ACOUSTIC GLASS BREAK DETECTOR GBS-200

A device for easy and reliable protection against robbery. One sensor covers an entire room, regardless of the number of windows. A dual technology detection method (air pressure and sound analysis) is combined with digital processing to guarantee high sensitivity to the breaking of all types of glass (Plate, Tempered, Laminated, Wired). At the same time, it is highly resistant to false alarms.

FEATURES

The GBS-200 detector has a relay contact output (N.C.), tamper switch (N.C.), a jumper switch for selection of ALARM MEMORY function, a jumper switch for manual testing mode and variable resistor for sensitivity adjustment. There are three LED's on the front side to indicate activation of the pressure filter, activation of the sound filter and alarm (or alarm memory) indication. For increased flexibility, the detector can be mounted either to the ceiling or the wall.

For testing you can use a GLASS BREAK SIMULATOR (model GBT-200), or you can conduct a manual "step by step" test (testing mode).

SPECIFICATIONS:

Input voltage	*10 – 16 V DC*
current consumption	*15 mA*
alarm relay contact	*NC max. 0.5 A / 60 V DC*
tamper switch output	*NC max. 0.5 A / 60 V DC*
max. working distance	*9 m*
operating temperature	*-10 ° C to 55 °C*
dimensions	*100 x 74 x 27 mm*

MOUNTING

The GBS-200 can be mounted on walls and ceilings. The unit must have an unobstructed view of the protected glass (in the case of heavy curtains, mount the unit on the widow frame behind the curtains). After opening the detector unit by pressing down on the plastic lock, take out the PCB module by removing the screw. Then mount the rear housing of the GBS-200 case on the desired surface. After mounting the case, replace the PCB module back in the housing, being sure to secure it with the screw.

WIRING: The terminals marked GND and +12V are connected to the power supply. The two terminals marked NC are the outputs for the normally closed alarm relay contacts. The tamper switch is connected to the TMP terminals.

Testing and adjustment: Switch the 12V power supply ON and wait for 60 seconds (warm-up time). You are now able to test the sensitivity of the low frequency analysis channel. To do this, strike carefully the glass with a cushioned instrument. If the yellow LED on the detector flashes, then the low frequency sensitivity is suitable. If the sensitivity is too low, adjust it with the variable resistor PR1 (clockwise direction for higher sensitivity). If the yellow LED flashes randomly, the sensitivity is too high and you should use the PR1 resistor to lower the sensitivity by turning it counter-clockwise.

For testing of the high frequency analysis channel and also for complete testing, you should use the GBT-200 simulator (refer to instructions in the simulator manual). Or, you can conduct an easy manual test. For manual test mode, open the AUDIO jumper. In this mode the green LED flashes when you generate a high frequency sound of breaking glass. You can simulate this sound easily with a piece of foamed plastic (enclosed with each detector). To generate this high frequency sound rub the protected glass with a wet piece of foamed plastic. If the green LED flashes as a result of this sound, close the AUDIO jumper and detector is now ready to work.

Alarm memory function: If you want this function, close the MEM jumper. As a result, the red LED will remain lit after the alarm is triggered.

You can reset the memory by opening the MEM jumper or disconnecting the power. If you remove the MEM jumper, the red LED will light only during ALARM output pulse and will reset automatically. This function is particularly helpful in determining which unit was triggered in a multiple detector installation.

Final testing: To ensure maximum protection against false alarms, try to activate any device in the area that may automatically cycle such as pumps, generators, heating/air-conditioning, etc. If the cycling device triggers an alarm, mount the unit in a different location.
There is no need to relocate the detector if the cycling only triggers the low frequency channel (the yellow LED flashes) and not the high frequency channel.

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