

# SLW1 Weather Station Installation and Operating Instructions

#### SLW1 On-Site Weather Station Installation

 Decide on a good mounting location for your SLW1 weather station. The mounting location should be one that is not affected by a heat source such as an air conditioner, hot roof, attic vent, etc. Mount in an area with unobstructed airflow. Mounting is acceptable in both direct sunlight and shade; however, the location must



have open access to rainfall (cannot be covered by any overhead obstructions such as trees, roofs, etc.). Finally, the SLW1 weather station must be installed in a

vertical position. The SLW1 weather station is supplied with 35 feet of 2 conductor, 20 AWG cable with UV stabilized jacket. The SLW1 cable may be extended using any cable meeting the above specifications. If the cable is routed underground, a suitable direct burial cable must be used. Wire splices must be water-tight.

Note: Maximum controller to weather station distance is 200 feet. For installations requiring greater distance, use the SLW15 or SLW10 weather stations.

 Option A: Surface Mount Attach mounting bracket to any flat siding or wood surface with the included screws. For other surfaces such as brick, use an appropriate anchor to secure the bracket.

> Option B: Gutter Mount Place the mounting bracket over an outside edge of the gutter, and secure with the included wing screw. For gutters with debris screens installed, use Option A to secure the mounting bracket to the gutter.





Option A: Surface Mount



**Option B: Gutter Mount** 

- Tighten both wing nuts of the extension arm, and make sure the SLW1 weather station is fixed in a vertical position.
- Route the cable back to ( the controller making sure the cable is

properly secured. Do not allow the cable any movement due to wind and avoid routing through areas where it could be snagged or damaged. Take care not to puncture or pinch the cable with mounting hardware. Cable clamps are recommended.

# Connect the SLW1 Weather Station to the SmartLine controller

 Install the SLHUB1 communication hub inside the SmartLine controller and secure with the supplied screw. Be careful not to bend the connecting pins.

Note: The SLHUB1 is the only hub that will work with the SLW1. Do NOT use other hub models.



 Route the communications cable to the SLHUB1 as shown. Cut the cable to length (at the controller end) and strip the outer jacket to expose the RED and BLACK wires. Strip <sup>1</sup>/<sub>4</sub>" of the

wires to expose the copper conductors.





Communication cable routing guides



**SMART**LINE

# **SMART**LINE

- Connect the RED and BLACK wires to the SLHUB1 communication hub as shown:
  - RED wire to Left terminal
  - BLACK wire to Right terminal
- 4. Refer to the SmartLine Owner's Manual for complete controller setup and programming instructions, prior to activating the SLW1.
- 5. Activate the SLW1 On-Site Weather Station by pressing the rain sensor stem on the top of the SLW1 for 15 seconds.
- Return to the SmartLine controller and verify the antenna icon appears on the bottom line of the LCD display. The flashing antenna icon indicates communication has been established in the past 5







Antenna Icon

minutes. A non-flashing antenna icon indicates communication has occurred in the past 5 days. If no antenna icon is present, repeat the activation process above.

Note: In the event communication is lost between the SLW1 weather station and SmartLine controller, a FAULT message will be displayed. Consult the SmartLine Owner's Manual for instructions on how to read fault messages. After 5 days of no communication with the SLW1, the SmartLine controller will automatically revert to Standard mode operation.

- 7. The SLHUB1 will initiate communications with the SLW1 periodically during each day to retrieve weather data. Every night at midnight, the SmartLine controller will log daily high and low temperatures. Consult the SmartLine Owner's Manual for instructions on how to view the SLW1 5 day temperature history.
- 8. On the SmartLine control panel, press the MODE button to select Auto Adjust mode. If the Auto Adjust LED flashes RED and reverts to Standard mode, hold down the MODE button and read the scrolling message indicating actions needed to enter Auto Adjust mode.

### **Rain/Freeze Sensing Functions**

The SLW1 weather station provides rain and freeze sensing to prevent watering during periods of rain and freezing weather.

The rain override will stop watering after the selected amount of rain is received (factory setting is <sup>1</sup>/<sub>8</sub> inch). Available settings are <sup>1</sup>/<sub>8</sub> inch to <sup>3</sup>/<sub>4</sub> inch (3 to 19 mm) Using the lock tab, select the desired setting.



Note: During rain shutdown, high/low temperatures of 60/60 are reported to the SmartLine controller and Auto Adjust deficits and run times will reset to zero.

The SLW1 weather station freeze sensing function will prevent watering when the outside temperature drops below 37 degrees Fahrenheit (1.5 degrees Celsius). Watering can resume when the temperature increases above 37 degrees F (1.5 degrees Celsius).

The Sensor LED in the Active position will display RED during rain or freeze periods. Additionally, after a rain event, the SmartLine controller will continue to pause watering for 48 hours after the rain sensor has disengaged, in order to prevent over watering. During the 48-hour extended rain delay, the Active Sensor LED is ORANGE. In the event you choose to end the 48-hour extended rain delay, press the Sensor button on the SmartLine control panel twice and the Sensor LED will return to a GREEN color and permit watering. SmartLine controllers with firmware 3.05 and higher have a selectable SLW DELAY feature in Advanced Functions that allows the factory default dry out period of 48 hours, to be set for 0 to 99, hours if desired for local conditions.

#### Maintenance

The SLW1 weather station is designed for years of maintenance-free operation. The SLW1 does not utilize any onboard power source. Operational power is provided from the controller.

The rain sensor Assembly, part # SLW1DISKASSY, is replaceable. To remove the module, turn the rain sensor housing so the rainfall set tab is disengaged and lift out the module.

The mounting arm assembly, part # SLW10BSA, is replaceable.