WINLAND
ELECTRONICS, INC.

WB-200

CONTENTS

This package contains:

- 1 WB-200
- 1 Surface Probe - Unsupervised (W-S-U)
- 1 Installation/Operating Instructions Guide

SPECIFICATIONS

Power Requirement	8-28 VDC @ 35mA 8-28 VAC @ 100mA
Sensitivity	Will not alarm due to high humidity or condensation.
Operating Temp	32˚ to 130˚F (0˚ to 54˚C); non-condensing environment (indoor use only)
Output	1 Form C Relay (N.O./N.C.) 1 Amp @ 30 VDC, resistive 1 Amp @ 24 VAC, resistive
Probe Options	Includes 1 Standard Unsupervised Surface Probe (W-S-U) Accepts up to 6 Unsupervised Surface Probes (W-S-U) wired in parallel or Accepts up to 6 Unsupervised Under Carpet Probes (W-UC-U) wired in parallel.
Max Cable Length	1-2 probes; max recommended distance of 200' (61 m) 3-6 probes; max recommended distance of 100' (30.5 m)
Probe Cable	Probes include 15" (4.6 m) cable. Extend using 22-18 AWG twisted pair.
Console Weight	2.4 oz (0.07 kg)
Console Dimensions	4.1 x 2.36 x 1.18" (10 x 6 x 3 cm) with flanges
Probe Dimensions	Surface: 2 x 3 x 0.88" (5.1 x 7.6 x 2.2 cm) Under Carpet: 2 x 3 x 0.18" (5.1 x 7.6 x 0.5 cm)
Mounting	Flanges
Case Material	ABS
Warranty	1 Year Limited

Introduction

Thank you for your purchase of the Winland WaterBug® model WB-200. The WB-200 is completely electronic and is designed to detect water only (distilled and deionized water cannot be detected). The WB-200 is not a self contained warning device. For proper operation, it must be used in conjunction with an alarm system, sounder, etc. It is designed so that the control console mounts on a wall or other flat vertical surface and the remote probes are placed in the locations where water leakage is most probable. Up to six remote probes may be connected to one control console. A film of moisture forming a bridge between the two metallic contacts on any remote probe is all that is needed for the unit to signal an alarm condition. The output on the WB-200 is non-latching, but will remain in alarm state until the moisture bridge is broken. As sensitive as the WB-200 is, it will not alarm due to high humidity or condensation. The WB-200 is ideal for use in homes, offices, computer rooms, warehouses, etc.

Installation

Locate the area where the WB-200 console is to be mounted. Using the WB-200 as a guide, mark the two locations on the mounting surface where the holes will be drilled in order to use the case's mounting flanges. If mounting on drywall, use the two provided drywall anchors. Once the holes have been drilled, place the WB-200 against the surface and drive the screws into the holes or anchors.

Multiple probes must be hooked up in parallel to the two "sensor" terminals. The remote surface probes may be mounted securely to the floor or a wall. Mounting the probe(s) to a vertical surface like a wall enables you to monitor an area for rising water levels. This is useful in basement sump pumps and other types of water storage and drainage systems.

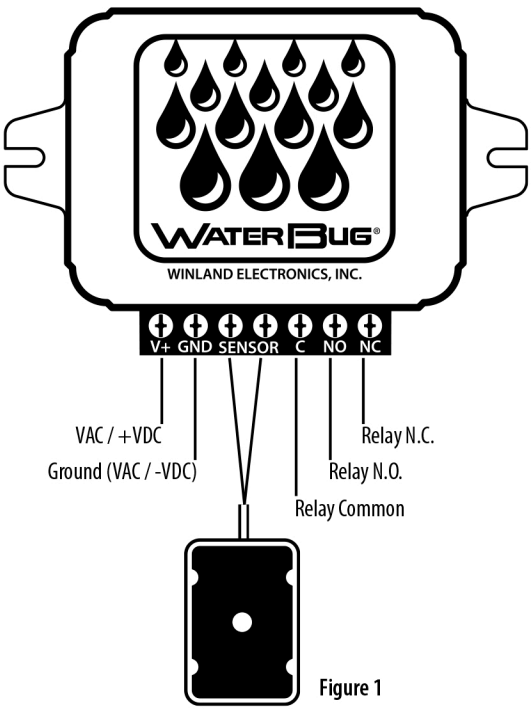

Figure 1

Terminal Block Connections

Relay contacts are accessible on the terminal block (See Figure 1). The WB-200 is in normal condition when power is applied and no moisture is being detected. It's in alarm condition when water is detected by any one of the remote probes.

Note: When connecting DC power to the WB-200 be sure to observe polarity and test to see if the WB-200 is operating properly. This may be done by forming a water bridge between two of the metallic contacts located on the probe (See Figure 2) with a moistened finger or cloth. If the WB-200 is not operating properly, check the polarity of the power supply connections.

AC – Power input wires are interchangeable
DC – Positive to V+ and negative to Ground

Test Procedures

To test the WB-200 operational status, form a water bridge between the two metallic contact points (See Figure 2) with a moistened finger or cloth. If working properly, the WB-200 will activate the warning device to which it is connected within approximately three seconds. The WB-200 will reset automatically when the probe dries and there is no longer a water bridge between the two metallic contact points.

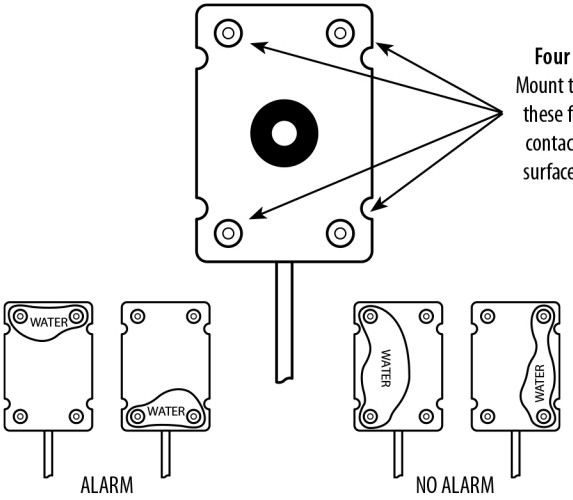

Figure 2

Standard Surface Probe Unsupervised

If a remote probe is to be bolted down in a permanent installation, drill only in the innermost center recessed area (See Figure 3). Drilling anywhere other than the innermost circle may damage the internal wiring causing the WB-200 to fail.

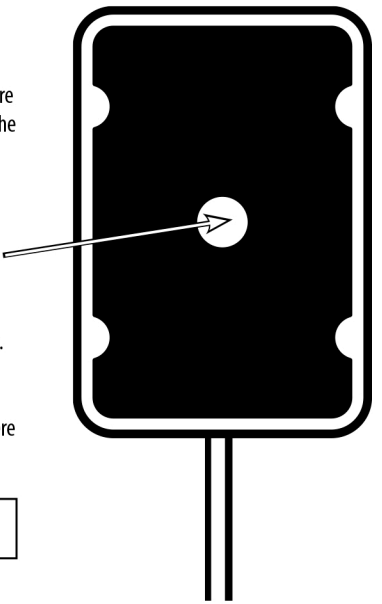

Figure 3

Monitoring for the Absence of Water

The WB-200 can be used to monitor for the absence of water (water level). This is done by:

1 - mounting the probe at the desired minimum waterline and ;
2 - using the opposite set of relay contacts that you would use if you were detecting the presence of water.

To insure proper operation, test weekly.

Concrete can be semi-conductive. If experiencing false alarms, insulate all probes mounted on concrete.