Stopping Irrigation for Rain Events

If an irrigation system that you manage is running during a rain storm, your customer might be criticized for wasting water by conservation-minded citizens, and in areas where water regulations and restrictions are in effect, your customer might also receive a hefty fine.

To help your customers avoid the disapproval of their neighbors and avoid getting a ticket from the water police, make sure that the irrigation controller is configured to stop watering when it's raining.

Baseline irrigation controllers offer multiple ways to stop or pause irrigation during rain events.

Set a Rain Delay

If you know when rain is expected, you can set up a rain delay that will prevent the controller from watering while the delay is active. The rain delay stops all programs and sets the status of all watering events to "Done."

BaseStation 1000 Irrigation Controller

On the BaseStation 1000 irrigation controller, press the **RUN** button, and then press the **BACK** button. The Status Report menu displays. Press the ⇧ or ⇩ button to highlight **Rain Delay**, and then press the **OK** button. The Rain Delay screen displays. When no rain delay is set, the Days to Delay field displays Off.

Note: In the BaseStation 1000 controller, 1 day is from the time you set up the rain delay until midnight on that same day. The next day begins at 12:01am and ends at midnight.

BaseStation 3200 Irrigation Controller

On the BaseStation 3200 irrigation controller, turn the dial to the **Start, Stop, Pause** position, and then press the **Next** button to highlight the **Rain Delay Days** option.

Note: The rain delay begins as soon as the command is submitted and ends at 11:59pm on the last scheduled day.

BaseManager

You can also use BaseManager set a rain delay on the controller.

1. Click the **Menu** icon in the upper-left corner of the BaseManager page, and then click **Rain Delay**. The Rain Delay settings pane displays.

2. Perform one of the following:

   ▪ To set a rain delay, determine whether the rain delay should be applied only on the current controller, on all controllers at the site, or on all controllers assigned to the company. Go to the appropriate row in the settings pane. In the **Days** field, type the number of days that you want the delay to last, and then click the **Submit** ↵ arrow.

   The rain delay begins as soon as the controller receives the command from BaseManager. A message displays in the Rain Delay settings pane indicating when the rain delay is scheduled to end.

   ▪ To cancel a rain delay, go to the row where a number displays in the **Days** field. Click **Cancel** X.

3. Close the menu by clicking the < arrow in the upper-left corner.

Connect a Rain Switch to an Event Decoder

When an event decoder is used in conjunction with a rain switch, you'll have a lot of flexibility over how your BaseStation irrigation controller responds to rain events.

Connect a rain switch to an event decoder and then connect the event decoder to the two-wire path. After you have assigned the event decoder in the controller, you can configure the settings in the controller.

BaseStation 1000 Irrigation Controller

1. Press the **Program Setup** button. The Program Setup menu displays.

2. If the program that you want to modify displays in the upper-left corner of the screen, continue to step 3. Otherwise, press the **PRG** button until the program that you want to modify displays in the upper-left corner of the screen.

    Note: To move backwards in the list of programs, press and hold the PRG button, and then press the **–** button repeatedly.

3. Press the ⇩ button to highlight the **Setup Prg. Stop** option, and then press the **OK** button. The Setup Prg. Stop screen displays.

    Note: If you want the controller to display a message whenever a program stops, refer to Enabling Start, Pause, and Stop Messages in the User Manual.

4. Press the ⇩ button to highlight the **Event Switch Stop** condition, and then press the **OK** button. A checkmark displays next to the Event Switch Stop condition.

    a. Notice that the serial number for one of your event switches is highlighted in the **Event Switch** field. If this is the serial number for the event switch installed in the area that this program will water, no change is required. If you need to assign a different event switch to the program, press the **+** or **–** button to select a different serial number.

    b. Press the ⇩ button to highlight the **Trigger** field, and then press the **+** or **–** button to alternate between "When Open" and "When Closed" to indicate which switch condition will cause your program to stop.

    Example: You have a rain switch that uses hydroscopic discs to detect rain and halt watering. In this example, you would set the program stop condition for the switch to "When Open."

5. Press the ⇩ button to highlight the **Stop** field, and then press the **+** or **–** button to alternate between "At End of Cycle" and "Immediately." Select one of the options to indicate when the switch condition will cause your program to stop.

BaseStation 3200 Irrigation Controller

1. Turn the dial to the **Start, Stop, Pause** position.

2. Press the **Next** or **Previous** button to highlight the **Event biCoders Setup** option.

3. Press the **Enter** button. The Event biCoders screen displays.

4. In the **Program** column, press the **+** button to highlight the program that you want to set up the conditions for.

> **Note**: Select All in the Program column to have the pause condition affect the entire controller.

5. Press the **Next** button to move to the **Event biCoders** column. Press the **+** button to highlight the serial number of the event biCoder that you want to set up the conditions for.

6. Press the **Next** button to move to the **Enable** column of the **Start** field. Press the **+** button to toggle the setting between the following values:

   ▪ **Off** – Tells the controller to ignore this condition

   ▪ **Equals** – Start the program when the condition of the switch matches the setting in the Value column

   Note: While the controller allows you to enable all of the start, stop, pause functions for a single program, it is best to use just one function per program.

7. Press the **Next** button to move to the **Value** column of the **Start** field. Press the **+** button to toggle the setting between Open and Closed.

8. Press the **Next** button to move to the **Enable** column of the **Stop** field. Press the **+** button to toggle the setting between Off and Equals.

9. Press the **Next** button to move to the **Value** column of the **Stop** field. Press the **+** button to toggle the setting between Open and Closed.

10. Press the **Next** button to move to the **Enable** column of the **Pause** field. Press the **+** button to toggle the setting between Off and Equals.

11. Press the **Next** button to move to the **Value** column of the **Pause** field. Press the **+** button to toggle the setting between Open and Closed.

12. Press the **Next** button to move to the **Pause Time** field. Press the **+** or **–** button to change the value in the field.

13. When you have finished making changes, turn the dial to the **RUN** position.

    When the event switch detects a start, stop, or pause condition, it causes the controller to respond according to the settings and the status in the Last Pause field on the Detail Status screen is updated.

Connect a Rain Switch to the Screw Terminals

On the controller board inside a BaseStation 1000 or BaseStation 3200 irrigation controller enclosure there are a number of labeled screw terminals. The exact configuration of these terminals varies depending on whether the controller is set up for two-wire or conventional wire. You can connect a variety of devices to these terminals.

A connected device is read each minute, but the device must be read as open two times in a row before action is taken. This means that it could take two minutes for the controller to respond after a device is read.

Two-wire Controllers

When a BaseStation 1000 or BaseStation 3200 controller is shipped without a 5200R-Series Powered biCoder, the controller board inside the enclosure has eight screw terminals. Four of these screw terminals are for attaching two-wire, and the other four are labeled Flow, Pause, Rain, and Com(mon).

Location of the screw terminals on a controller in an X cabinet
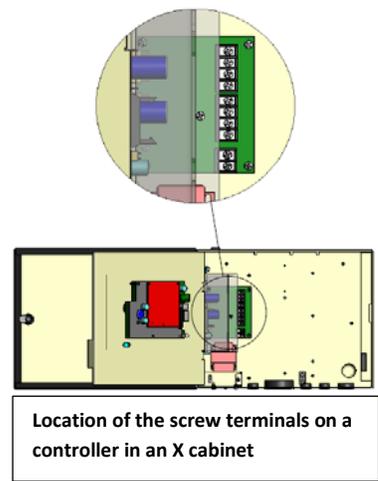
You can connect a compatible device to either the Pause terminals or the Rain terminals to manage how the irrigation controller responds to rain events.

Pause Switch Device

- A pause switch connected to the Pause terminals influences **all programs**.

- When the pause switch contacts open, all water is **paused** for four hours. The timer is starts over at four hours each minute that the switch contacts are open.

- The controller displays a message about the paused condition. Watering will resume where it left off when the switch contacts are closed, and the four-hour timeout is complete.

Rain Switch Device

- A rain switch connected to the Rain terminals influences **all programs**.

- When the rain switch contacts open, all watering is **stopped**, and all programs and zones are set to "Done." All programs will be immediately stopped if they are started. No programs can run while the rain switch contacts are open.

- The controller displays a message about the rain switch condition. When the rain switch contacts close, the message is removed automatically so that watering can resume (programs that were stopped are still stopped).

Conventional Wire Controllers

When a 5200R-Series Powered biCoder is directly connected to the controller board, a rain switch connected to the screw terminals behaves as described above. However, when a 5200R-Series Powered biCoder is in its own enclosure or is mounted in an enclosure as a supplemental board, the rain switch terminals are disabled.