SmartLine
The Smart Irrigation Controller

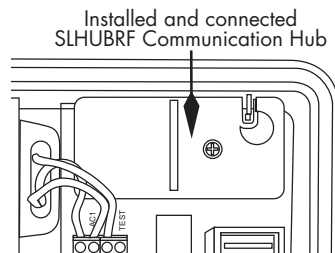# SLW5 Wireless Weather Station Installation Instructions

The SLW5 is a wireless weather station operating on a 900 MHz bi-directional frequency. Maximum range is 1500 feet (457m) Line of Sight (LOS). The SLW5 is operable with all SmartLine® models and firmware versions. The SLW5 and SLHUB-RF-5 are "pre-paired" or synched at the factory for your convenience.

1. Install the SLHUB-RF-5.

The SLHUB-RF-5 is the wireless transceiver that communicates with the SLW5. The SLHUB-RF-5 is supplied with your SLW5. To install in your SmartLine® controller, open the control panel on the SL1600 or the large front panel of the SL4800. On the SL800, remove and discard the hub cover panel from the back of the SL800 housing.
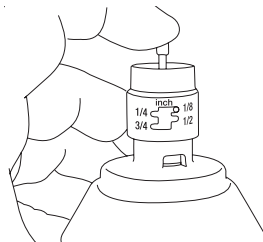
Insert the SLHUB-RF-5 into the mating pin connector holes. Be careful not to bend the connecting pins. Secure the SLHUB-RF-5 to the housing with the supplied flathead machine screw. The RF antenna will hang down inside the SL1600 or SL4800 housing. On the SL800, allow the RF antenna to hang underneath the controller.

Installed and connected
SLHUBRF Communication Hub

Make sure AC power is supplied to the SmartLine® controller and then proceed to Step No. 2.

2. Initializing SLW5 weather station

a. Program auto adjust settings in controller.

b. While standing in front of controllers, press the rain switch on the top of the SLW5 for 15 seconds; then watch the LED which is visible through the openings in the cover at the bottom of the SLW5. You will see 4 blinks. All blinks should be Green. At this time, put the controller into Auto adjust mode on controller.

NOTE: If the controller fails to hold in auto adjust mode, press the auto adjust button and hold for instructions in display related to issue that failed to allow controller to be placed in auto adjust mode.

Note: The 4th (final blink) indicates the strength of the RF communication. If the 4th blink is Red, you do not have a satisfactory RF communication. Move the SLW5 to a different mounting location and repeat the diagnostic procedure.

Note: The first diagnostic blink indicates the strength of the 2 AAA lithium batteries in the SLW5. A Red signal would indicate a need to replace the batteries. Capable life for the lithium batteries is 10 years. If the 2nd and 3rd blinks are Red, replacement of the weather station is required.
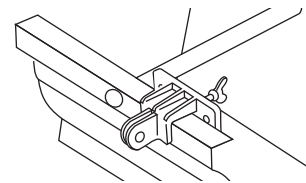
Note: A separate SLW5 weather station is required for each SmartLine® controller that you are installing.

Conduct communication range and choose location

Press the rain sensor wick for 15 seconds and go to the SmartLine® controller. If you have RF communication, the antenna icon on the SmartLine® display should be blinking. Note: The blinking will continue for 5 minutes after any communication from the SLW5. After 5 minutes, the antenna icon will remain static until the next communication. Press the Mode button and place the SmartLine® into the Auto Adjust position. If the installation is successful, you will have a Green light at Auto Adjust. If you see a message that "weather data is needed" re-check the installation and/or the required data input into the controller. Required data is zip code/latitude and correct time and date. In addition, the operating panel on and SL1600 or SL4800 must be closed so that AC is present. You will get a communication error if the panel is showing NO AC.
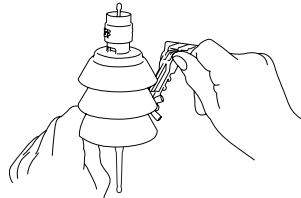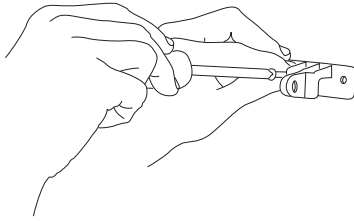
3. Mounting the SLW5

a. Decide on a good mounting location for your SLW5 wireless weather station. The mounting location should be one that is not affected by a heat source such as an air conditioner, hot roof, hot asphalt, etc. Mount in an area with unobstructed airflow. Mounting is preferred in direct sunlight with good air

Attach bracket to gutter.

flow. Additionally, the location must have open access to rainfall (cannot be covered by any overhead obstruction such as trees, roofs, etc.). Mount the SLW5 as close as possible to the controller. Obstacles such as earth, hills, walls or other structures will reduce the maximum operating range of the SLW5. Use the diagnostic LED in the SLW5 to verify communication and to check operating range at a specific location. Extreme conditions may prevent wireless communication; in this circumstance, use the SLW1 wired weather station.
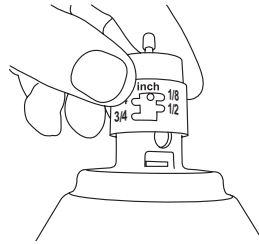
Weathermatic™
Water Conserving Innovation

b. Attach mounting bracket to a smooth surface using the two mounting screws (supplied) or attach to gutter using the wing nut provided. You may choose to remove the mounting bracket from the bracket arm for easier installation. Make sure the SLW5 is fixed in a vertical position. Tighten all wing nuts to make sure unit is held vertical.

Rain/Freeze Sensing Function

The SLW5 wireless weather station provides rain and freeze sensing functions to prevent watering during periods of rain and freezing weather. The rain override will pause watering after a minimum of 1/8th inch of rainfall is received, based on the 1/8th inch factory rain sensor setting. Settings can be changed incrementally up to 3/4" (19mm). The SLW5 wireless weather station freeze sensing function will prevent watering when the outside temperature drops below 37 degrees Fahrenheit (1.5 degrees Celsius) and allow watering to resume when the temperature increases above 37 degrees F (1.5 degrees Celsius). The Sensor LED 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 sensor LED is ORANGE. In the event you choose to end the 48-hour extended rain delay, press the Sensor button twice and the sensor will return to a GREEN color and permit watering. If the firmware version in your SmartLine® controller has an SLW DLY function, you can adjust the factory default setting of 48 hours delay to a period of 0–99 hours.

Attach sensor in vertical position.

Troubleshooting and Maintenance

They have a factory installed security code that will enable communication only between those two units. Therefore if you ever need replace an SLW5 always install the mating SLHUB-RF-5 that ships with the unit. After replacing both components, you should reactivate the SLW5 using step 5 above to assure communication.
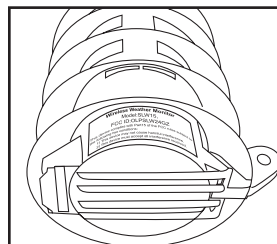
The SLW5 wireless weather station is designed for years of maintenance free operation. You will need to change the two AAA lithium batteries after approximately 10 years of operation. See instructions under Changing Lithium Batteries.

Changing Lithium Batteries

To change the SLW5 wireless weather station batteries:

• Loosen the bottom cover screws on the SLW5 and rotate the cover in the keyholes and remove the cover.

• Replace the existing batteries with two (2) new AAA lithium batteries.

• Reactivate the SLW5 wireless weather station. See Step 5, Activate Auto Adjust Mode, under Complete Installation and Operation Instructions.

• Return to the controller and push the MODE button to place the controller back in the Auto Adjust position. If the SLW5 wireless weather station and SmartLine® controller are in communication, the Auto Adjust GREEN LED will light and the antenna icon will appear in the display.

Verify the remaining voltage in the SLW5 battery at any time by turning the dial to Advanced Menu, Tests. Push Next to get Outputs, then push DOWN button to get SLW Battery. Push Next to read the remaining voltage. Note: The SLW Battery function is visible after you have established communication with the SLW5.
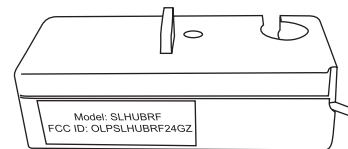
PGM SUN MON TUE WED THU FRI SAT
A
B
C
D ZONE START FAULT NO AC

12:00 PM

Battery icon

These devices comply with Part 15 of the FCC rules subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept all interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Model: SLW5
FCC ID: OLPSLW5900MZ

Model: SLHUBRF
FCC ID: OLPSLHUBRF24GZ

Model: SLHUB-RF5
FCC ID: OLPSLHUBRF900MZ

ADSLW5