



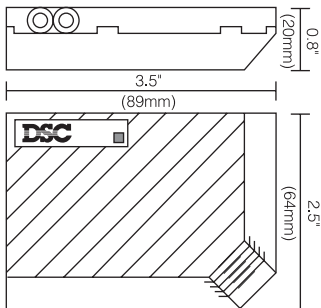
# DG-50 Glassbreak Detector

## Installation Instructions

### Features

- Clean, modern design blends with any decor
- Advanced signal discrimination for accurate identification of breaking glass
- Resistant to blinding by background noises
- Sensitivity adjustment potentiometer
- Anti-shock design prevents false alarms from mechanical shock
- MOV static/lightning protection
- SMD construction and integral ground shield for high RF immunity
- Models
  - DG-50A Form A alarm contact
  - DG-50B Form A alarm contact and tamper contact
  - DG-50C Form C alarm contact and tamper contact

### Dimensions



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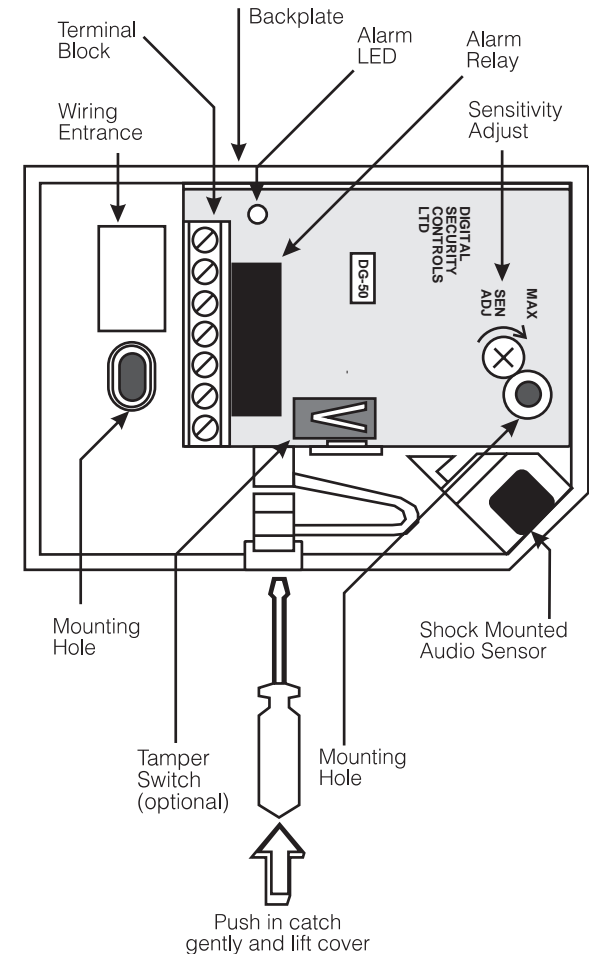
As with all DSC products, the DG-50 Glassbreak Detector has been designed with careful attention to the smallest details. The DG-50 incorporates features and refinements which make it superior to any other product of its kind and provides accuracy and reliability which are second to none.

### Specifications

- Voltage input 9-16 V<sub>DC</sub>
- Supply Ripple 1 V P-P max.
- Current 15 mA @ 12 V<sub>DC</sub>
- Operating Temperature 14°F to 122°F (-10°C to 50°C)
- Humidity (non-condensing) 95% max. RH
- Contact Rating 24 V<sub>DC</sub>, 100 mA max.
- Alarm Duration 3 seconds
- Coverage
  - Max. sensitivity - 35' x 35' (10m x 10m)
  - Min. sensitivity - 10' x 10' (3m x 3m)
- Mounting Surface
- Color Designer White

### Description

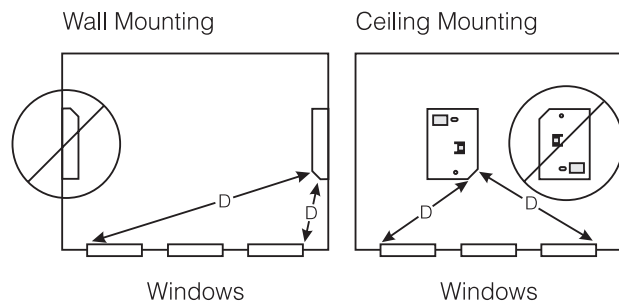
The DG-50 is an acoustic glassbreak detector designed to listen for the specific sonic frequencies of breaking glass. The DG-50 is equipped with multi-level discriminating circuitry to maximize its response to breaking glass and minimize its response to normal environmental noises. As well, the DG-50 is extremely resistant to seismic shock and will not alarm in response to a slamming door or even a tap on the case.



## Locating the Detector

Since the energy of breaking glass is transmitted through the air, the location of the detector, relative to the window(s) to be protected and the furnishings in the room are important considerations.

Sound absorbing materials such as curtains, rugs, acoustic tile, wall coverings and plush furniture reduce the energy received by the detector. To assist in establishing proper operation, use the DG-50ST acoustic tester and adjust the sensitivity as required.



## Sensitivity Adjustment

If the sensitivity is too high, turn the adjustment counter-clockwise and if reliable detection is not achieved, increase the sensitivity by turning the adjustment clockwise. Sensitivity should not be adjusted any higher than necessary to achieve reliable detection.

## Setup

Use the double-sided tape provided with the detector to temporarily mount the detector in the selected location and with the DG-50ST tester, verify that the detector responds consistently.

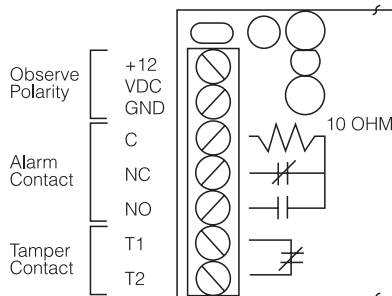
Place the DG-50ST tester against the window to be protected and operate 3 times. If the detector does not respond each time, relocate the detector or

adjust the sensitivity and repeat the test. If there are multiple windows or one large window, use the tester at the extreme location. When the detector responds consistently, it can be permanently mounted using the supplied screws.

If there are drapes or curtains that can be closed to cover the window(s), they should be closed for the setup tests. Hold the DG-50ST tester between the drapes and the window. If the curtains or drapes prevent reliable detection, it is suggested that the detector be mounted behind the drapes either on the wall or the ceiling.

## Mounting the DG-50

Once the location has been determined, open the detector by pressing the release tab on the bottom with a small flat-blade screwdriver. Remove the cover and set in a safe location. Draw the wires through the rectangular opening in the backplate and connect to the terminal block. Observe polarity for power wiring. Mount the detector using the two mounting screws. Once the detector is permanently mounted, repeat the installation tests using the DG-50ST tester to confirm proper operation.



### Notes

1. Contacts are shown with the DG-50 energized in the non-alarm state.
2. Contacts shown are for the model DG-50C.
3. The model DG-50A includes NC alarm contact only.

### DG-50 USED WITH TEMPERED GLASS

To ensure glass break detection on tempered plate glass, the DG-50 must be mounted directly in front of the surface to be protected at a maximum distance of 12 feet and a minimum distance of 5 feet. For difficult applications location of the unit must provide a direct line-of-sight between the DG-50 and the protected glass at an angle not to exceed 45 degrees. A rule of thumb for most applications is to locate the DG-50 approximately the same distance from the surface to be protected as the distance between the center of the glass and the ceiling of the room.

**Limited Warranty** Digital Security Controls Ltd. warrants that for a period of twenty-four months from the date of purchase by the original buyer, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its factory. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls Ltd. such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Digital Security Controls Ltd. This warranty contains the entire warranty. Digital Security Controls Ltd. neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty or liability concerning this product.

In no event shall Digital Security Controls Ltd. be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

**Warning:** Digital Security Controls Ltd. recommends that the entire system be tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.