

The
Intelligent
Use of Water™



RAIN  BIRD®

Simple-To-Set Smart Controller Installation Guide

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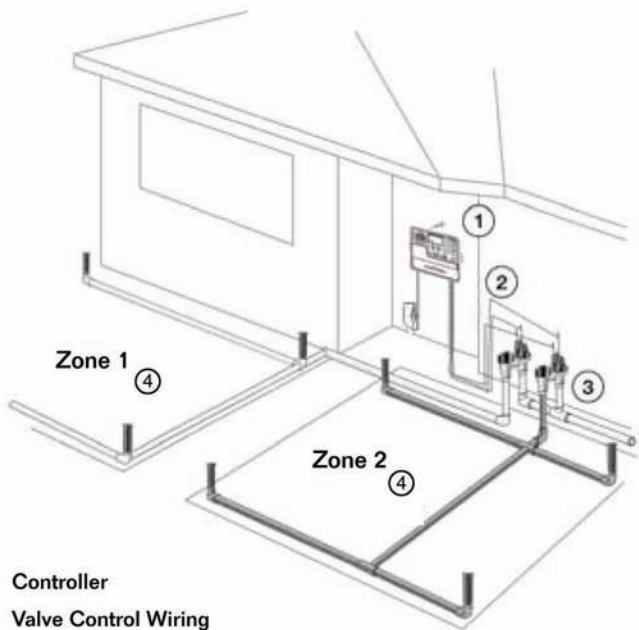
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1 What is an Automatic Sprinkler System?







- ① Controller
- ② Valve Control Wiring
- ③ Valves
- ④ Sprinkler Zone

(Number of Zones vary by Controller Model)






The SST Controller can be mounted INDOOR or OUTDOOR.

Supplies not included with controller

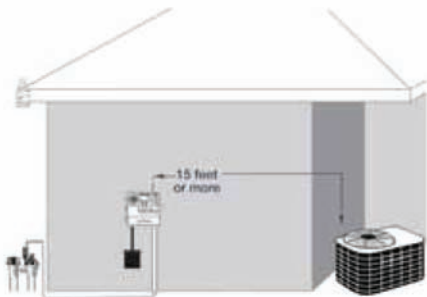
<ul style="list-style-type: none">• Valve Control wire; for new systems 18 gauge color coded, multi-strand, direct-burial wire for runs less than 800 feet; 14 gauge for runs greater than 800 feet	
<ul style="list-style-type: none">• Water tight splice connectors (gel caps)	
<ul style="list-style-type: none">• Drywall anchors; optional	
<ul style="list-style-type: none">• 3/4" or 1" PVC electrical conduit; optional	

Tools you will need to install timer

<ul style="list-style-type: none">• Phillips screwdriver	
<ul style="list-style-type: none">• Wire strippers	
<ul style="list-style-type: none">• Hammer	

3 Mounting your Controller to the wall

Locate the weather sensor within 25 ft. of the controller. If this is not possible, you will need to purchase additional wire and water tight splice connectors to complete the installation.

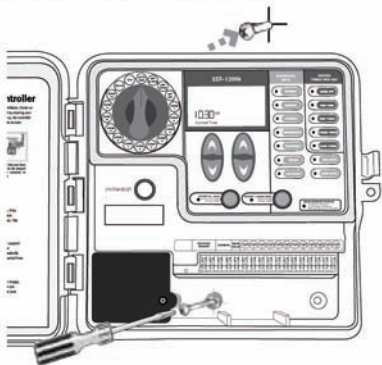


Choosing Controller location

- Locate a spot for your Controller.
- Locate Controller so that it is convenient to run control wires to valves and weather sensor.
- If using attached power cord, locate controller within 5 feet of an AC power outlet.
- Locate Controller at least 15 feet away from major appliances and air conditioners.

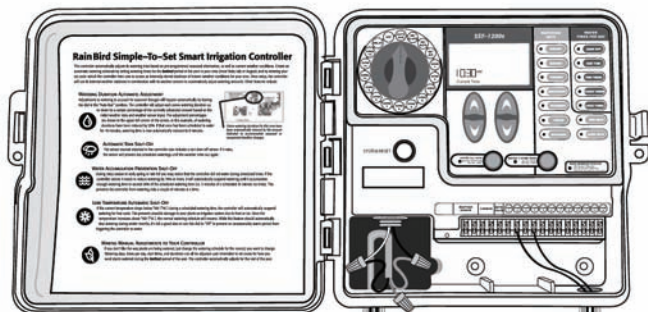
Mounting Controller to wall

- ① Drive a screw into the wall, leaving 1/8" gap between head and wall. (May also use supplied wall anchors if necessary)
- ② Hang Controller on exposed screw.
- ③ Remove access cover at bottom of Controller and drive a screw through the center hole into wall.



4 Wiring with Conduit

Below is a typical outdoor hard wired installation using electrical conduit. Check with your local building department or a licensed electrical contractor for assistance.



Power connection using included power cord

Plug into any Outdoor Electrical Outlet



110 VAC power wire

J-Box

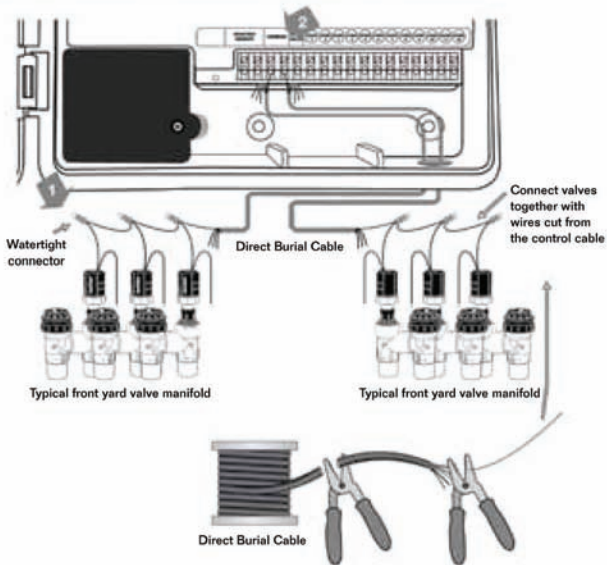
Controller wire in conduit

STOP

DO NOT plug in until you have completed and checked all wiring connections.

Common Wire Connection

- 1 Connect one wire from each valve together with watertight splice connectors; either valve wire will work.
- 2 Connect all wires to common terminals on controller.



The SST Series controllers can be used with most hydro-indexing valves. Please contact the valve manufacturer for more information. **DO NOT** connect more than one valve wire to each terminal. Wiring more than one valve to each terminal will damage the controller. Also, if you are using more than one controller, do not share "common" wires between them.

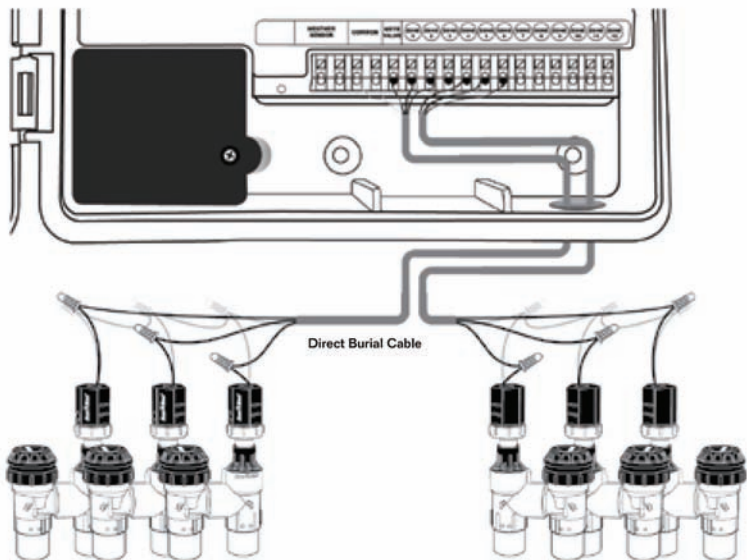
USER TIP: Use watertight splice connectors to prevent corrosion and avoid short circuits.

5b Connecting the Valve Wires: Control

Control Wire Connection

- 1 Connect the second wire on each valve to a wire on the control cable; connect only one valve to each wire.
- 2 Connect the other end of the wire to the desired zone on the controller (1,2,3, etc.).

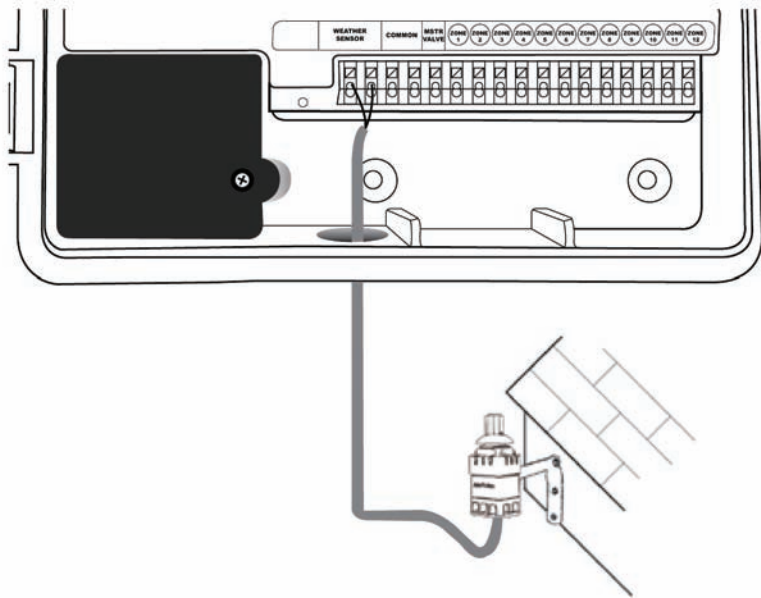
(Each numbered zone corresponds to the same number zone when programming the controller)



6

Connecting Weather Sensor

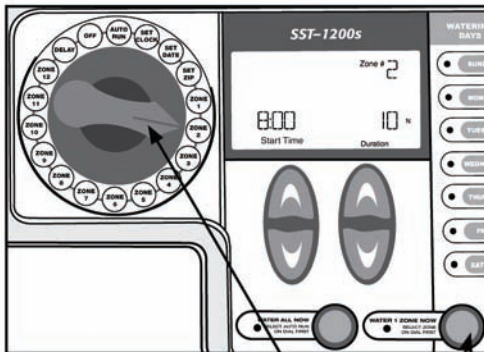
- 1 Connect both Weather Sensor wires to the terminals marked WEATHER SENSOR.



The weather sensor includes a 25' long wire for connecting to the controller. If you require more wire, you can splice additional wire up to 200' in length. Use 18-20 AWG solid wire that is appropriate for outdoor use.

To make sure each system is functioning properly, cycle through each ZONE using the WATER 1 ZONE NOW feature:

- ① Turn the dial to the ZONE you wish to test and press WATER 1 ZONE NOW.
- ② The ZONE will start watering for a default 10 minutes.
- ③ Use the Up/Down arrows to adjust the time.
- ④ To stop watering before the time is up, turn dial Auto Run.
- ⑤ Repeat on next ZONE until all have been checked.



Set dial to
desired ZONE
and press
WATER 1
ZONE NOW

- ① Connect the color-coded “hot” wire from the Master Valve or Pump Start Relay to the Controller terminal marked MASTER (MSTR) VALVE.
- ② Connect the common wire from the Master Valve or Pump Start Relay to the common wire coming from the station valves. This wire connects to the Controller terminal marked COMMON.
- ③ To avoid possible pump damage, connect a short “jumper” wire from any unused station terminal(s) to the nearest terminal screw in use. For example, if you have a 6-station controller with only 4 stations in use, route stations 5–6 to the nearest active station (in this case, 4).

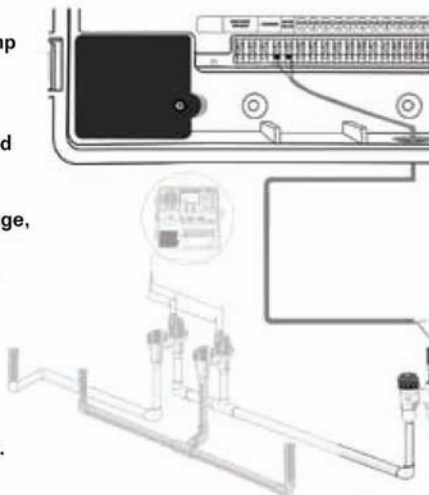
STOP

SST Controllers allow a master valve or pump start relay to operate whenever a valve is operating (pumps are used in some places to draw water from a well or other source).

If you are activating a pump from the Controller, you must also install a Pump Control Relay.



This example shows what a Master Valve connection would look like. A Pump Start Relay would connect differently at the water source.



Water Source



USER TIP: Make sure that the total draw of the Master Valve or Pump Start Relay plus the draw of the valve does not exceed 0.650 Amps at 24 VAC, 60 Hz.

This Controller does not provide the main power for a pump.