard soil moisture sensor – use this if you have wired the soil moisture sensor's normally open wire to the controller

Controller Choose the controller that the sensor is wired to.

Controller Input Choose the input on the controller that the sensor is wired to.



2. Once you've created your sensor, choose the zones which will use the sensor.

Create a Custom Sensor

You can also create custom sensors in your Hydrawise account under Sensors.

Some examples of custom sensor types are:

- A flow meter of a different size to the standard Hydrawise flow meters.
- A sensor to conform to watering restrictions which specify that zones must not water for a minimum period of time after rain is detected.
- A sensor to start irrigation if motion is detected (Enthusiast plan only)

To add a custom sensor type go to Sensors and click on **Add Custom Sensor Type**.

Sensor Name Give the sensor a name.

Type of Sensor Choose the type of sensor.

Flow Meter

Litres per pulse The number of litres of water expected to pass through the flow sensor per flow meter pulse (you can get this information from your flow meter's specifications)

Normally Open Sensor/Normally Closed Sensor

Sensor Action Whether the sensor should cause a zone to start or stop.

Start a Zone

If the zone should start, choose the minimum number of seconds before the sensor can cause the same zone to start again.

Stop a Zone

If the zone should stop, choose the number of seconds delay before stopping the zone, and how long the zone should be disabled.

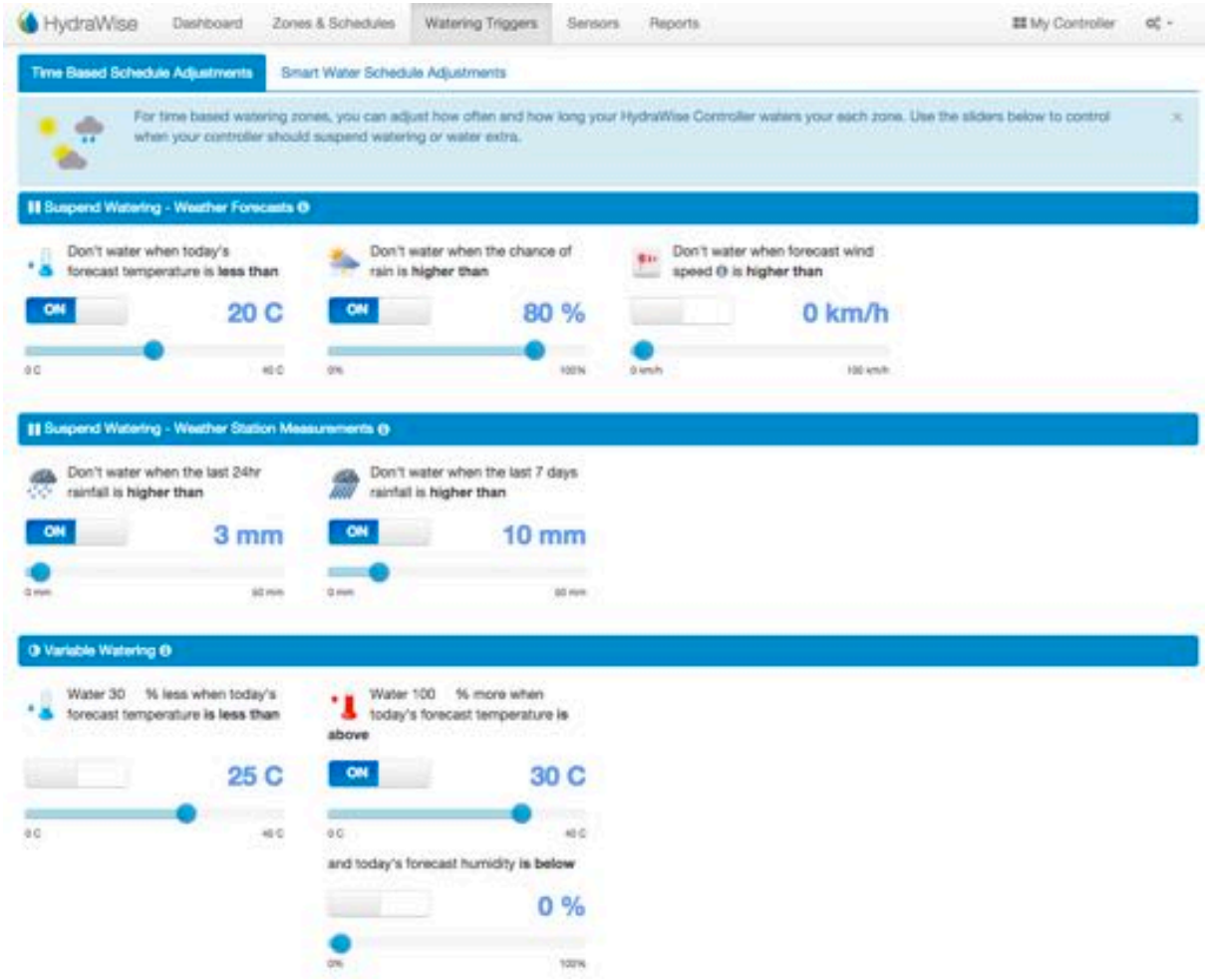
For example, some watering restrictions require that if rain is detected, sprinklers should not run for at least two days.

Setting Watering Triggers

You can configure watering triggers for either Time Based Predictive Watering or Smart Watering.

To configure your predictive watering triggers click on Watering Triggers.

Triggers for Time Based Predictive Watering



You can suspend watering based on either forecast or actual weather data. You can also vary the amount of watering according to the forecast temperature.

Suspend Watering – Weather Forecasts

Forecast Temperature Choose to suspend watering when the forecast temperature is less than the specified amount.

Forecast Rainfall Choose to suspend watering when the forecast rainfall is higher than the specified amount.

Forecast Wind Speed Choose to suspend watering when the forecast wind speed is higher than the specified amount.

Suspend Watering – Weather Station Measurements

Actual Rainfall 24 hr Choose to suspend watering when the rainfall over the past 24 hours is higher than the specified amount.

Actual Rainfall 7 days Choose to suspend watering when the rainfall over the past 7 days is higher than the specified amount.

Variable Watering

Water Less — Choose to water a certain percentage less when the forecast temperature is less than the specified amount.

Note: to change the watering percentage, click on the number next to the % sign.

Water More — Choose to water a certain percentage more when the forecast temperature is higher than the specified amount and the forecast humidity is below the specified amount.

Note: to change the watering percentage, click on the number next to the % sign.

Triggers for Smart Watering

Using forecast evapotranspiration helps to predict the right watering schedule for your zones, giving you a more accurate picture of when the zones will next run.

You can choose whether or not to use the forecast temperature to predict smart watering, and whether or not to use forecast rainfall to delay smart watering.

Schedules will be estimated up to 30 days from today based on forecast and historical temperatures and rainfall. The predicted schedules will be progressively updated each day based on actual weather conditions and new forecasts.

Your watering schedule is updated based on actual weather conditions shortly before your first Program Start Time each day.

Creating Alerts

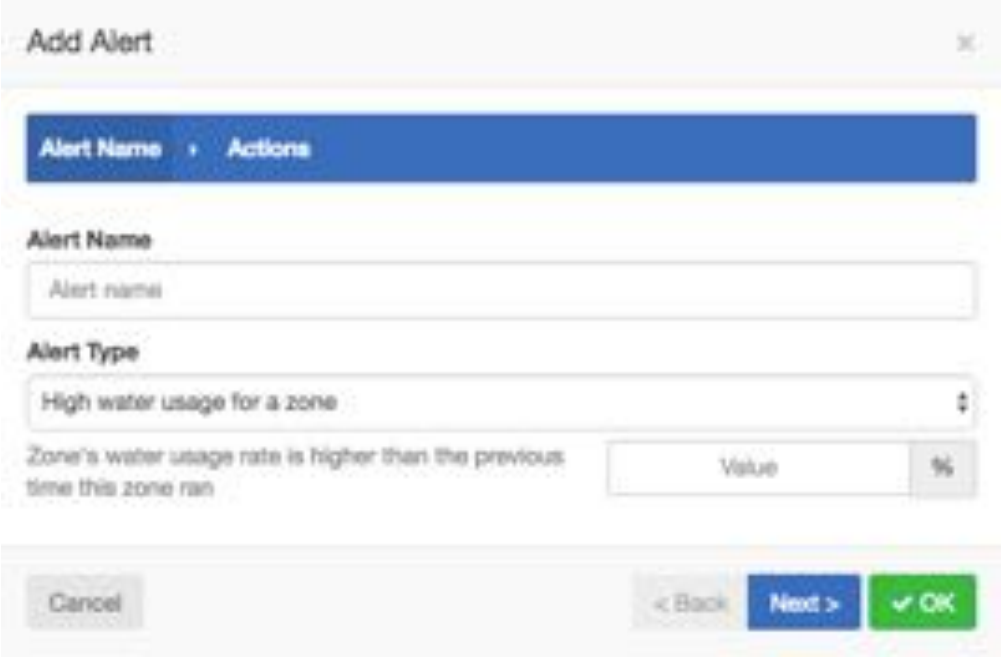
You can create alerts to keep you up to date on what's happening with your controllers.

Alerts can be created to track water flow or detect faulty solenoid wiring.

Alert Types

Alert Type	Description	Requirement
High water usage for a zone	Set a percentage to generate an alert when the zone's water usage rate is that much higher than the previous time this zone ran.	Flow Meter
Low water usage for a zone	Set a percentage to generate an alert when the	Flow Meter

	zone's water usage rate is that much lower than the previous time this zone ran.	
High water usage with no zones running	Set a number of litres/gallons to generate an alert when that amount of water usage is detected when no zones are running. This alert is typically generated within 5 minutes of the event happening.	Flow Meter
High water usage over the past hour with no zones running	Set a number of litres/gallons to generate an alert when that amount of water usage was detected over the previous hour and no zones are running. This alert is typically generated each hour and can be useful for detecting slow water leaks.	Flow Meter
Interrupted water usage at any time	Set a number of litres/gallons to generate an alert when the average water is less than that amount. This is most useful when you need to monitor continually running water. This alert is typically generated within 15 minutes of the event happening.	Flow Meter
Interrupted water usage over the last hour with no zones running	Set a number of litres/gallons to generate an alert when the average water use in the last hour is less than that amount. This is most useful if you have zones that run every hour. This alert is typically generated each hour and can be useful for detecting slow water leaks.	Flow Meter
Wiring short (high current) to your solenoid	Generate an alert for high solenoid current when a zone is running, which may be caused by faulty wiring or faulty solenoid valve	Controller supporting solenoid current measurement
Broken wire to your solenoid	Generate an alert when there is no solenoid current when a zone is running, which may be caused by broken wiring or non existent solenoid valve	Controller supporting solenoid current measurement



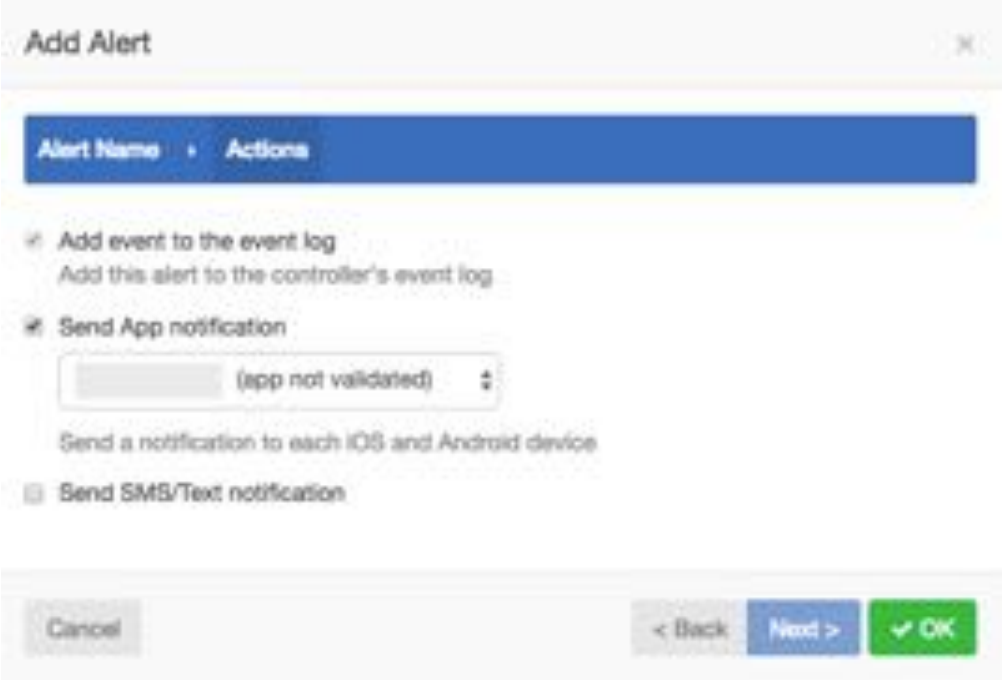
Alert Actions

Add Event to Event Log — Add the alert to your event log which you can view under Reports.

Send App Notification — Send a notification to any Apple or Android device you have the Hydrawise app installed on.

Note: if you see ***(app not validated)*** in the drop down list, that means you have not logged into any valid device using your Hydrawise app. You need to log into your Hydrawise app at least once on the device before the notification can be sent to that device.

Send SMS Notification — Send an SMS to the specified mobile number (this feature requires an Enthusiast plan).



Getting Help

Self-help guides are available at http://hydrawise.com/support.

Email support is available at support@hydrawise.com

Certifications

CE N29732 FC

Canadian FCC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

US 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.

To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.