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WLS912 Wireless ACUITY Glass Break Detector
Instructions for Installation and Use
****WORKING PAPER ****

Introduction

The model WLS912 is a battery operated acoustic glass break sensor, designed to detect the sound produced by the shattering of framed glass. Equipped with an RF transmitter, the WLS912 establishes a supervised, one-way communications link with the 900MHz System Controller.

The WLS912 uses Dynamic Signal Processing* to provide accurate detection of Plate, Laminated, Wired and Tempered glass types, while rejecting common false alarm sounds.

** Protected under US Patent 5,675,320*

Specifications

Operating Voltage ..... 4.5V (three "AA" Alkaline Batteries)

Operating Environment ..... 0°C - 50°C (32° F- 122°F)
5% - 95% RH, non-condensing

Sensitivity:

Glass Type	Thickness	Minimum Glass Size (lxw)	Level 1 Setting	Level 2 Setting
Plate/Tempered	1/8"-1/4" 3-6mm	12"x12" 30cmx30cm	20ft 6m	10ft 3m
Wired/Laminated	1/4" 6mm	18"x18" 46cmx46cm	20ft 6m	DO NOT USE

Battery Guidelines and Installation

Before installing batteries, please note the following guidelines:

- The detector is designed to work with **Eveready Alkaline Energiser "AA"** batteries. Do not install any other type. "No-name" or generic brand batteries may not provide the best quality and dependability.
- Always replace all three batteries at the same time.
- When disposing of used batteries, follow the instructions and precautions printed on the batteries. Many cities and communities have collection sites or services for used household batteries. Contact your municipal offices for information on the disposal of used batteries.

To install the batteries,

1. Remove the detector from its mounting plate by holding the detector by its sides and pushing up as indicated in Figure xx.
2. Observe the correct polarity (see Figure xx).
3. Install the batteries negative (-) side first as shown in Figure xx.

Setting the Dip-Switches

The detector has two user-selectable jumper settings as shown in Figure xx:

SW1 – Alarm Led enable/disable

This jumper enables/disables alarm led operation during alarm indications. The detector is factory preset to SW1-OFF (LED enabled).

SW2 – Level1/Level2 Detection

This a sensitivity selection jumper which may be used to optimize false alarm immunity for certain acoustic environments.

The detector is factory set for Level1 detection (SW2 = OFF). This is the highest sensitivity setting for the detector, and will be suitable for most applications.

For rooms which are smaller, and contain a significant amount of sound-reflective surfaces (such as bathrooms, kitchens, entrances, etc.), Level2 detection (SW2=ON) provides a reduced sensitivity setting which is more appropriate for these environments.

Locating the Detector

The detector is omnidirectional, providing 360° coverage. Coverage is measured from the detector to the point on the glass farthest from the detector as shown in Figure xx.

Guidelines for Optimizing Detection and Avoiding False Alarms

Insert here all bullets from AC-100 sheet 29002508R1 – section "Locating detector"

Testing the Detector

When choosing a location for each WLS-912 glass break detector, the following test should be performed to ensure that it is mounted in the best possible location.

Test Mode Setup:

1. Select a location. Make sure that the Alarm Led is enabled (dip switch J1 =OFF)

2. Place the detector in test mode by momentarily pressing the tab on the base plate, as shown in Figure xx. The detector's led will blink periodically to indicate that it is operating in test mode. Test mode operation is terminated either manually (by momentarily pressing the tab on the base plate), or automatically by the detector (after 10 minutes).

3. Use double-sided tape to temporarily mount the detector in the selected location.

NOTE: The detector will not respond to the glass break simulator unless the test mode operation has been enabled by momentarily pressing the test mode tab on the base plate.

Testing:

The AFT-100 Glass Break Simulator
The AFT-100 glass break simulator generates plate or tempered glass sounds. Use the plate glass setting if you are unsure of the glass type. Observe the following when testing the detector:

- The correct mounting location is indicated by three successive detections. If the detector does not respond each time, relocate the detector and repeat the test.
- If the windows in question are covered by drapes or blinds, place the tester behind the closed window coverings. If the drapes prevent reliable detection, we suggest that the detector be mounted behind the drapes either on an adjacent wall or on the ceiling.
- If there are multiple windows, or one large window, activate the tester at the furthest point on the glass.

Mounting the Detector

Once the location of the detector has been determined, perform the **Module Placement Test** to ensure that the selected location is in range of the wireless receiver (See the Placement Test instructions in the Instruction sheet for your receiver).

[NOTE: ADD FOLLOWING PARAGRAPH TO ALL 900MHZ SYSTEM INSTALLATION MANUALS – RE "MODULE PLACEMENT AND TESTING – Glass Break Detectors":

"Remove the detector from its backplate, wait 5 seconds, then reattach the detector to its backplate. The keypad will then display the test result. An alternative method is to press/hold the test mode tab, wait 5 seconds, then release the test mode tab".]

Once the transmitter range has been verified, the detector can be mounted to the wall.

For mounting to a wall, mount the backplate using the screw holes indicated in Figure xx. The detector can also be mounted on the XXXX-XX ceiling/wall mount bracket using the screw holes indicated in Figure xx.

Once the detector is permanently mounted, repeat the installation tests using the AFT-100 tester to confirm proper operation.