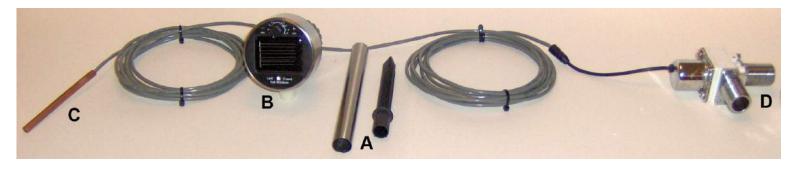
# WATERGREAT LLC MODEL SR-1 SERIES INSTALLATION INSTRUCTIONS



# WaterGreat SR-1<sup>™</sup> Installation





- 1) Attach stake and stainless steel tube [A] to the control assembly [B] and place in the ground where the sun shines at least 5 hours a day. Turn knob to below "1" for no watering (as shown in picture below left) until the unit charges in the sun (up to 24 hours).
- 2) Place the slender sensor rod **[C]** in an area watered by the system, about 5 inches from a dripper if using drip irrigation. Push the rod into the soil, red dot UP at a slight angle, so that lower tip is about 1 1/2 inches from the surface. It is best to place the sensor in an area that dries the quickest. GIVE THE AREA A GOOD WATERING AFTER INSERTION.





- 3) Connect the solenoid valve **[D]** to a spigot or hose as shown. Connect the outlet to the drip irrigation system or other watering system, such as a sprinkler. Use high quality hose if kept pressurized. If desired, the valve can be directly installed into PVC pipe or plumbing as well. Note the IN and OUT as shown by the provided garden hose fittings already installed. If sand or debris is present in the water, place a filter in-line prior to the valve.
- 4) The next day make a note of the number of blinks on the controller. This gives you the current soil moisture reading. Adjust the knob to the same number as the blinks to give good watering.
- 5) Periodically check the soil and plants. Adjust the knob setting up or down as desired for more or less watering. For example, lettuce would require wetter soil, tomatoes are deep rooted and thrive on lower moisture levels.

The controller and system is now <u>completely</u> <u>automatic.</u> In the morning it waters if it needs it for eight minutes. Then every four hours it checks it again and waters if needed. This is the <u>world's easiest to use watering system.</u>

Need a shorter or longer watering time? Need a longer cable from the valve to the controller? **SEE ADVANCED INSTRUCTIONS.** 

### What is the basic operation of the system?

The solar panel charges the Lithium Ion battery, and sends a signal to the control module to permit daytime watering. At daybreak and then every 4 hours, during daylight hours, two additional soil moisture level measurements are made. That level is compared with the user set 'desired' watering level. If the desired level is higher than the measured (current) moisture level, a watering cycle begins, turning on the valve for eight minutes. This amount of water prevents over-watering or water dripping through before it can be absorbed. It is possible to increase or decrease this amount of water if needed using the switches on the underside of the assembly. The user adjusts the desired moisture level by turning the knob at the top of the control assembly to raise or lower the desired moisture setting. This is just the same as turning up or down the volume on a stereo. Every twenty seconds, the LED (Light Emitting Diode) will blink and indicates the 'Current' or measured moisture level. At any time a watering cycle is initiated when the knob is turned wetter than the current reading. Watering is stopped manually by turning the knob "down." All the way down stops all watering. At night (1 blink) or if the battery is low (2 blinks) the LED flashes briefly once per minute and the controller goes into a special low power mode.





### SR-1™by WaterGreat™ LLC Limited Two Year Warranty

WaterGreat LLC warrants to its customers that its WaterGreat SR series products will be free from defects in materials and workmanship for a period of two years from the date of purchase. We will replace, free of charge, the defective part or parts found to be defective under normal use and service for a period of up to two years after purchase (proof of purchase required). We reserve the right to inspect the defective part prior to replacement. WaterGreat LLC will not be responsible for consequential or incidental cost or damage caused by the product failure. WaterGreat LLC liability under this warranty is limited solely to the replacement or repair of defective parts. To exercise your warranty, return the unit to WaterGreat LLC with a copy of the sales receipt. YOU ARE IMPORTANT TO US. We will work with you to provide reduced pricing for any units under five years.

# WaterGreat SR-1<sup>™</sup> Advanced Instructions

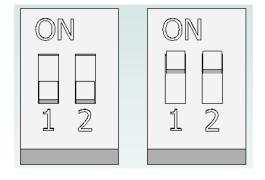
This document covers Setting the Watering Time, Connecting Wiring, and some basic troubleshooting guides. Contact <a href="mailto:support@WaterGreat.com">support@WaterGreat.com</a> if you have inquiries or suggestions for clarifying these procedures.

### **Setting the Watering Time**

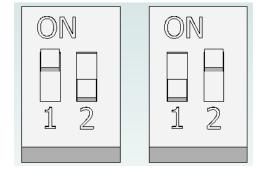


8 MINUTE WATERING1 MINUTE 3MINUTE

WATERING



**8** MINUTE **20** MINUTE WATERING



- 1) Twist the control head counter clockwise until it hits the stop (a small amount), then separate the control head from the black support housing. The unit will separate showing the switches and terminal strip on the left.
- 2) Using a fingernail, a pen tip or a small screwdriver select the switches on the red switch panel to the watering time you wish 8 minutes, 20 minutes or one minute. As shown in the pictures and captions: Switch 1 ON and Switch 2 ON is 3 minutes; Switch 1 ON and Switch 2 OFF is 8 minutes; Switch 2 ON and Switch 1 OFF provides 20 minutes of watering; both switches OFF provides one minute of watering. Note: this is only the watering time that occurs when the SET point (by the knob) is greater than the READING. The reading is shown by the blinking LED that repeats the last measured soil moisture every 20 seconds.

Normally 3 minutes works well. 20 minutes is used when a deep watering is desired, or with the 48 plant extender kit with the ½ gallon per hour drippers or similar. The one minute setting usually used when the three minutes it too much water, such as watering small potted plants.

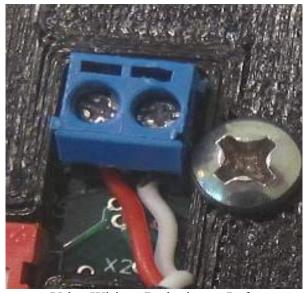
# Removing or Lengthening the Wiring to the Valve

Summary: Consumers will occasionally wish to re-route their valve wiring, or extend it if the 9 ½ feet length is not adequate. Simple take care in removing the wiring, and pay particular attention to keeping the wiring as shown: Red wire (or attached wire tied to the red wire) on the LEFT and the White wire on the right.

If by accident you reverse this wiring you will not harm the system, but the 'ON' and the 'OFF function of the valve will be reversed. If turning the moisture knob all of the way down turns the valve 'ON' you have reversed the wires.

Notice: This terminal strip uses a small opening and screwdriver. Take care in making sure you re-install the wiring in the proper hole, and when you tighten the wire back make sure that you have good insertion into the hole. Mistakenly shorting the two wires together, such as bare wires of the white touching the red during valve operation will short out the output transistors in the controller, and it will fail. Shorting the wiring is not covered by warranty, so be careful! Always turn the knob all of the way down before working on the wiring.

To extend the wiring, just pay attention to the color coding and carefully remove the existing cable from the drilled hole in the support housing. Purchase additional wiring (at least 22 gauge, preferably larger. Then use an outdoor rated splice to attach the existing cable to your new cable. If needed, you may enlarge the hole in the support housing to fit the new wire. It is not recommended to enlarge the hole much as it may crack the support housing. Most hardware stores sell 22/2 stranded CM plenum type cable that will fit into the existing support housing hole. Do not extend more than 20 feet.



Valve Wiring -Red wire on Left

SR-1™ by WaterGreat™ LLC Support

We at WaterGreat LLC want you to be our customer for life. We will only sell you the same quality product that has proven itself to us as fellow gardeners. As part of this customer relationship, we promise to provide friendly prompt customer support by email, and we'll do our best to answer back within one business day or sooner. Please contact <a href="mailto:support@watergreat.com">support@watergreat.com</a> for any questions. We also <a href="mailto:love">love</a> to hear stories of success and enjoy pictures of happy gardens with this system.

# **Error codes and Conditions:**

LED indication	Condition		
One brief blink per minute	Low light condition – normal		
Two brief blinks per minute	Low battery – move into sun more or contact support for battery replacement		
Three brief blinks per minute	Hardware failure – contact Support		
Continuous blinking	Normal first 15 minutes in the morning – then indicating a weak battery if persists. Move into a sunnier area. If problem persists after two days, contact support for a battery replacement.		
Poor water flow	Check screen at input to the valve. If clogged, remove stainless housing screws and reverse flush and re-install.		
Very low moisture readings (few or no blinks)	Check that sensor is close to the irrigation source, and that the soil appears moist. Reposition the sensor to firm soil near the water source or in the sprinkler pattern.		