

# WaterSwitch AC & DC

## IRROMETER®



### WaterSwitch AC/DC Specifications

**COMPATIBILITY:** The WaterSwitch is compatible with AC and battery powered (DC) irrigation valve/controllers. For AC, it can be a sensor input or a common interrupt. For DC, it requires a "sensor" port or wire connection on the irrigation controller. It will work with normally open or normally closed switch requirements. The WaterSwitch can be used in combination with other climatic sensors (rain, freeze, etc.).

**Note:** The WaterSwitch provides a dry contact switch closure at a reference moisture level for other control applications such as alarms, signaling, etc. Please contact IRROMETER for more details.

**POWER REQUIREMENTS:** Input voltage – Self powered 9 VDC internal battery (DC) or 24 VAC (AC).

**MATERIALS:** ABS plastic case with encapsulated electronics for outdoor operation. Water resistant battery compartment is sealed with thermo plastic rubber plug (DC).

#### **DIMENSIONS:**

HEIGHT: 1.50 in. (38 mm) – 2.5 in. (64 mm) including mounting tabs  
WIDTH: 2.625 in. (67 mm)  
DEPTH: 2.0 in. (51 mm) including knob  
WEIGHT (module only): (AC) 4.1 oz. (116g) – (DC) 5 oz. (142g)

**WIRE LEADS:** 20 AWG x 12 in. (30 cm) 5 leads – 2- sensor, 3- switch (normally open/closed)

**SETTINGS:** Timed Bypass and 1 (wet) through 9 (dry)

### 200SS-5 Sensor Specifications

**MATERIALS:** ABS plastic caps with stainless steel body over a hydrophilic fabric covered granular matrix with embedded stainless steel electrodes.

#### **DIMENSIONS:**

DIAMETER: .875 in. (22 mm)  
LENGTH: 3.00 in. (76 mm)  
WEIGHT: 2.4 oz. (67g)

**WIRE LEADS:** 20 AWG x 5 ft. (1.5 m) — two (2) leads

**ORDERING INFORMATION:** Catalog # WS-AC or # WS-DC includes one WaterSwitch module, one 200SS-5 Watermark sensor and instructions in a clear plastic display package.

**WARRANTY:** One year

**The WaterSwitch works with existing valves or controller to improve irrigation efficiency based on plant demand. The module will prevent irrigation cycles by signaling the controller's sensor circuit or interrupting the solenoid power, when the soil moisture status is wetter than the adjustable set point. The kit includes one moisture sensor. Nine moisture set points allow for a wide range of variations in plant and soil type. An indicator light flashes to indicate status.**

#### **Features:**

- **WS-DC Works with any battery powered controllers equipped with a sensor circuit**
- **WS-AC works with AC powered controllers with a sensor circuit or as a common interrupt of the valve wiring**
- **Suspends irrigation cycles based on soil moisture status**
- **Nine position switch for variations in plant demand and soil type**
- **Requires no seasonal adjustments**

### WaterSwitch-DC

**OPERATING PRINCIPLE:** The WaterSwitch-DC is a self-powered device that is designed to work in conjunction with a battery powered (DC) irrigation valve/controller equipped with a sensor circuit. The device will suspend irrigation when soil moisture status is appropriate for good plant health. The included WATERMARK soil moisture sensor is placed in the root zone of the plant material being irrigated and wired to the WaterSwitch-DC. Every few minutes the Water Switch interrogates the sensor for soil moisture status. If the moisture level is wetter than the set point the system will prevent any irrigation cycles.

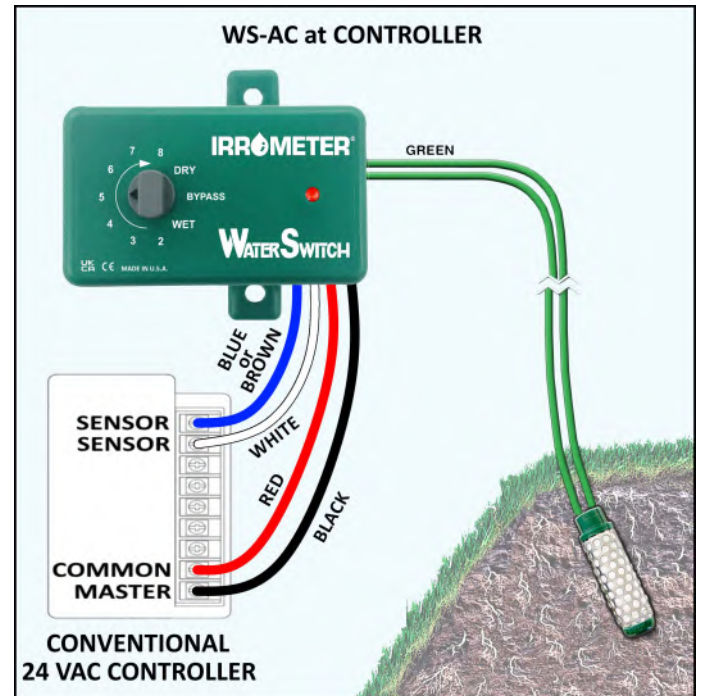
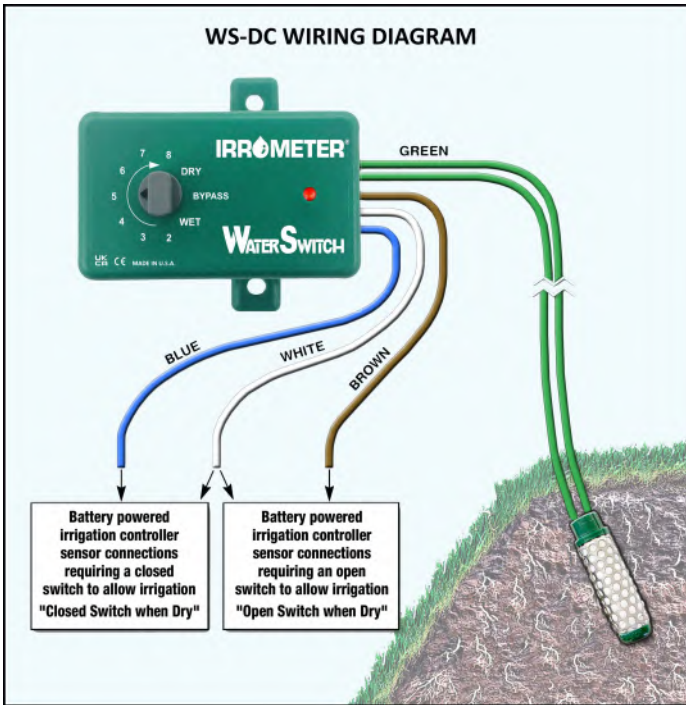
**SPECIFICATION INFORMATION:** The irrigation system shall incorporate a battery powered (DC) soil moisture management device designed to integrate with the irrigation controller and suspend irrigation cycles based on soil moisture status. The soil moisture management device shall be comprised of a Granular Matrix Sensor (GMS) and an adjustable electronic control module. The module shall interpret sensor readings and prevent operation of the irrigation valve/controller when soil moisture levels are wetter than desired thresholds. The module shall provide nine adjustment levels to accommodate plant type and soil variances. The device shall be the WaterSwitch-DC as manufactured by the IRROMETER Company, Inc. of Riverside, California.

### WaterSwitch-AC

**OPERATING PRINCIPLE:** The WaterSwitch-AC is a device that is designed to work in conjunction with an AC powered irrigation valve or controller equipped with a sensor circuit. The device will suspend irrigation when soil moisture status is appropriate for good plant health. The included WATERMARK soil moisture sensor is placed in the root zone of the plant material being irrigated and wired to the WaterSwitch-AC. At every start time the WaterSwitch-AC interrogates the sensor for soil moisture status. If the moisture level is wetter than the set point the system will prevent that irrigation cycle.

**SPECIFICATION INFORMATION:** The irrigation system shall incorporate a 24 VAC powered soil moisture management device designed to integrate with the irrigation control system and suspend irrigation cycles based on soil moisture status. The soil moisture management device shall be comprised of a Granular Matrix Sensor (GMS) and an adjustable electronic control module. The module shall interpret sensor readings and prevent operation of the irrigation valve/controller when soil moisture levels are wetter than desired thresholds. The module shall provide nine adjustment levels to accommodate plant type and soil variances. The device shall be the WaterSwitch-AC as manufactured by the IRROMETER Company, Inc. of Riverside, California.

# WaterSwitch Wiring



The WaterSwitch (DC) can be used with battery powered controllers equipped with a sensor circuit.

The WaterSwitch (AC) can be wired to a conventional 24 VAC controller, to a individual valve, or multiple switches can be wired to a single controller.



This product has been certified when used in combination with a compatible base controller.

A list of compatible controllers can be found here:

<https://lookforwatersense.epa.gov/products/Product-Search-Base-Controllers.html>

Search for your controller and expand selection to find the WaterSwitch device.

**IRROMETER®**

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