Installation Instructions

WS/R
Rain Dectector

Important: Retain these instructions

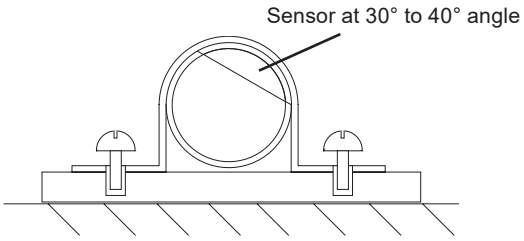
These instructions shall be used by trained service personnel only. If the equipment is used in a manner not specified by these instructions, the protection provided by the equipment may be impaired.

https://partners.trendcontrols.com

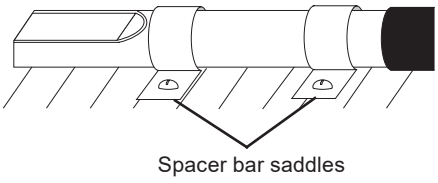
1 INSTALLATION

Mount the sensor in position. The location should provide safe access for maintenance and a suitable operating environment.

(1) Mount the sensor on a permanent structure using 2 off 20 mm (0.79”) spacer bar saddles, available from RS Components (608-121) as shown below. Note that the sensing area should be mounted at an angle of 30° to 40° to enable surface moisture to run off.



Do not cover, allow air circulation.
Do not operate outside the ambient temperature range (-25 °C to +55 °C) (-13 °F to +131 °F).
Do not store outside the ambient temperature range (-25 °C to +55 °C) (-13 °F to +131 °F).

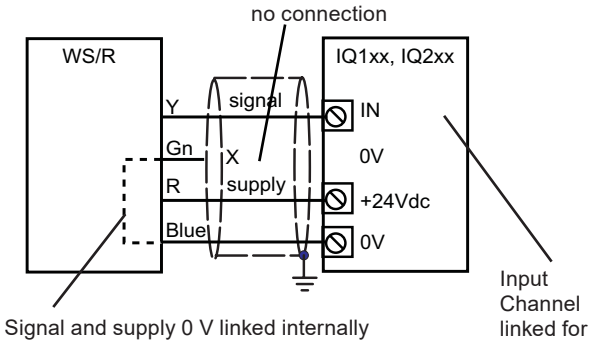


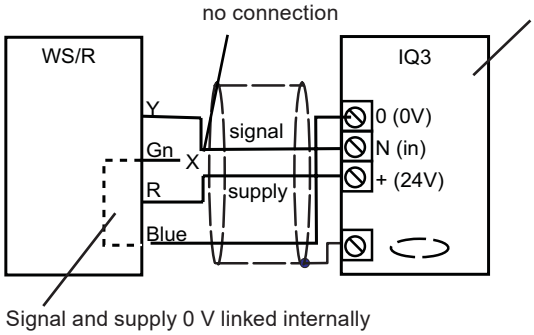
Connect the sensor’s output to the IQ controller.

(2) Wire the sensor output (yellow) to an analogue voltage input of the required IQ controller as shown.

Connect the sensor’s power supply.

(3) Connect the sensor to the IQ controller’s 24 V auxiliary supply using the red and blue leads as shown.





For details about particular IQ Controller auxiliary supplies see the appropriate controller data sheet.

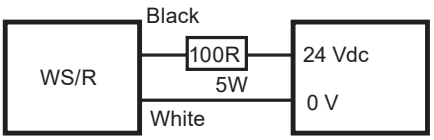
Note: The nominal sensor supply is 9 to 12 Vdc, but the sensor is fully functional with a 24 Vdc supply.

1 INSTALLATION (continued)

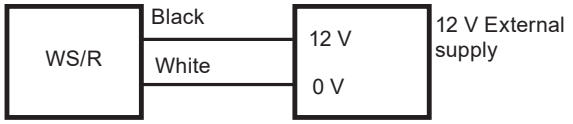
Connect the sensor's heater supply.

(4) Connect the sensor to the IQ controller's 24 V auxiliary supply, or an external 12 V power supply using the black and white leads as shown below.

WS/R powered from IQ controller



WS/R powered from external 12 V supply



When powering the sensor's heater from an IQ controller's 24 V auxiliary supply it is necessary to connect a 100 Ω, 5 W resistor in series with the sensor.

Note: If both the sensor's power, and heater supply are from an IQ controller's 24 V auxiliary supply, ensure that enough current is available (125 mA approx.).

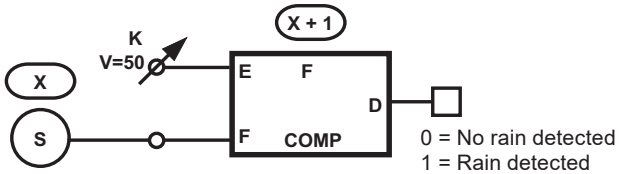
It is now necessary to configure the IQ controller to decode the signal from the sensor.

(5) Using a Trend configuration program configure the controller to contain the strategy shown below:

Sensor output:

0 V no rain

1 V rain present



IQ Scaling

It is recommended to use SET (Software Tool) for the setting of sensor type modules. For all IQ2 series controllers with firmware of version 2.1 or greater, or IQ3 series controllers the following SET Unique Sensor Reference should be used:

Rain Detector V

Alternatively select sensor type module scaling mode 5, (characterise) and enter scaling manually as defined in the table below. For all other IQ controllers see the Sensor Scaling Reference Card (TB100521A).

Y	E	U	L	P	I_1	I_2	O_1	O_2
0	4	1000	-1	2	0	10	0	1000

volts, V

DISPOSAL

WEEE Directive:
At the end of their useful life the packaging and product should be disposed of by a suitable recycling centre.
Do not dispose of with normal household waste.
Do not burn.

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TR CU Certification

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