

# WD1-D/WD1-DS

## **Dual Relay Contact Point Leak Detector**

#### **FEATURES**

Adjustable Probe Height
Wide Range of Operating Voltages
Form "C" Relay Output for Alarms
(1Amp/120Vac Rated)
Gold Sensing Probes
Red LED indicator light
Encapsulated Electronics
Failsafe Circuitry (WD1-S Only)
Self Contained System
(No special monitor panel required)
Design Flexibility
Simple Installation



### GENERAL

The DiT, Inc. WD1-D and WD1-DS are Water Point Detectors, featuring gold-plated probes and microchip technology for the highest level of water detection confidence. All models can be operated from 12-25 Volts AC or DC. Alarm signaling is provided with two form "C" relay contacts. Connect the WD1-D or WD1-DS to a DiT, Inc. MPR, GMP or similar monitoring system to complete the monitoring package. A height adjustable, epoxy painted steel enclosure is standard.

The WD1-D models change the relay contacts state, and lights the red LED on the cover when water is present at the sensing probes. The WD1-D model provide two sets of non-powered alarm relay contacts. The



WD1-DS models include fail-safe circuitry to signal an alarm condition for an internal malfunction or loss of power to the sensor. The WD1-DS models incorporate a reverse acting set of relay contacts that are closed in a normal condition.

#### **OPERATION**

The WD1-D or WD1-DS can be used with any "contact-closure" monitoring panel. The "dry" contact points may be wired normally open or normally closed, allowing wiring flexibility to handle most installations.

Relay contacts on the WD1-D sensors, once powered, remain in the same state until water is applied to the sensing probes. When water is present, the relay contacts make.

On WD1-DS sensors, the relay contacts are reverse acting and make as soon as power is applied.

When water is present at the sensing probes, the relay releases and returns to a non-powered state. During a powered steady state condition, the contacts will change states and signal an alarm condition if:

- 1. A leak is detected
- 2. An internal malfunction occurs
- Power is lost to the sensor

#### MOUNTING

The units mount directly on the floor or sub-floor. Two ¼" mounting holes are provided (one on each flange) for anchoring to the floor. Adjust the height of the sensing probes with the screws on the mounting legs.

#### WIRING

The unit requires 12-24 Volts DC or AC power. Shielded cable should be used for wiring to prevent electrical noise. Electrical knockouts (1/2") are provided for electrical connection.

#### WD1 Wire Connections

Positive Power Red White **Negative Power** Orange Relay Common Blue N.C. Contact Yellow N.O. Contact Brown Relay Common Normally Open Gray Normally Closed Green

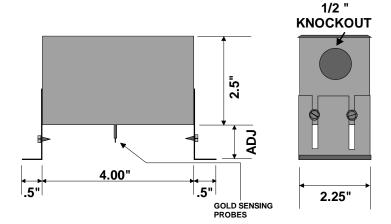
Relay contacts are reverse acting on WD1-DS models.

For detailed mounting and wiring information, see the DIT, Inc. Water Detection Installation Manual.

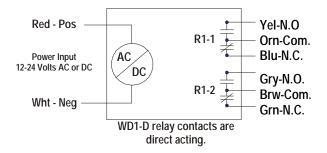
PO Box 2029 Rowlett, Texas 75030-2029 Phone: 214-607-9991 Fax: 214-607-4334 WWW.DARWELLIT.COM



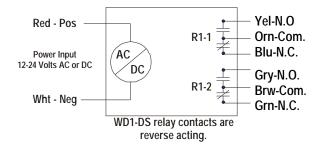
#### **Dimensions**



#### **WD1-D Internal Connections**



#### **WD1-DS Internal Connections**



#### **SPECIFICATIONS**

Model Number

12-24 Volts AC or DC Power

50MA

WD1-D

Alarm Output 2- Form "C" Relay Contacts

Indicator Light Red LED

Contacts 2- (1Amp/120Vac Rated) 32-125F/0-95%Rh Environmental 5"L x 5"H x 3.25"D Size

Weight 1.4 lbs.

#### Model Number WD1-DS

12-24 Volts AC or DC Power

50MA

2- Form "C" Relay Alarm Output

Red LED

Indicator Light Contacts 2- (1Amp/120Vac Rated)

(Reverse Acting) Environmental 32-125F/0-95%Rh 5"L x 5"H x 3.25"D Size

Weight 1.4 lbs.

#### WD1-D(S) Module Wire Connections

Red Positive Power White Negative Power Orange Relay Common Yellow Normally Open Normally Closed Blue Brown Relay Common Normally Open Gray Normally Closed Green

Use 18-22 gauge stranded wire. For detailed mounting and wiring instructions, see DiT, Inc. Water Detection Installation Manual.