

RAIN SENSOR FOR HERON CONTROLLER

1. Principle of operation

The rain sensor option for Heron controllers enables irrigation program run times to be reduced automatically depending upon measured rainfall and user pre-set triggers. Once connected all settings/adjustments can be done at the controller.

The rain sensor is supplied as a kit including bracket and sensor wire. The rain sensor can be fitted without the bracket if a suitable flat area is available, use the two holes in the base of the unit to secure (do not block the drainage slots).

2. Fitting the rain sensor to the bracket

Remove the top cover and base section from the rain sensor main body.

Mount the base section onto the bracket using the bolts and nuts supplied (ensure both cut-out sections align) and the bracket wall fixing holes are underneath.

3. Wiring the rain sensor

The sensor is supplied with 10m of 2 core sensor cable and crimp connectors. Strip 20mm from the outer sheathing exposing the 2 inner cores, strip 5mm of sheathing from each core, put the bared wire into the yellow end of the connector and crimp the wire firmly using pliers, ensure the crimp is tight on the wire.

Push the crimp connectors fully onto the terminals of the rain sensor circuit board (not polarity dependent). Push the wires upwards leaving only the grey outer sheath exposed at the bottom of the body. Spray the terminals with WD40 or similar, to protect from corrosion, align the cable with the cut-out then push the body firmly onto the base. Check from the top that the spoon still has free movement. Using the supplied ratchet strap secure the signal cable to the underside of the bracket.

4. Mounting the rain sensor

The rain sensor must be mounted in a level plane and in an exposed position typical of the watering area. Fit at an accessible height for maintenance purposes. Use the mounting holes on the bracket and fixings as appropriate.

5. Wiring the rain sensor to the controller

Route the signal cable back to the controller and ensuring the mains power supply is turned off, open the front of the controller (4 plastic screws). Route the cable through one of the cable entry glands and strip 20mm from the outer sheathing exposing the 2 inner cores, strip 5mm of sheathing from each core. Remove the controller RH connection plug and insert the wires into the screw terminals I2 and C2 then secure (not polarity dependent).

Before refitting the connection plug, close the cover and temporarily secure, turn on the power supply to the controller and set option 7 (Rain Days) in the controller options menu (see controller instructions) with the number of days you wish the rain sensor to consider, for example if you set Option '7' to 3 then rain that has fallen within the last 3 days will still be included in the rainfall measurement. The maximum value you can set is 4.

Once set an extra page 'Rain Fall' will appear in the main menu. The menu firstly displays the current measured rain fall and the present % reduction level.

There are four pre-set rain trip levels available. Move the cursor to the appropriate level and enter a number (mm). The basic setting should be 1,2,3,4 when these trip points are met any set zone/valve run time will be reduced, for example: if all zones/valves have been set for a run time of 20mins.

- 1mm rainfall (25% reduction) = zone/valve run time 15mins.
- 2mm rainfall (50% reduction) = zone/valve run time 10mins.
- 3mm rainfall (75% reduction) = zone/valve run time 5mins.
- 4mm rainfall (100% reduction) = zone/valve run times 0mins.

Turn off the power supply to the controller, open the cover and replace the connection plug. Close the cover and secure then reinstate the power supply.

6. Testing the rain sensor

The rain sensor can now be tested by pressing down the black spoon inside the rain sensor body. Pressing the spoon down will increment the rainfall by 1 mm. If you press the spoon enough times so that a trip level is reached, you will see a reduction on the display of the controller and the zone/valve run time. (don't forget to fit the top securely once the testing has been completed).

To zero the rain fall count, press the 'MENU' button and scroll and select to the 'Rain Fall' page. With the cursor on the 'Rain Fall is' line press the 'OK' button twice, then exit by pressing the 'MENU' button.

The controller will display current sensor status on the home page under the 'ZONES/VALVES OFF' message. 'Rain Comms' fault message on the controller display indicates a fault with the wiring or the sensor itself.

Maintenance: periodically clean out the sensor cover inlet slots, spoon and inside casing, ensure free movement of the spoon. Spray terminals with WD40 or similar, to protect from corrosion.

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