# BlueSpray Controller User Manual

# Contents

**Version 2.0**

# 1 Preface

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# 2 Introduction

BlueSpray is a web-enabled irrigation controller. It has built-in Wi-Fi, an intuitive user interface, flexible scheduling, and offers unlimited programs and start times. Unlike the dials and buttons that you use to control traditional irrigation controllers, you control BlueSpray from your computer or smart phone.

BlueSpray can also adjust to seasonal and current weather conditions. When used with a rain or soil sensor, you can save as much water as you do with any Smart controller without any extra fees.

Control and access your BlueSpray controller from anywhere using your web browser - there is no app to install. BlueSpray's extremely flexible programming and innovative user interface make it the most advanced irrigation controller on the market.

# 3 Installing the BlueSpray controller

You can use the BlueSpray controller in new installations, or to replace any existing irrigation controller.

The base model supports up to eight zones. With expansion boards (optional), one BlueSpray controller can support up to 24 (residential) and 64 zones (commercial).

## 3.1 Mounting the controller

The BlueSpray controller should be mounted indoors only. You can mount the BlueSpray controller outdoors with the a weatherproof case. For more information, contact support@bluespray.net.

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**Tip**
Tools needed:

- Drill

- Level (optional)

- Phillips screwdriver

- 1/4 in. slotted screwdriver (flat head)

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### 3.1.1  To mount the controller

1. Mount 1 large screw (provided) into the wall. Use wall anchors if needed. Leave about 1/8 inch between the screw head and the wall.

2. Hang the BlueSpray controller box on the screw. Slide the controller box down and on to the screw. If the controller box is loose, remove it and tighten the mounting screw slightly.

3. Open the controller access door. Use the second screw to secure the controller in place.

## 3.2  Wiring the controller

Use this procedure to connect the valve wires from the sprinkler system.

### 3.2.1  To wire the controller

1. Connect the valve wires to the zone terminals marked 1 through 8.

   The zones are ordered left to right, top to bottom.
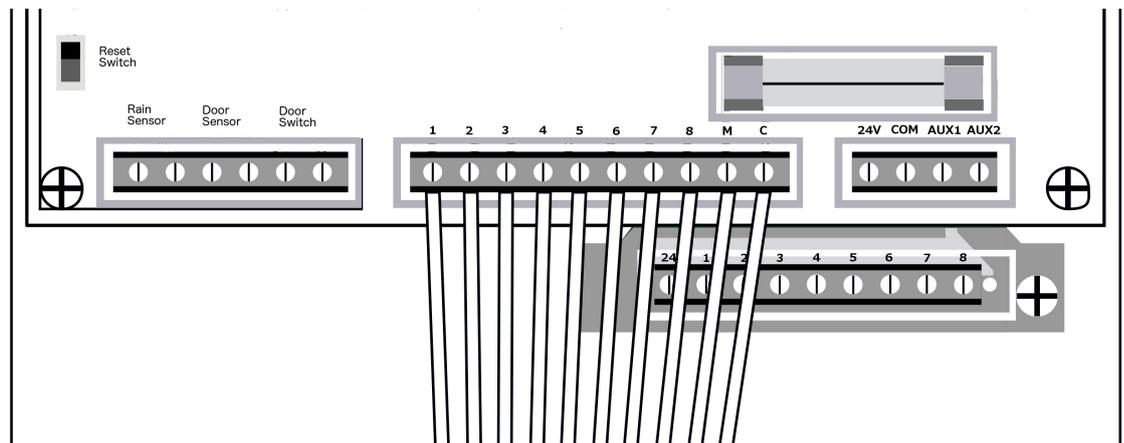


**Note**

If your controller has more than eight zones, it will have one or more expansion boards under the main board. The order of the terminals would be:

- Termimals on the main board are 1 - 8.

- Termimals on the lower left expansion board are 9 - 16.

- Termimals on the lower right expansion board are 17 - 24.

**Caution**

Do not connect a valve wire to the terminal marked 24V on the expansion board. This terminal is used by the 24V AC power supply. Use the terminals marked 1 through 8 only.

1. Make the following connections:

   - Connect the master valve wire (if applicable) to the terminal marked M.
   - Connect the common wire to the terminal marked COM.

- Connect the sensor wires (rain/door) to the appropriate terminals. Polarity does not matter here.

2. Route the wires through the bottom of the controller box and close the access door.

3. Connect the power wire from the power supply (supplied) to the 24 V and COM terminals. Polarity does not matter here.

4. Plug in the power supply. The green power light will come on.

The controller will start. The amber status light will come on for a few seconds, and then start blinking. When the amber status light starts blinking, the controller has started. You are now ready to configure the controller.

# 4 Installing the Garage Door Kit

You will need a magnetic Door sensor to complete this step. For recommended Door sensor, please contact support@bluespray.net.

## 4.1 Mounting the garage Door sensor

The garage Door sensor attaches to your garage door to detect whether it is open or closed. The sensor is made up of two pieces: on e with a wire terminal and one without

### 4.1.1 To mount the garage Door sensor

1. Close the garage door. Locate a spot on the wall or garage door frame to mount the sensor. The best place is probably on the top of the door.
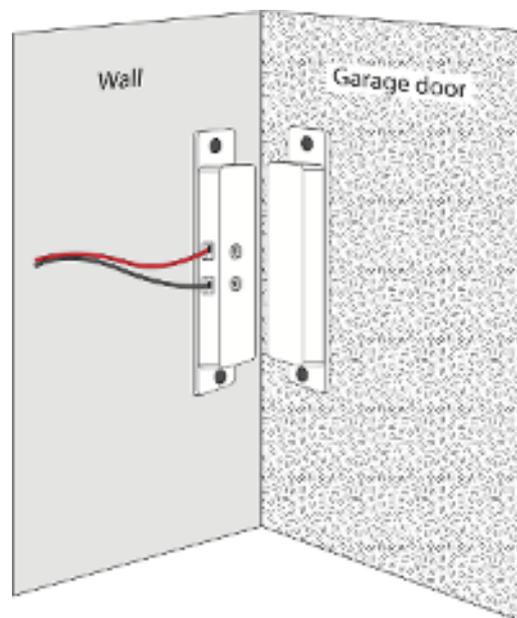


1. Mount the piece with the wire terminal on the wall or garage door frame.

2. Mount the piece with the magnet on the garage door. Ensure that it is aligned with the other piece.

The two pieces must be no more than 1 inch apart when the door is closed. After the pieces are attached, open and close the garage door to ensure the pieces can move freely without colliding.

## 4.2  Connecting the garage Door sensor

After you have mounted the garage Door sensor, connect the wires to the BlueSpray controller.

### 4.2.1  To connect the garage Door sensor

1. Turn off the BlueSpray controller by removing the AC power supply from the power outlet.

2. Connect the two wires from the Door sensor to the Door Sensor terminals on the controller.

3. Connect the two wires from the Door Switch terminals on the controller to either the garage door switch or the terminals on the garage door motor.

# 5  Getting Started

Use the information in this section to get started with the BlueSpray controller.

## 5.1  Status Lights

The Status lights are located on the left side of the controller. The color of the lights and what they mean are outlined in the table below.

| Color | Light | Description |
| --- | --- | --- |
| Green | Power | The controller is on |
| Blue | Data | The light blinks while the controller is sending or receiving data over the wireless connection. |
| Amber (solid) | Attention | The controller is starting. |
| Amber (flashing) | Attention | The controller's time is not synced. If in discovery mode, connect to the controller and time will be synced automatically. If online, the controller cannot get the time from the Internet, possibly not able to connect to your wireless router. |

## 5.2  Reset switch

The Reset switch is either on the left side of the enclosure below the status LEDs or on the lower left side of the BlueSpray main board above the sensor terminals, depending on the version of the controller. Use the switch to reset or select the operating mode of the controller.

### 5.2.1  Discovery mode

To run the controller in Discovery mode, slide the Reset switch to the **DOWN** position.

In Discovery mode, the controller activates its own hotspot named *bluespray* with no encryption and no password. The Discovery mode allows local access to any one to access the BlueSpray controller.

> **⚠ Important**
> Discovery mode should be activated when you need local access, to discover the controller, or to allow service techni-cian to service your system only. It is strongly recommended that you slide the Reset switch back to the **UP** position when done to prevent unwanted access.

### 5.2.2  Reset the controller to default settings

In the event that you cannot connect to the controller (Wi-Fi password changed, forgot login password), you can reset the controller to the default mode.

1. Locate the Reset switch located at the lower left side of the main board.

2. Slide the switch to the **DOWN** position. The amber light will start to blink (10 times) in about 5 seconds.

3. Slide the reset switch back to the **UP** position while the amber light is blinking. The controller will reset.

   When the controller is reset, you can try connecting to the controller again. See "Connecting to the BlueSpray user interface" Section 5.3.

   > **✎ Note**
   > • Resetting the controller only resets the network and login settings. Other configurations and settings will not be affected.
   >
   > • When the reset switch is moved, it will blink once to acknowledge.
   >
   > • If the reset switch is left in the **DOWN** position after the amber light finishes blinking, the controller will just go into Discovery mode.

## 5.3  Connecting to the BlueSpray user interface

We recommend that you use a desktop computer or laptop computer or tablet with Wi-Fi capability the first time you connect to the BlueSpray controller.

### 5.3.1  To connect to the BlueSpray user interface

1. On your computer, view the available wireless networks. The specifics of how you do this depend on the device you are using.

2. Look for the Wi-Fi network named *bluespray*.

3. Connect to the *bluespray* network. There is no password.

4. Start a web browser and enter the following address in the address bar:

   http://192.168.123.1

   You will see the BlueSpray user interface in your browser.
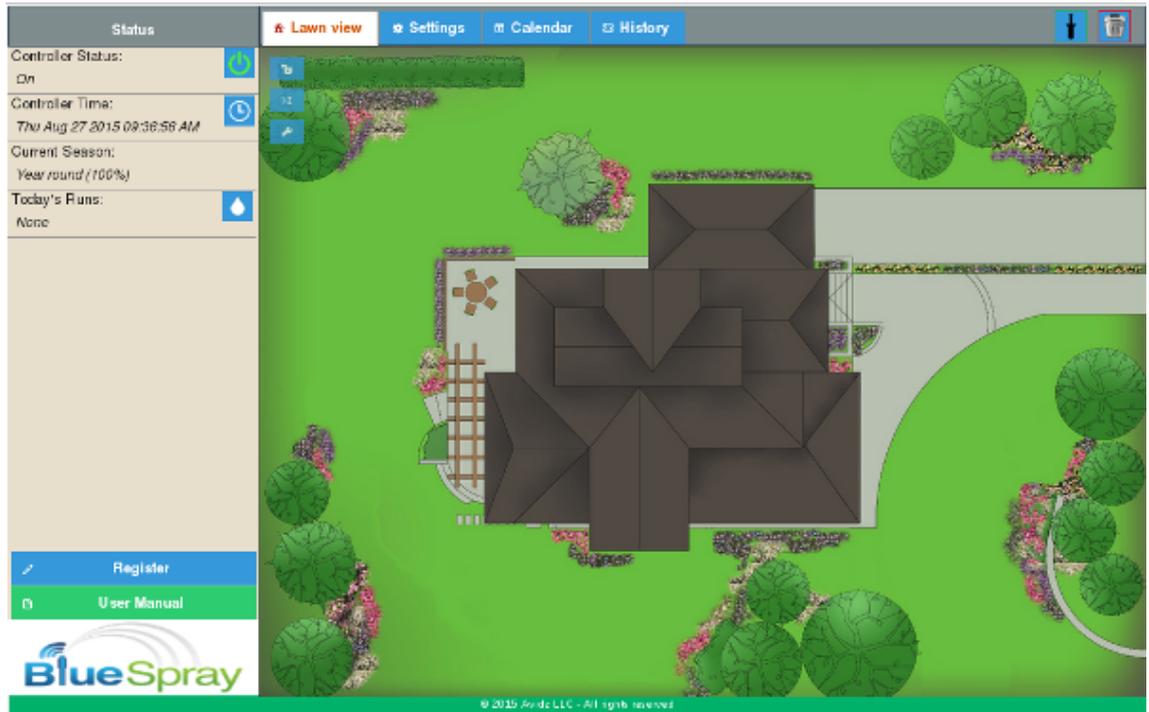
- To connect the controller to your router, please see "Setting up Network options" Section

## 5.4 Status panel

The Status Panel on the left side of the BlueSpray user interface shows the current condition of your BlueSpray controller.

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**Connection Status**

Shows whether your browser is connected to the controller.

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**Controller Status**

- **On**: The controller is on and operating normally.

- **Standby**: The controller is in standby mode. All watering activities are suspended until the controller is returned to normal mode.

- **Delayed**: The controller is on, but all watering activities are suspended temporarily. Typically, Delayed status means that the Rain sensor has detected rain, or a manual delay has been set.

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**Note**
You can click the power button to switch between on (normal mode) and standby mode.

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**Controller's time**

Shows the controller's current time of day.

- When online, the controller automatically syncs the time from the internet.

- When not online, the controller automatically syncs with the connecting device (computer, phone) if there is a big time difference between the controller and the connecting device.

- You can click the  button to force synchronizing the controller with the time of day on the connecting device.

**Today's Runs**

Shows the runs that are scheduled for the current day. You can click the magnifying glass button to see the details of a run. Click the X button to cancel a run.

- Grey: A watering run is scheduled but has not run yet.

- Green: A watering run is currently running.

- Crossed out grey: A watering run has already run.

- Crossed out red: A watering run was scheduled, but was cancelled.

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**Note**

- To view more details about the run, click on the  icon.

- To cancel the run, click on the  icon.

- You can initiate a manual run by clicking on the  button.

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**Current Season**

Shows the current season and the water budget for the current season.

**Rain sensor**

Shows the current status of the Rain sensor. This panel appears only if you have a Rain sensor configured.

- **Inactive**: the Rain sensor is dry.

- **Active**: the Rain sensor is wet (tripped).

**Flow sensor**

Shows the current water flow rate of your system. This panel appears only if you have a Flow Sensor Reader installed.

- **GPM**: the flow rate in Gallon Per Minute (GPM).

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**Door Sensor**

Shows the current status of the garage door. This panel appears only if you have configured a Door sensor. When the door is opened, the panel will show the time that the door is scheduled to close. Click the gear button to change the time you want to close the door.

- **Close door at**: The time you want to the door to close (applies to the current day only). Use this option to extend the time the garage door stays opened.

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>  **Note**
>
> You can click the  button to open and close the garage door manually.

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# 6  Configuring BlueSpray

You use the BlueSpray user interface to configure the BlueSpray controller. If you have not connected to the BlueSpray user interface, See "Connecting to the BlueSpray user interface" Section 5.3.

## 6.1  Setting up Zones

A zone (station) is a collection of sprinkler heads grouped together to water a part of your lawn. Each zone is operated by one valve. A typical irrigation system has one or more zones.

### 6.1.1  To create a zone

1. Click the Lawn View tab

2. In the upper right corner, click the  icon and drag it onto the lawn. Place it in the approximate location of the zone on your property.

### 6.1.2  To edit a zone

1. Click the Lawn View tab.

2. Right-click the zone icon  you want to edit. On a touch screen device (tablet, phone), you can press and hold on the icon.

3. Enter the following:

   - **Name**: Enter a unique name for this zone.
   - **Active**: Enable or disable the zone. If you select No, the zone is disabled. It will not be watered until you select Yes. Use this feature to prevent a zone from watering if a sprinkler head is malfunctioning.
   - **Terminal**: Select the terminal you want to assign to this zone.
   - **Flow rate**: If you the flow rate of this zone, enter it here. Otherwise, leave it at 0.

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     >  **Note**
     > When you add a zone, the GUI automatically assigns the zone to the terminal sequentially. You should not have to change this unless you want to override it or to skip a terminal.

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### 6.1.3 To move a zone

1. Click the Lawn View tab.

2. Locate the icon for the zone you want to move. Click and drag it to its new location.

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> **✎ Note**
> If you are using a touch screen device, you might inadvertently drag a zone when you tap on it. To prevent inadvertent dragging , you can disable the click and drag feature. Tap the lock button on the upper right corner of the lawn view.

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### 6.1.4 To change zone run order

BlueSpray controller will water zones in the order they are added. You can change the zone run order using the BlueSpray user interface without rewiring the controller.

1. Click the [icon] button in the upper right corner of the lawn view.

2. Drag the zones up or down to put them in the desired order.

3. Click **OK** button.

### 6.1.5 To delete a zone

If you've added more zones than you need, you can delete them.

- Drag the [icon] icon to the [trash icon] icon in the upper right corner. When the trash can turns red, drop the icon to delete it.

## 6.2 Setting up Programs

A program is a set of run times for one or more zones. You can add as many programs as you need.

### 6.2.1 To create a program

1. Click the Settings tab, then click the Programs tab.

2. Click the **New** button.

3. Enter the following:

   - **Program name**: Enter a unique name for the program.
   - **Time Unit**: Specify minutes (default) or seconds for the watering time unit.
   - **Use Master Valve**: Additional option to associate a Master Valve for this program. Default is the main Master Valve. This option only appears when Master Valve is configured in "Operations Settings" Section 6.6.1.
   - **Delay between Zones**: You can set a time delay between end of one zone run and the start of the next. This option only appears when Master Valve is configured in "Operations Settings" Section 6.6.1.
   - **Run times**: Enter the number of minutes or seconds to water each zone. If you want to skip a zone, enter 0 for that zone.

4. Click **Save** button.

### 6.2.2 To edit a program

1. Click the Settings tab, then click the Programs tab.

2. Click the program you want to edit.

3. Make the appropriate changes to the program.

4. Click **Save** button

### 6.2.3 To delete a program

1. Click the Settings tab, then click the Programs tab.

2. Click the program you want to delete.

3. Click **Delete** button

4. Click **Save** button

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**Note**

The program is not deleted until you click **Save** button If you change your mind about deleting the program, click the **Cancel** button

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## 6.3 Setting up Seasons

You can use seasonal settings to water more efficiently during various times of year. For example, you can water more in the Summer, less in the Spring and Fall, and perhaps not at all during the Winter.

### 6.3.1 To create a season

1. Click the Settings tab, then click the Seasons tab.

2. Click the **New** button

3. Enter the following:

   - **Season name**: Enter a unique name for the season.
   - **From date**: Enter a start date for the season.
   - **To date**: Enter an end date for the season.
   - **Percentage**: Enter the water budget for the season. The percentage applies to the run time configured.

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**Tip**

**Example:** if you set 100% for the summer and 50% for the fall, and each zone to run for 10 minutes, then the controller will run the full 10 minutes in the summer and 5 minutes in the fall. A percentage ending with a 5 is rounded up. For example, 55% of 10 minutes will result in 6 minutes.

---

### 6.3.2 To edit a season

1. Click the Settings tab, then click the Seasons tab.

2. Browse to the season you want to edit.

3. Make the appropriate changes to the season.

4. Click **Save** button

### 6.3.3   To delete a season

1. Click the Settings tab, then click the Seasons tab.

2. Browse to the season you want to delete.

3. Click **Delete** button.

4. Click **Save** button.

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**Note**

The season is not deleted until you click **Save** button If you change your mind about deleting the season, click the **Cancel** button

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## 6.4   Setting up Schedules

A schedule is a water run. This is where you tell the controller when to water. You will also need to associate a program with the schedule.

### 6.4.1   To create a schedule

1. Click the Settings tab, then click the Schedules tab.

2. Enter the following:

   - **Run Name**: Enter a unique name for the schedule.
   - **Start Time**: Enter the time of day to start watering.
   - **Run Program**: Select a program that you want to run with this schedule.
   - **Apply to Season**: Select a season for this watering run. By default, a run is applied to all seasons (year round).
   - **Active**:
     - Yes: this run active but will be ignored if Water Restriction rule is in effect.
     - No: disable this run.
     - Variance: this run is always active, even when under Water Restriction.
     - Run Once: this run is only executed once for the duration of the selected season. The run will be removed after the specified season.
   - **Run Interval**: Specify how often you want this schedule to water.
     - Even days: Run on even days of the month only.
     - Odd days: Run on odd days of the month only.
     - Every X days: Run every X number of days.
     - Days of Week: Run on certain days of the week.
   - **Effective on**: Specify the date to start the schedule. Keep in mind that this is day one of a schedule. For new schedule, the default is the next calendar day.

     ---

     **Tip**

     The **Effective on** option typically applies to "Every X days" runs. For example, to schedule a run every other Tuesday, set Every X days to 13, and set the "Effective on" date to a Tuesday.
     This option also lets you start your schedule on a future date. For example, if you're installing an irrigation system but the grass won't be install for another week, set the **Effective on** date to a week from now.

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### 6.4.2 To edit a schedule

1. Click the Settings tab, then click the Schedules tab.

2. Browse to the schedule you want to edit.

3. Make the appropriate changes to the schedule.

4. Click **Save** button

### 6.4.3 To delete a schedule

1. Click the Settings tab, then click the Schedules tab.

2. Browse to the schedule you want to delete.

3. Click **Delete** button

4. Click **Save** button

---

> **Note**
> The schedule is not deleted until you click **Save** button If you change your mind about deleting the schedule, click the **Cancel** button

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## 6.5 Setting up Sensors

If you installed a Rain sensor or Door sensor, use the information in this section to configure it.

### 6.5.1 To set up a Rain sensor

BlueSpray controller supports any commercially available on/off Rain sensor. A typical Rain sensor may be of Normally Closed or Normally Opened type. Please consult your Rain sensor user manual to see what type of sensor you have. Configuring the Rain sensors improperly may affect the operation of your controller.

1. Click the Settings tab, then click the Sensors tab.

2. Click on the [ ] button to enable the Rain sensor configuration.

3. Enter the following to set up the Rain sensor:

   - **Sensor type**: Select the type of Rain sensor that you have.
     - NO: Normally Opened Rain sensor
     - NC: Normally Closed Rain sensor
   - **Delay after rain**: Number of days to delay the system after the rain sensor is tripped.

---

> **Note**
> Some rain sensor has the ability to set how long it takes to dry out, enabling the system to water again. The rain sensor's mechanical setting may be unreliable. You may use this **Delay after rain** setting to add further delay.

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**Tip**

- Make sure your Rain sensor is dry. Connect the sensor wires to the sensor terminals.

- Select either NC or NO in the **Sensor type**.

- Observe the ⏻ icon on the status column. If it turns yellow after a few seconds, you have selected the wrong type. Click on the other type. The power icon should turn green. This is the correct type.

### 6.5.2  To set up a Door sensor

1. Click the Settings tab, then click the Sensors tab.

2. Click on the 🔲 button to enable the Door sensor configuration.

3. Enter the following to set up the Door sensor:

   - **Close after**: Close the door automatically if it has been open for a specified amount of time.
   - **Close at**: Close the door automatically at a particular time of day, if it is open.
   - **Retry**: If for any reason the door is still opened after the **Close at** time, the controller will repeatedly try to close the door after the specified number of minutes (default is 1 minute).

4. Click **Save** button.

**Note**

- To test the Door Switch, click the garage door button on the Status Panel and see if your garage door opens and closes on demand.

- If the controller is unable to close the door, it will try again until the door is successfully closed. The time between attempts is the same value as **Close after** , or the **Retry** value above if **Close at** is configured.

### 6.5.3  To set up Flow sensor

If you've installed a Flow Sensor Reader, the Flow sensor configuration will appear.

1. Click the Settings tab, then click the Sensors tab.

2. Enter the following to configure the Flow sensor:

   - **Sensor model**: Select the make and model of your Flow sensor.
   - **Overflow**: The threshold of the flow over the normal flow rate of each zone.
   - **Underflow**: The threshold of the flow under the normal flow rate of each zone.
   - **Delay period**: The time which an Overflow or Underflow the controller will wait before triggering an exception.

3. Click **Save** button.

**Note**

To establish a base flow rate for each zone, click the 〰 button on the Status Panel. The controller will execute a manual run through each zone to record the base flow rate for each zone.

## 6.6  Setting up Operations

Use the information in this section to configure the general behavior of the BlueSpray controller.

### 6.6.1  To set up Operations

1. Click the Settings tab, then click the Operations tab.

2. Enter the following in formation to set up the controller settings:

   - **Master Valve**: Select Master Valve if you have a master valve installed.
   - **Additional Master Valve**: Option to designate any terminal(s) to be additional Master Valve(s).
   - **Delay watering**: Temporarily suspends all watering for X number of days. The controller will count down this value each day until it reaches 0, then all scheduled runs will resume as normal. While in delay mode, you still can water manually.
   - **Bypass Rain sensor**: If the Rain sensor is not operating properly, you can bypass it and resume all scheduled runs.
   - **Stack runs**: In Stack mode, overlapping runs will be rescheduled to be run sequentially. Otherwise, they will be run in parallel. Note that if you run concurrent runs, you may not have enough pressure to water your lawn properly. Residential users should typically choose Yes for Stack mode.
   - **Heartbeat interval**: Specify how often to report to the server. The heartbeat signal indicates normal operation. If the IP address of your router changes often, lower this value.

3. Click **Save** button

## 6.7  Setting up Conservation options

BlueSpray controller offers many options to conserve water.

**Note**

Your controller must be registered and online to activate this feature.

### 6.7.1  To set up Weather options

BlueSpray can modify your scheduled watering based on the weather forecast.

1. Enter the following:

   - **Enable Weather Settings**: Yes to enable this feature, No to disable it.
   - **Chance of rain is at least**: Do not water if rain is likely.
   - **Extend rain forecast to**: Look X number of hours further into the forecast.
   - **Temperature is less than**: Do not water if it is too cold.
   - **Wind speed is greater than**: Do not water if it is too windy.

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**Note**

Forecast data is obtained from NOAA. The forecast is based on ZIP code and may not reflect the actual weather conditions at your property. Use it as a guideline only. BlueSpray is not responsible for the accuracy of the weather forecast.

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### 6.7.2 To set up Water Restriction

A water restriction rule typically dictates a weekly watering schedule, depending on the address of a resident or business. Blue-Spray currently supports this type of water restriction rule.

If you have water restriction in your area, chances are BlueSpray might be able to help you to comply to the rule. We try our best to include all the water restriction rules, but it is not possible. We also need the cooperation of your local Water Municipal. Please contact us if you don't see your Water Municipal listed in the list.

1. Enter the following:

   • **Enable Water restrictions**: Yes to enable this feature, No to disable it.

   ---

   **Note**

   If you enable water restriction, the controller will strictly water according to the rule. However, we recognize that there are times and circumstances where you need to water more. You can do so by specify a schedule as Variance in the Schedule setting.

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   • **Water Municipal**: Enter the name of your Water Municipal (or Water Authority). A list of available Water Municipal names will appear. Select your Water Municipal.

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   **Note**

   – If you do not know what it is, you can look up your Water Municipal name in your water bill.

   – If your Water Municipal is not found, please contact us at support@bluespray.net

   ---

Click on the ⬚ button. A Water Restriction screen will appear.

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1. Enter the following:

   - **Property Type:** Some Water Municipal may may different property classification. Select your property type if applicable.
   - **Select Program:** Select the program that you want to water. The 💧 icon will appear.
   - Drag the 💧 icon to the green area of the watering days. Drag the program to adjust the start time if you wish.
   - Repeat for all restriction stages if applicable.
   - Click **OK** button.
   - Click **Save** button.

## 6.8 Setting up Network options

Use the information in this section to configure network information.

1. Click the Settings tab, then click the Network tab.

### 6.8.1 To set up Ethernet (wired) networking

If your controller is equipped with an ethernet port, the Ethernet Settings option will appear when an ethernet cable is connected to the ethernet port.

- **Use DHCP**: By default, the controller accepts dynamic IP address from your router. You can choose to use static IP address by selecting No here and enter the following information.

- **Netmask**: Enter the netmask of your network.

- **Gateway**: Enter the gateway host of your network.

- **DNS**: Enter the DNS server for your network.

### 6.8.2   To set up Wi-Fi networking

Enter the Wi-Fi Settings:

- **Network SSID**: Enter your home wireless network.

---

**Tip**

- Click on the  button. The controller will scan for nearby Wi-Fi networks.

- Select your Wi-Fi network from the list of networks found. Make sure it has at least 2 bars. If it shows less than 2 bars, your Wi-Fi signal at the controller might be weak. You might need to use a signal booster or range extender.

- Click **OK** button. Your Wi-Fi network SSID and encryption type will be filled in automatically.

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- **Encryption**: Select the type of encryption of the wireless network. The controller should be able to detect this automatically.

- **Key**: Enter the key or password for the wireless network.

- **Use DHCP**: By default, the controller accepts dynamic IP address from your router. You can choose to use static IP address by selecting No here and enter the following information.

- **Netmask**: Enter the netmask of your network.

- **Gateway**: Enter the gateway host of your network.

- **DNS**: Enter the DNS server for your network.

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**Note**

Once your controller is connected to the router, you can access it by entering http://my.bluespray.net in any browser of any computer on your home network.

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## 6.9   Setting up System options

Use the information in this section to configure system and security information.

### 6.9.1   To set up system information

1. Click the Settings tab, then click the System tab.

2. For Controller Name, enter a descriptive name for the BlueSpray controller.

3. Enter the time settings:

   - **Time zone**: Select the time zone for your location.
   - **NTP servers**: Specify the address of Internet time servers. You can use the default NTP servers unless you need to use custom ones.

4. Enter the security settings:

- **Enable login**: Select Yes to restrict access to your controller.
- **Login Name**: If login is enabled, enter the login or user name that you want to login as.
- **Password**: If login is enabled, enter the password for the login name above.

> ⚠ **Caution**
> We recommend that you enable login with your own user name and password to protect your controller from unwanted access.

5. Enter the Additional HTTP port settings:

- **HTTP port**: Specify a HTTP port for the controller. Default: 8000.
- **HTTPS port**: Specify a HTTPS port for the controller. Default: 8443.

> ☞ **Tip**
> – By default, the controller listens on port 80 for HTTP and port 443 for HTTPS. You can use these options to configure additional ports if your router can not forward to ports 80 and 443.
> – HTTPS protocol will encrypt all messages to and from the controller. We recommend that you use the HTTPS protocol for security reasons.

6. Click **Save** button

## 6.10   Administrations

### 6.10.1   To update firmware

BlueSpray periodically provides new firmware to fix bugs or add features. There are 2 ways to update the firmware.

1. Automatically download the latest firmware

- The controller regularly checks to see if there is a later firmware version available. When there is, the **Dowload** button will be active. Click on the **Download** button to initiate the firmware update process.

> ✎ **Note**
> Your controller must be online for this option to be available.

2. Manually download the latest firmware image file from http://www.bluespray.net/support.html.

- Save the firmware image file to your local computer.
- Under Firmware update, click the Browse button
- Select the firmware image file and click **Upload** button.

The update process takes about two minutes. Do not disconnect power from the controller while the update is in progress.

## 6.11   Resetting the controller's settings

Use this procedure to reset the controller's settings.

### 6.11.1 To reset the controller's settings

1. Click the Settings tab, then click the Administration tab.

2. Click on **Reset** button.

---

**Note**

The **Reset** button only resets the Programs, Seasons, Schedules, Sensors, Operations, Conservation, and some System settings. Network settings will not be reset. To reset network settings, please see "Reset the controller to default settings" Section 5.2.2

---

## 6.12 Restarting the controller

Use this procedure to restart the controller.

### 6.12.1 To restart the controller

1. Click the Settings tab, then click the Administration tab.

2. Click the **Restart Controller** button

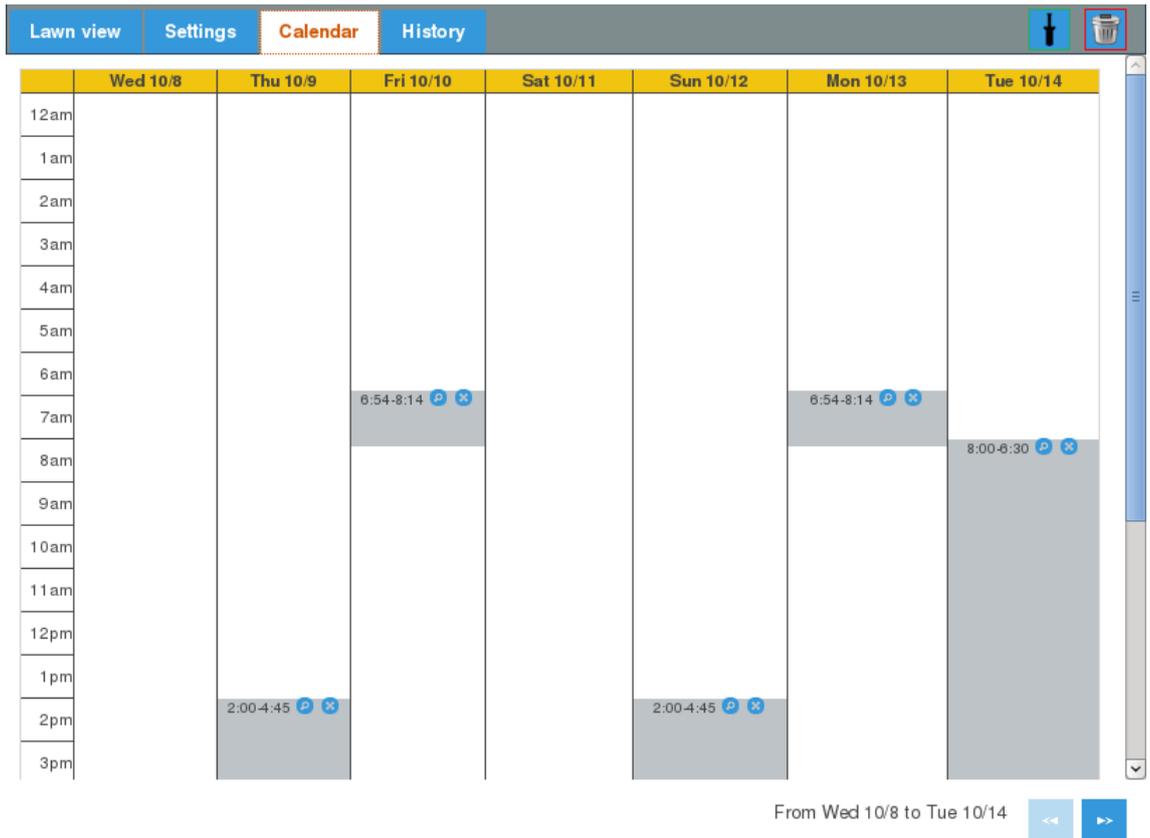## 6.13 Using the Calendar view

The Calendar view is very useful to get a an idea of what your water schedules look like on a weekly basis. You can also cancel future runs in Calendar view.

---

**Note**

The Calendar view only shows future runs starting the next day. Current runs are shown on the Status Panel, under Today's Runs.

---

### 6.13.1 To use the calendar view

- Click the Calendar tab.

---

- To advance to the following week, click the Next button

- To view a run's details, click on the ⊕ icon.

- To cancel a future run, click on the ✱ icon.

## 6.14 Viewing the History report

BlueSpray logs all events for up to one year. Use the history report to track your watering schedule and water usage.

### 6.14.1 To view System logs

1. Slect System logs.

2. Select the date range from which you want to view the logs. The logs will be shown chronically from the date selected.

### 6.14.2 To view History graph

1. Slect Water usage.

2. Select the date range from which you want to view.

3. If you have a flow sensor installed, the graph will also show how much water has been used.

4. Click on the yellow bar to see the total number of minutes.

5. Click on the blue bar to see the total number of gallons of water used (with flow sensor only).

6. Select **group by** day or month to see usage by day or month.

---

**Note**

- If grouped by day, the graph will automatically adjust to show up to 60 days from the **from** date.

- If you don't have a flow sensor installed, and you know the flow rate of each station, you can enter it for each station. The controller will use this number to calculate the water usage.

---

## 6.15   Registering the BlueSpray controller

If your controller has not been registered, you will see a **Register** button on the lower left side of the screen. Registering your controller will enable additional features such as:

- Automated weather forecast and settings.

- Water Restriction.

- Remote access to your controller through our web site without having to set up DNS.

### 6.15.1   To register your controller

1. Click the **Register** button on the Status Panel.

2. In the registration window, enter the controller location. This information is used to provide accurate weather data from NOAA.

   - **Address**: Enter the street address where the controller is used.
   - **City, State, and ZIP code**: Enter the postal information for the address.

3. Enter the account information to create an account with BlueSpray.

   - **Name**: Enter the name to be used for the account.
   - **Email**: Enter the email address to be used for the account.
   - **Password**: Enter a password for the account.

   ---

   **Note**
   If you have already created an account, click Use existing account and enter your email address and password.

   ---

4. Click Submit.

# 7   Using the BlueSpray controller

After your BlueSpray controller is set up, it should run automatically. You can always access the BlueSpray User Interface for manual operation and configuration tweaks.

## 7.1   Watering manually

If you want to water a zone outside of a schedule, you can do it manually

### 7.1.1 To water a zone manually

1. Open the BlueSpray user interface.

2. Click the zone icon  on the lawn.

3. Enter the number of minutes or seconds to water.

4. Click **OK** button.

### 7.1.2 To water more than 1 zone manually

1. Open the BlueSpray user interface.

2. Click the  button on the Status Panel.

   - **Start in**: Start this run in number of minutes from now.
   - **All zones for**: Short cut to specify number of minutes to run for each zone.
   - **Run a program**: You can select to run a program instead.

## 7.2 Changing the lawn picture settings

The lawn settings determine how the lawn view looks in the user interface. You can change the picture and the text color. You can also use the picture of your actual lawn from Google Map.

### 7.2.1 To use the default picture

1. On the Lawn View page, click the  button on the upper left side of the lawn view.

2. For Lawn image preference, select Use default lawn image.

3. For text color, select a color from the list.

4. Click **OK** button.

### 7.2.2 To use a custom picture

1. On the Lawn View page, click the  button on the upper left side of the lawn view.

2. For Lawn image preference, select Use my own lawn image.

3. Under Image URL, specify the address (URL) where the picture is hosted on the Internet.

4. For text color, select a color from the list.

5. Click **OK** button.

**7.2.3   To use Google Map**

1. On the Lawn View page, click the [image] button on the upper left side of the lawn view.

2. For Lawn image preference, select Use Google Map.

3. For Address, enter the physical address of the property.

4. For text color, select a color from the list.

5. Click **OK** button.

---

☞ **Tip**
Use Google Map tilt, zoom tool to obtain the best satellite image of your property. You might also want to try different angle views to see what works best for you. When you're satisfied with the image, click the **Save** button.

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✎ **Note**

- The custom picture and Google Map features are enabled only when the controller is online.

- Google Map image quality depends on Google Map satellite images available for your area or property.

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# 8   Troubleshooting

Use the information in this section to resolve common issues.

1. Controller does not water

   - Your controller might be in Standby or Delay mode. Check the power icon on Status Panel. It must be [icon]. If it's [icon], clicking on the icon will turn it to On. If it's [icon], it may be delayed by Rain sensor or manual delay. When the delay period expires, the controller will resume watering.
   - If your system has a master valve, select a **Master Valve** for Master Valve in "Operations Settings" Section 6.6.1.

2. Can't connect to the BlueSpray controller

   - If you think you might have entered incorrect network information during BlueSpray setup, you can reset the controller to the default network settings.

3. Forgot your controller password

   - If you happen to forget the security Login Name or Password, you will have to reset the controller to the default network settings.

# 9   Regulatory Information

This product contains FCC ID: 2AB5EGS-OOLITE

## 10 Warranty Statement

Avidz LLC warrants its products to be free from defects under normal use and service for a period of 18 months from the date of purchase or 12 months from the date of installation, whichever period will be shorter, unless otherwise agreed in writing or provided for in a written product.

This warranty does not apply to products that are the subject of negligence, accident, or any improper operation, installation, or use.

You may contact us at support@avidz.net to make a claim. Failure to provide such notice constitutes a waiver of the warranty. The product must be sent back to Avidz LLC to determine the extend of the defect or damage. If Avidz LLC receives timely notification and if the products are proved to have a warranted defect, Avidz LLC will, at its own discretion, expense and within a reasonable period of time, either repair, correct or fix the product, or replace the defective product.

## 11 Support

Contract BlueSpray if you have any issues with your BlueSpray controller.

Email support is available at: support@bluespray.net.

We will respond to your questions within 24 hours. We do our best to resolve your issues in a timely manner. You can also browse our discussion forum at:

http://www.bluespray.net/forums