

WD-86 Water Detector

INSTALLATION INSTRUCTIONS

Item: 4780 (A5DS)

Description

The WD-86 detects water flooding caused by water leak from plumbing, washing machines, dishwashers, air conditions sinks and other water sources. The WD-86 water contains internal relay and options switch. In alarm mode the relay is activated, buzzer is optional. The water sensor is fully sealed at IP-68 grade. The WD-86 is highly immune to RFI and EMI to prevent false alarms. The micro water sensor provides installation in hard to get locations with minimal visibility. Ordering Information:
WD-86PRO: Water & Temp Detector. WD-86IP: Water Detector with sealed controller box. WD86_IND: Water Detector with controller in metal box (industrial areas). WD86_HD & WD86_HD24: Water detector 12V or 24V with one SEN1 sensor, W86SEN1: Heavy Duty sensor in sealed case.

Locating

Place the sensor close to potential water source, close to place where water may concentrate, considering that the WD-86 controller box won't get direct water. The controller electronic board is not waterproof, in wet place locate the main unit enclosure above floor and extend the sensor wire. The flood sensor doesn't have polarity.

Wiring (notice the marking of relay are wrong on PCB and Blue label)

Wires entry located in the unit front side. Wire regulated 12V DC to the wires terminal detector, notice the polarity. The Red LED indicated that power supplied to the detector. To connect the WD-86 to an alarm or other system use the relay wires terminal. The relay has COM N.O. and N.C. contacts, for alarm application use the COM & N.C. To use few sensors with one controller, connect few sensors in parallel, run the wires for up to 20 meters, longer wires may cause false alarms. If long wiring applied run test after installation.

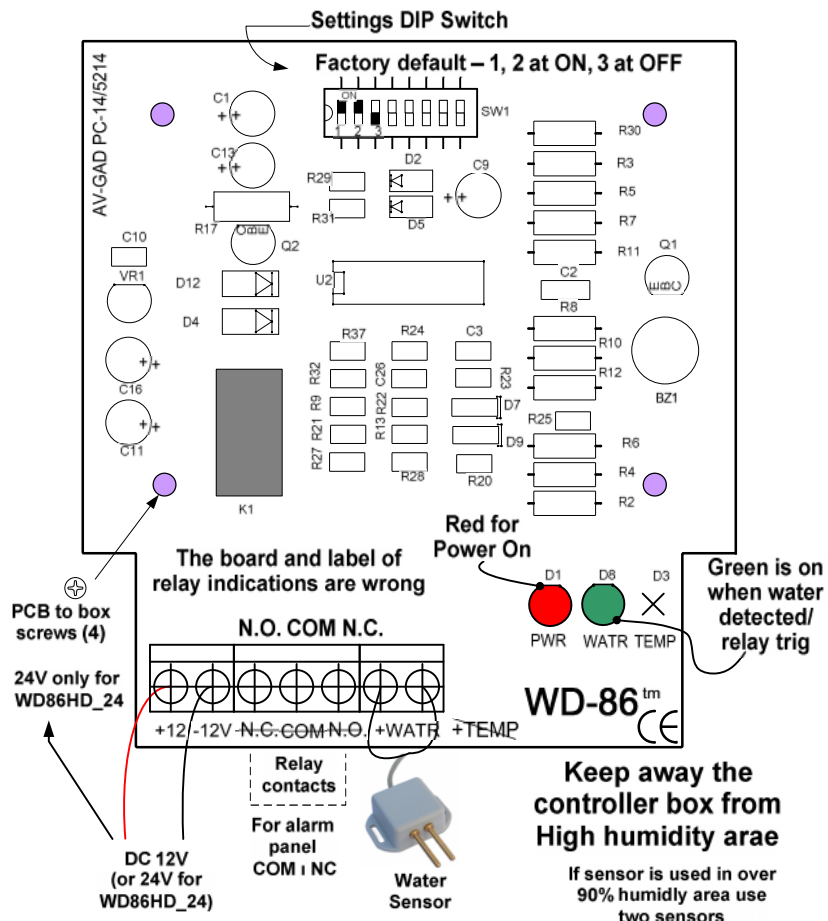


Figure 1: WD-86WT wiring schematic

(PCB & Label on box: Relay's NC and NO terminals marking are wrong)

Options Setting

DIP switches (three positions only for WD-86WT):

Key 1 at ON = Low water sensitivity, at OFF = High
 Key 2 at ON = Water Sensor enabled, at Off = Disabled
 Key 3 at ON = Buzzer off, at Off = Buzzer On
 Use low sensitivity in high humidity (+70%) environment.

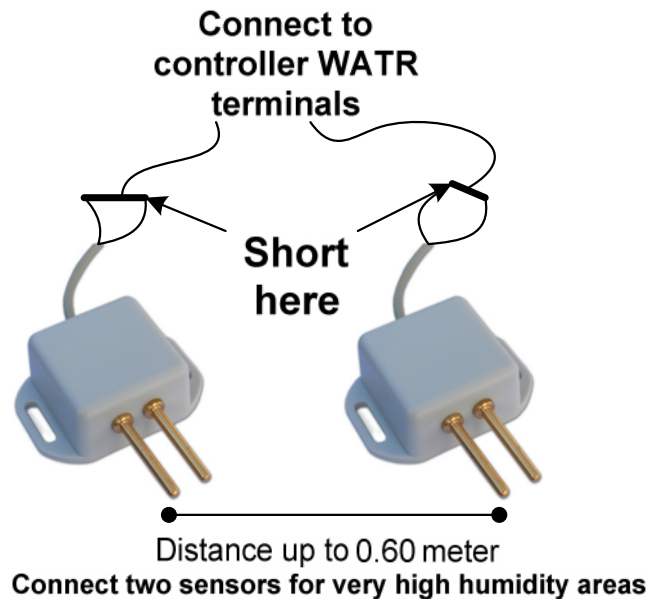


Figure 2: Use two sensors at very high humidity areas

If the sensors located at areas with 80-90% humidity it's recommended to use two sensors as figure 2 shows.

Testing

After wiring completed supply DC power (24 or 12V) to the WD86 controller, verify Red LED is on, wait 15 seconds, apply a small water splash or place the Water Probe unit in a glass of water within few seconds alarm start, relay triggered and the Green LED turns on.

If the protected area uses other liquids verify they activate the detector. If for example the protected area is air condition water pump test the WD-86 with water that sourced form the air condition collecting container, not tap water.

WD-86WT Specifications	
Operating Temp: -25 to +70 C°	Relay: 0.5A @ 24V, N.O. or N.C.
Controller area Max. Humidity: 60%	Internal Sounder: 85 db @ 1 meter
Power Input WD86 standard: 11 to 14V DC	Water Sensor: Metal Compound, sealed, 1m wire
Power Input WD86_24: 22 to 26V DC	Sensor Case: Plastic compound for water environment
Standby Current Consumption: 21 mA	Standard controller case: ABS, Black Color
Alarm Mode Current Consumption: 50 mA	Metal controller case: Aluminum epoxy power painted
Indications: Two LEDs & Sounder	Size: W=92, L=87, H=33 mm

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