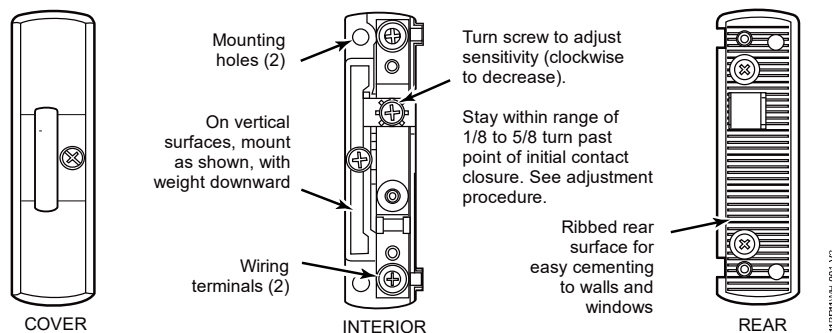


## INSTALLATION AND SETUP GUIDE



## No. 11 TYPE VIBRATION SENSOR

The No. 11BR (brown housing) and 11WH (white housing) Vibration Sensors are used indoors, in closed circuit alarm systems, to protect against intrusion through windows, walls, ceilings, safes, cabinets, etc. 11BR and 11WH are UL Listed only for use as supplemental protection (UL File AMQV: BP547.)

## INSTALLATION CONSIDERATIONS

Two holes are provided in the base for screw mounting. The ribbed rear surface of the base permits cementing to a glass or other smooth surface if necessary.

When installing on a vertical surface, such as a wall, mount the sensor with its long dimension vertical and its interior weighted blade downward, as shown in the illustration.

On a ceiling, the sensor may be mounted directly thereon (upside down) without the use of any bracket.

When protecting a window, mount the vibration sensor on the frame of the window rather than directly on the glass. This reduces the danger of false alarms from heavy vehicles passing by or from tapping on the window by pedestrians.

When connected in a fast response (approximately 10ms) closed circuit protection loop, vibration sensors will initiate an alarm when a blow of sufficient force strikes the protection surface. The sensors can be adjusted to respond on virtually any surface (e.g. plaster, sheet rock, plywood, cement block, brick, glass).

Low frequency vibration caused by normal building vibration has little effect on the sensor, as it is designed to respond much more efficiently to sharp blows.

The sensor contacts are enclosed in an inner compartment that guards against erratic operation in dusty or particle laden environments.

Temperatures ranging from -5° F (-21° C) to 150° F (66° C) had negligible effect on the operation of the sensor in tests conducted by Underwriters Laboratories.

The coverage of vibration sensors on walls and ceilings can be increased if the contacts can be mounted on furring strips. On walls, run furring strips vertically, from the ceiling to about 4 feet from the floor (the distance between them is dependent on the type of construction). On ceilings, run the furring strips from one end of the protected area to the other.

A typical installation for wall protection might consist of vibration sensors mounted 42 to 48 inches above the floor and spaced at 36 to 48 inch intervals along the wall. Optimum locations for vibration sensors can best be determined by experimentation, because of the variety of construction materials and methods that may be encountered.

## ADJUSTMENT AND TESTING

An adjustment screw on the sensor's contact assembly permits sensitivity adjustment with a screwdriver (see illustration above).

## Initial Adjustment

Mount the sensor (leave the cover off). Connect an ohmmeter across the sensor's terminals and slowly turn the adjustment screw counterclockwise to increase sensitivity. With the sensor contacts open, turn the screw slowly clockwise to decrease sensitivity until the desired sensitivity is obtained. The sensor's maximum advisable setting is 1/8 turn (45°) past contact closure.

**Note:** Higher sensitivity is not recommended, as erratic operation and false alarms may result.

## Final Adjustment

Connect the sensor in series with the closed protection circuit intended for it. Light blows with a small hammer, approximately 2 to 3 feet from the sensor, will permit its adjustment for desired response.

The sensor can be made less sensitive by turning its adjustment screw clockwise. Turn it in 1/8 turn steps until the desired response is obtained.

**Caution:** Do not turn the screw more than 1/2 turn clockwise from the maximum advisable sensitivity position described previously or the sensor's contact assembly vibration blade may be permanently damaged.

Replace the sensor's cover (do not overtighten!) and recheck the final adjustment with the cover in place.

## SPECIFICATIONS:

**Length:** 3" (76mm); **Width** 13/16" (21mm); **Height** 5/8" (16mm)

**Contact Rating:** 50mA @ 28VDC (max).

## WARRANTY

For the latest warranty information, please go to:

[www.resideo.com](http://www.resideo.com)

## TO THE INSTALLER

**Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.**

**The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's proper operation at all times.**

This product manufactured by Resideo Technologies and its affiliates.

