

Which rain sensor setting do I use?

The sensor should interrupt the sprinkler system only after enough rain has fallen to satisfy the lawn's water requirement. Therefore, irrigation is possible during rainfall until a specific amount has been collected in the sensor. If the controller is set to irrigate the equivalent of 3/4" of rain on 1 day of the week (general recommendations), then the sensor should be set for 1/2" (conservative) to 3/4". Most sensors have settings for rainfall quantities of 1/8", 1/4", 1/2", 3/4" or 1". This adjustment is easily made on the sensor.

How long will the system stay off after it rains?

The variables of the weather will determine how fast the water dries out: wind, sunlight, temperature and humidity all play a role. Some models that operate by the wetting and drying of internal leather discs have an adjustment ring at their base to allow for more ventilation into the sensor (faster reset time) or less ventilation for a slower reset time. Use an adjustment for a slower reset time resulting in the system's staying off for at least 2 or 3 days. Dish type sensors reset after the dish has emptied from evaporation. Locating the sensor in a sunny area will result in faster drying and resetting than if installed in a shaded location.

Do I need a permit to install the rain sensor?

No permit is required to install a rain sensor on irrigation systems.

Will a rain sensor affect the schedule or change my controller settings?

No, the sensor acts as a switch to break the control circuit to the valves of the irrigation system when it has rained. This allows the controller to advance as scheduled, but keeps the valves from opening the water flow. Once the water has dried sufficiently, the switch closes again to allow for normal operation on the set schedule.

* Standards & Specifications for Turf & Landscape Irrigation Systems, Fifth Edition, Dec. 1, 2005 by The Florida Irrigation Society, Inc., 9340 56th St. N, Temple Terrace, FL 33617 www.fisstaterg.org.

NOTE: You may qualify for a 100% rebate from Manatee County Government for installing a rain sensor. Call (941)-792-8811 ext. 5327 for rebate information.

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Want more information? Contact the Manatee County Extension Service in Palmetto, FL at (941)-722-4524 or email: jtichenor@ifas.ufl.edu.

Pre-edited text courtesy of Dr. Dorota Hamon, Professor of Agricultural and Biological Engineering, University of Florida, Gainesville and the Palm Beach County Utilities Department. Revised 4/12/06

RAIN SENSORS

STOP SPRINKLING IN THE RAIN & START CUTTING YOUR WATER USE

What is a rain sensor?

A rain sensor is an irrigation shut-off device that prevents an automatic sprinkler system from operating during and after a rainfall. Rain sensors are available in several designs and are usually connected into the automatic irrigation system's wiring. The device overrides a scheduled irrigation after a specific amount of rainfall has occurred. When the collected rainwater has evaporated from the device, scheduled irrigations resume. Rain sensors are simple, economical and useful tools for preventing irrigation that would be wasteful. A common type of rain sensor is pictured below.



Rain Sensor Irrigation Shut-Off Device

What are the advantages of having a rain sensor?

- ◆ **Saves You Money** – Reduces your utility bill by stopping your irrigation system after adequate rainfall has been received.
- ◆ **Better for Your Lawn** – Excessive watering promotes thatch development, fungal diseases and weeds.
- ◆ **Conserves Water** – Rainfall is used to water your lawn instead of fresh drinking water.
- ◆ **Protects Community Resources** – Stretches our drinking water supply. Reduces pesticide and fertilizer runoff into our lakes, rivers and bays and into our underground water table.

Is a rain sensor required?



Yes. Florida is the only state with an overall rain sensor statute (FS373.62 effective May 1, 1991) which governs all new automatic sprinkler systems states: *...shall install a rain sensor device or switch which will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred.*

Important Installation Information

What is the ideal installation location for a rain sensor?

The device should be mounted in an open area outdoors where it will be exposed to unobstructed rainfall, but not in the path of sprinkler spray. A good location is on a roof overhang so that trees, overhangs and awnings are not blocking direct rainfall onto the rain sensor. The closer the rain switch is to the controller, the shorter the wire run will be. This will also reduce the chance for wire breaks. There are wireless models available that simplify installation.

Installation guidelines, courtesy of The Florida Irrigation Society*

- A. Rain shutoff device (rain sensor) shall be placed on the top of the fascia or parapet if at all practical. It can also be placed on other stationary structures, such as walls, posts or fences.
- B. The device shall not be located where rainwater is channeled, to avoid false readings.
- C. The vertical area directly above the rain shutoff device shall be unobstructed to the sky.
- D. The rain shutoff device shall not be installed over or within 5 feet of the edge of either an air conditioner's compressor or a pool heater unit.
- E. Rain shutoff devices shall not be installed on a backflow preventer.

- F. Rain shutoff devices shall be installed above the height of the sprinkler spray. When this is not possible, locate the sensor in the last zone to operate.
- G. Rain shutoff devices shall be installed as close as possible to the control equipment.
- H. Devices that use UV resistant wire may be left exposed to sunlight. The first 18 inches where the wire leaves the ground shall be encased in a conduit. If the wire is not UV resistant, its entire above-ground length shall be encased in a conduit.
- I. Devices that use UL wire listed for direct burial may be installed in the ground without a conduit, but the first 18 inches where the wire leaves the ground shall be encased in a conduit. Wire that is not so rated must be encased in a conduit.
- J. In systems where a pump is used to supply irrigation water, a rain shutoff device shall deactivate pump control circuits as well as valve circuits.

Who can install rain sensors?

Rain sensors can be installed by homeowners or irrigation professionals.

Where can I purchase a rain sensor for my sprinkler system?

Rain sensors are available wherever irrigation supplies are sold.