

WaterBug[®]
Model WB-200
 Part No. M-001-0104
 Installation / Owners Manual



Introduction

Thank you for your purchase of the Winland WaterBug[®] model WB-200. The WaterBug[®] is completely electronic and is designed to detect **water only** (distilled and de-ionized water cannot be detected). The unit is not a self contained warning device. For proper operation this unit must be used in conjunction with an alarm system, wireless transmitter, 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 sensors may be connected to one control console. A film of moisture forming a bridge between the two metallic contacts on any remote sensor 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 closed until the moisture bridge is broken. As sensitive as the WaterBug[®] is, it will not alarm due to high humidity or condensation. The WaterBug[®] is ideal for use in homes, offices, computer rooms, boats, etc. Several consoles may be wired together to monitor an entire complex.

Installation

Locate the area where the WaterBug[®] console is to be mounted. Mark the position of the screw hole on the mounting surface. Drive the mounting screw into the wall allowing 3/16" between the screw head and the wall. Engage the key slot on the back of the WaterBug[®] console and the screw head and press down. Multiple sensors must be hooked up in parallel to terminals 3 & 4. 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.

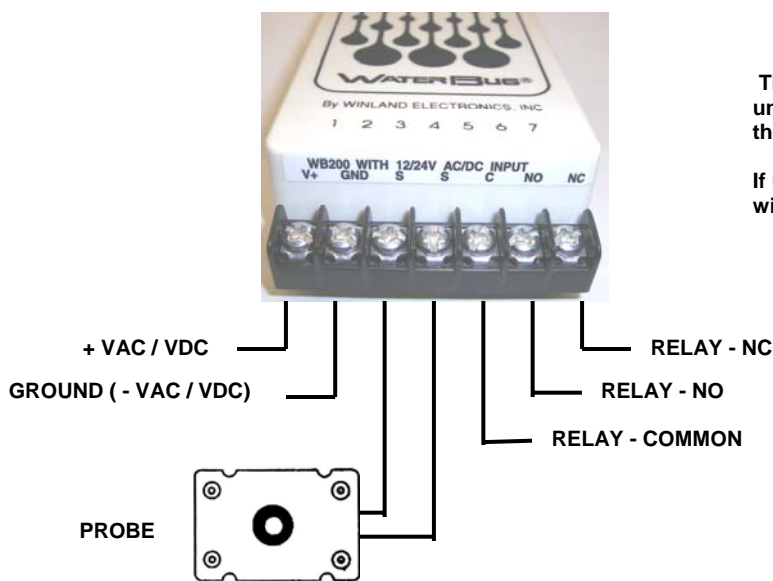
Monitoring for the Absence of Water

The WaterBug[®] model WB-200 can be used to monitor for the absence of water. This is done by (a) mounting the probe at the desired minimum waterline and (b) using the set of relay contacts that are the opposite of what you would use if you were detecting the presence of water.

Terminal Block Connections

Relay contacts are accessible on the terminal block (See Figure 1). The unit is in normal condition when power is applied and no moisture is being detected. The unit is in alarm condition when water is detected by any one of the remote sensing probes. Note: When connecting DC power to the WB-200 be sure to observe polarity and test to see if the unit is operating properly. This may be done by forming a moisture bridge between two of the metallic contacts located on the sensor probe (See Figure 2) with a moistened finger or cloth. If the unit is not operating properly, check the polarity of the power supply connections.

- AC – Power input wires are interchangeable
- DC – Positive to Position #1 and negative to Position #2



The relay connections shown are for when power is applied to the unit. The unit provides power-on supervision so that if power is lost, the relay will provide an alarm output.

If using for detecting the absence of water, the NC and NO contacts will be reversed.

Figure 1

Test Procedures

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

Standard Surface Sensor

If a remote sensor is to be bolted down in a permanent installation, do not drill any hole outside of the innermost center recessed area (See Figure 3). Damage to the internal wiring may occur, causing the unit to fail.

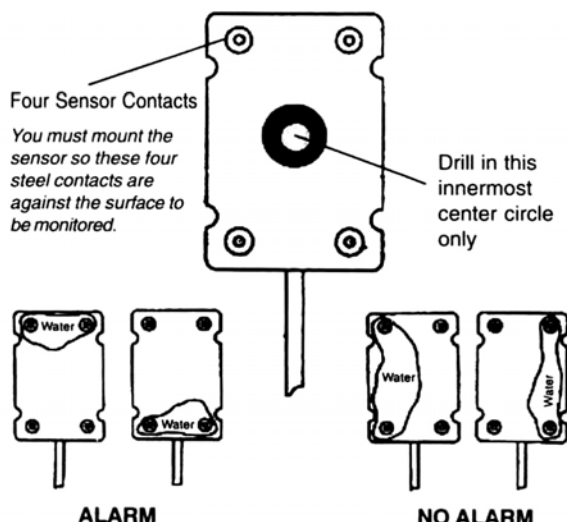


Figure 2

Specifications

WaterBug® WB-200 (P/N M-001-0104)	
Input Voltage	12 VDC, 24 VDC (8-28 VDC) @ 35mA 12 VAC, 24 VAC (8-28 VAC) @ 100mA RMS
Maximum Number of Sensors & Maximum Sensor Cable Run	6 Sensors Maximum Total cable length of all sensors not to exceed 600 feet (183 m) Max.
Recommended Sensor Cable	18 to 24 GA.
Relay Type	Form "C" dry contacts, SPDT
Relay Rating	1 Amp at 24 VAC, resistive 1 Amp at 30 VDC, resistive
Sensitivity	Will not alarm due to high humidity or condensation
Case Material	ABS
Color	Off-white
Operating Temp (Console)	32° F to 130° F (0° C to 54° C)
Operating Temp (Probes)	32° F to 130° F (0° C to 54° C)
Weight (Console)	3.5 ounces (.10 kg)
Weight (Probe)	6 ounces (.17 kg)
Console Dimensions	5.00" x 2.44" x 1.25" (12.7 x 6.2 x 3.18 cm)
Surface Probe Dimensions	2.00" x 3.00" x .88" (5.08 x 7.62 x 2.24 cm)
Under-carpet Probe Dimensions	2.00" x 3.00" x .18" (5.08 x 7.62 x .46 cm)
Mounting	Surface Mount

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Winland Electronics, Inc. ("Winland") warrants to the end user/purchaser that each product of its manufacture shall be free from defects in material and factory workmanship for a period of one year from the date of purchase, when properly installed and operated under normal conditions according to Winland's instruction. Winland's obligation under this warranty is limited to correcting, without charge, at its factory any part or parts thereof which shall be returned to the factory, by the original purchaser, transportation charges prepaid, within one year of the date of purchase and which upon examination, shall disclose to Winland's satisfaction to have been originally defective. Correction of such defects by repair to, or supplying replacements for, defective parts shall constitute fulfillment of all Winland's obligations to purchaser under this limited warranty. Repair service performed by Winland after one year from date of purchase will be for a reasonable service charge. This limited warranty shall not apply to any of Winland's products which have been subject to misuse, negligence or accident or which have been repaired or altered outside of Winland's factory. Winland shall not be liable for loss, damage or expense resulting, directly or indirectly, from the use of its products or any other cause.

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In an effort to improve waste management in the European Union, the European Union has enacted directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE Directive). According to the WEEE Directive, this product must not be disposed of with other household waste. For disposal information go to www.winland.com and click on the WEEE link. To request additional information regarding Winland's RoHS and WEEE compliance initiative and how it might impact your business, email customerservice@winland.com.

WB-200 Certification Info



Radio Frequency Interference Requirements: This device complies with Part 15 Class B of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



CE Marking and European Union Compliance: Products intended for sale within the European Union are marked with the CE Mark, which indicates compliance to applicable Directives and European Norms (EN). Amendments to these Directives or ENs are included:

Applicable Directives

Electromagnetic Compatibility Directive 89/336/EEC; RoHS Directive 2002/95/EC; WEEE Directive 2002/96/EC

Statement of Compliance

Winland Electronics, Inc. hereby declares that this device is in compliance with all the applicable Directives, 89/336/EEC, 2002/95/EC, 2002/96/EC.

Symbols on the Product or Manual Labeling

Symbol	Definition
	For product disposal, ensure the following: <ul style="list-style-type: none"> Do not dispose of this product as unsorted municipal waste. Collect this product separately. Use collection and return systems available to you
	WEEE Waste Electrical and Electronic Equipment
	RoHS Restriction of Hazardous Substances
	Registered trademark (USA only)



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