



# Fact Sheet: 09003

## Rainfall Sentry

### Rainfall Sentry Pump Controller

### Operating Instructions

---

The Monitor Sensors Rainfall Sentry Pump Controller monitors the rainfall and operates an alarm relay when a programmable amount of rain falls within a programmable period of time. The relay is released after a second programmable period of time has elapsed. This second period of time may be extended, if desired, by further rainfall. The operator may also program the amount of this additional rain, and the extended time period. Isolated single-pole change-over relay contacts are available to operate external equipment. The relay is rated to switch low voltage, up to 1 Amp, and an external heavy duty relay or contactor is required to control a pump motor.

There are 5 parameters that control the operation of the Rainfall Sentry.

1. Amount of rainfall to initiate the alarm.
2. Period of time in which the above rainfall must fall.
3. Duration of the alarm.
4. Amount of additional rain to extend the alarm duration.
5. Period of time for which the alarm is extended.

When the Rain Alarm unit is switched on, the alarm relay will be off. The screen will briefly show the software version number and will then display the normal alarm-off information screen: -

0.0 mm fell in  
last 30 minutes

This screen will remain unchanged until rain is recorded. The amount of rainfall displayed will increase as rain falls, but will also decrease as time passes. New rainfall will add to the total, but rain, which fell prior to the critical period, will be subtracted. Whenever the total reaches the programmed amount, the alarm relay will be energized. A new alarm-on information screen will be displayed: -

Alarm will clear  
in 01 hr 30 min

This screen shows the period of time in hours and minutes before the alarm will clear. If no additional rain falls, the time displayed will count down to 00:00. At this point there will be a further period of 30 seconds before the alarm relay is released. The screen will revert to the previous alarm-off information screen.

### Changing the Rain Alarm Unit Settings

NOTE: The change key must be inserted and turned to the right before the up and down buttons can be used.

The Settings may be viewed at any time by pressing the menu button. The first press displays the following screen: -

Alarm activated  
after 2.0 mm

Use the up and down buttons to adjust to the desired value. This is to prevent accidental changing of the settings. Pressing the menu button again displays: -

After 2.0 mm  
in 30 minutes

In this screen the up and down buttons adjust the alarm-determining time. A wide range of times is available from 1 minute up to 6 days. Pressing the menu button again displays: -

Alarm cleared  
in 1½ hours

This screen adjusts the alarm duration. The range of times available is from 1 minute to 6 days.

Pressing the menu button again displays: -

Unless 1.0 mm  
of further rain

This screen adjusts the amount of additional rain that must fall in order to extend the alarm duration period. If the amount set is zero, no alarm duration extension will occur.

Pressing the menu button again displays: -

Extends alarm  
for 15 minutes

This screen adjusts the alarm extension period. In the above example, each additional mm of rain will add 15 minutes to the alarm duration, except where the total would exceed the 1½ hours previously set. In this case the total is limited to this value. If the period set is zero, no alarm duration extension will occur. Pressing the menu button again stores the new settings and displays the message "Set-up completed". After a few seconds, the screen will return to the information display. Remove the key to prevent accidentally changing the settings.

An alarm can be terminated at any time by removing power to the unit. The Rain Alarm Unit will always power-up with the alarm off, and no rain recorded.