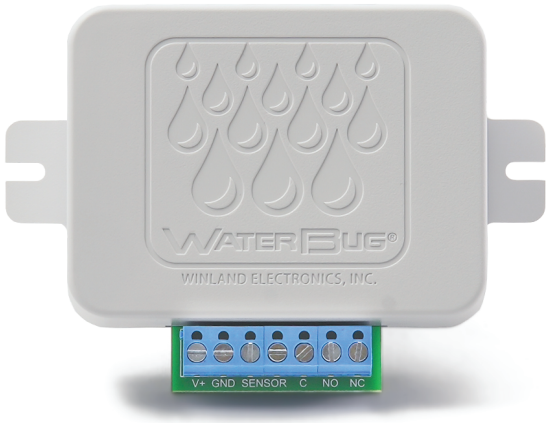
WINLAND™
ELECTRONICS, INC.

WATERBUG®

Electronic Water Detec on Device



This Package Contains:

- 1 WB200 Device
- 1 W-S-U (can be placed into a condensing enviroment)
- 1 Moun ng Kit (2 screws and 2 anchors)
- 1 Product Guide

Features:

- Connects to most hardwire or wireless systems
- Hardwire powered
- Connect up to six sensors wired in parallel up to 100' (30.48m) using 18-22 AWG twisted pair
- Monitors for the presence of water (dis lled and deionized water cannot be detected)
- Can be used to detect for the absence of water
- Will not alarm due to condensa on of humidity

Note:

- Test device weekly to ensure proper opera on.
- Concrete can be semi-conduc ve. If experiencing false alarms, insulate all sensors mounted on concrete.

Specifica ons:

Current Draw	8 to 28V DC at 35mA or 12 to 28V AC at 100mA
Device Opera ng Temperature Range	32 to 130 °F (0 to 54.4 °C) in a non-condensing environment. Indoor use only
Output	1 Form C relay Normally Open/Normally Closed ("N.O."/"N.C.") 1 Amp at 30V DC, resis ve or 1 Amp at 24V AC, resis ve
Sensor (external)	Includes 1 unsupervised surface sensor (W-S-U) May be placed into a condensing environment
Max Sensor/Device Distance	1 to 2 sensors with max distance of 200' (61.0m) each 3 to 6 sensors with max distance of 100' (30.48m) each
Device Dimensions	4.10" x 2.36" x 1.18" (10.4cm x 6.0cm x 3.0cm)
Sensor Dimensions	3.0" x 2.0" x 0.88" (7.6cm x 5.1cm x 2.2cm)
Weight	2.4oz (68.0g)
Moun ng	Moun ng flanges (see image above)

CE RoHS WEEE COMPLIANT

Tech Support 8:00am - 5:00pm Central Time
(800) 635-4269 • (507) 625-7231
techsupport@winland.com
www.winland.com

wb200.winland.com

D-011-0116 REV E (12/2023)

Introduction:

Thank you for your purchase of the Winland WaterBug® model WB200. The WB200 is completely electronic and is designed to detect water only (distilled, deionized water and rainwater cannot be detected). The WB200 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 device mounts on a wall or other flat vertical surface and the remote sensors are placed in the locations where water leakage is most probable. Up to six remote sensors may be connected to one WB200. A film of moisture forming a bridge between the two metallic contacts on any remote sensor is all that is needed for the device to signal an alarm condition. The output on the WB200 is non-latching but will remain in alarm state until the moisture bridge is broken. As sensitive as the WB200 is, it will not alarm due to high humidity or condensation. The WB200 is ideal for use in homes, offices, computer rooms, document storage areas, warehouses, sump pumps and basements.

Installation:

Locate the area where the WB200 device is to be mounted. Using the WB200 as a guide, mark the two locations on the mounting surface where the holes will be drilled 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 WB200 against the surface and drive the screws into the holes or anchors. Multiple sensors must be hooked up in parallel to the two "sensor" terminals. The remote surface sensors may be mounted securely to the floor or a wall. Mounting the sensor(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.

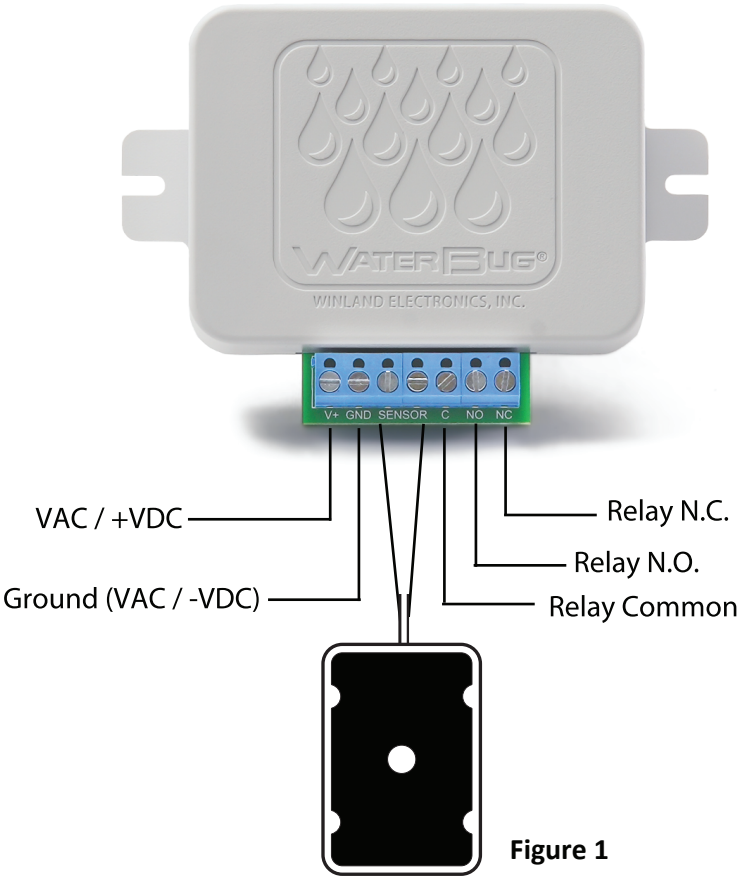


Figure 1

Terminal Block Connections:

Relay contacts are accessible on the terminal block (See Figure 1). The WB200 is in normal condition when power is applied, and no moisture is detected. It's in alarm condition when water is detected by any one of the remote sensors.

Note: When connecting DC power to the WB200 be sure to observe polarity and test to see if the WB200 is operating properly. This may be done by forming a water bridge between two of the metallic contacts located on the sensor (See Figure 2) with a moistened finger or cloth. If the WB200 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 WB200 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 WB200 will activate the warning device to which it is connected within approximately three seconds. The WB200 will reset automatically when the sensor dries and there is no longer a water bridge between the two metallic contact points.

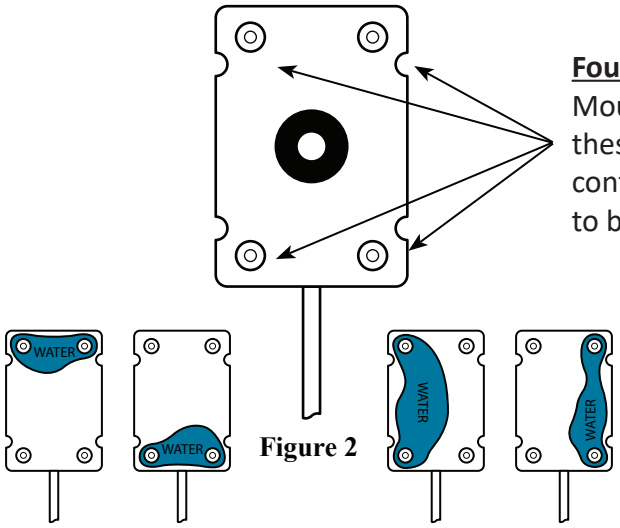


Figure 2

Four Sensor Contacts:
Mount the sensor to ensure these four stainless-steel contacts are against the surface to be monitored.

Standard Surface Sensor Unsupervised:
If a remote sensor 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 W-S-U to fail.

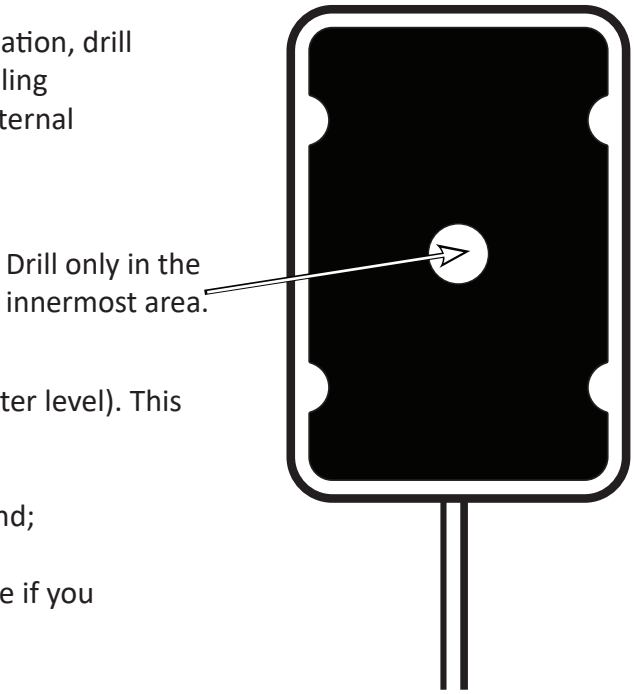


Figure 3

Monitoring For the Absence of Water:
The WB200 can be used to monitor the absence of water (water level). This is done by:

1 – mounting the sensor 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.

Additional Sensors:
Multiple sensors must be connected in parallel to the two “sensor” terminals. The WB200 accepts up to six sensors wired per device.

TEST DEVICE WEEKLY TO ENSURE PROPER OPERATION.

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

WARRANTY AND SERVICE INFORMATION

Winland Electronics, Inc. (”Winland”) warrants to the original purchaser from Winland that each product of Winland’s that it manufactures shall be free from defects in material and factory workmanship for a period of one (1) year from the date of purchase, when properly installed and operated under normal conditions according to Winland’s instruction.

Winland’s obligation under this limited warranty is limited to correcting the product without charge, at its factory any part or parts thereof which are returned, transportation charges prepaid, to the factory within one year of the date of purchase subject to Winland’s examination showing to Winland’s satisfaction to be covered by this warranty.

Product returns will not be accepted unless a Return Material Authorization has been issued by Winland, which is subject to purchaser’s identification of the purchase order number and product serial number. UNAUTHORIZED RETURN SHIPMENT OR SHIPMENT CONTRARY TO WINLAND’S WRITTEN INSTRUCTIONS WILL VOID THIS LIMITED WARRANTY. Correction of such defects by repair, replacement, or refund of the amount paid for the product, at Winland’s option, shall constitute fulfillment of all Winland’s obligations under this limited warranty. Repaired and replacement parts will be warranted for the remainder of the original product warranty. Repairs not covered by this limited warranty may be offered by Winland for a charge.

This limited warranty shall not apply to any of Winland’s products which have been subject to misuse, negligence, accident, or which have been repaired or altered outside of Winland’s factory.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES, NON-INFRINGEMENT, DESIGN, AND TITLE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, USAGE OF TRADE OR OTHERWISE. ALL OTHER REPRESENTATIONS MADE TO THE END USER/PURCHASER BY ANY OTHER PARTY ARE EXCLUDED. No person, agent or dealer is authorized to give warranties on behalf of Winland nor to assume for Winland any other liability in connection with any Winland product.

WINLAND SHALL NOT BE LIABLE TO ANY PERSON FOR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF WARRANTY OR OTHER CONTRACT, NEGLIGENCE, OTHER TORT, STRICT LIABILITY OR OTHERWISE. Under no circumstances shall Winland’s liability under this limited warranty exceed the purchase price paid by the end user/purchaser for the product. The parties agree that the limitation of remedies in this document is an agreed upon allocation of risk and does not cause the remedy to fail of its essential purpose.