

## INSTRUCTION MANUAL

### INTRODUCTION:

Thank you for selecting the Glasstrek "glass break" detector, designed for professional security applications. Please follow the instructions in this manual carefully to optimize use of your Glasstrek detector, which has been 100% quality control tested to ensure proper operation and unit durability. Glasstrek's innovative Model 456 incorporates state-of-the-art audio frequency glass break detection and infra-sound impact analysis in its full spectrum, Model 456 can recognize the characteristic sound created when glass is broken. Continuous sensitivity adjustment is provided so that false alarm is avoided. You have got Glasstrek, the most advanced glass break detector available on to-day's security market.

### APPLICATION:

Glasstrek delivers effective coverage in the presence of plate, tempered, and laminated glass, with easy sensitivity adjustment. However, since optimal performance is dependent on secure and vibration-free mounting, there must be no play between the panes under surveillance and their framework. Glasstrek can be used in most protected areas, including glass display panel and rooms with blinds, curtains, or multiple windows, as long as careful coverage tests are conducted using Testtrek sound generator. **Glasstrek detector should not be connected to 24 hour protection zones.**

### FEATURES:

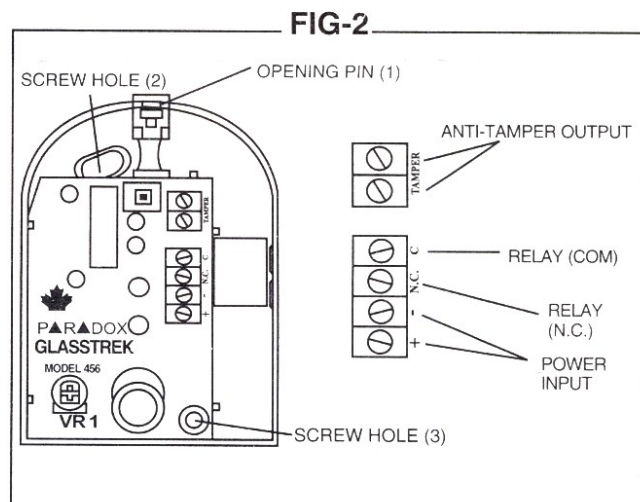
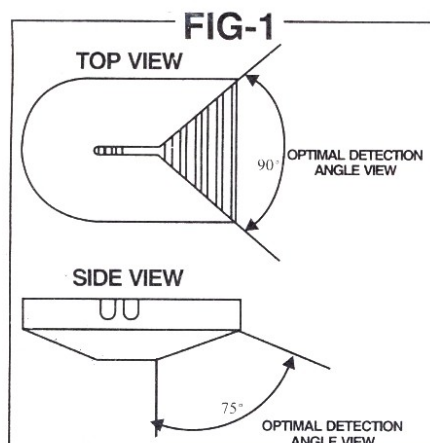
1. Software driven, 8/12 bit microprocessor-controlled digital signal processing (8 MHz).
2. High frequency sound pressure detection.
3. Full audio spectrum 7 frequency signal and impact analysis including infra-sound pressure analysis
4. Digital RFI/EMI filtering, extremely high immunity.
5. Unique acoustic microphone chamber and casing design.
6. Manual sensitivity settings to avoid false alarm.

### LOCATING GLASSTREK:

A good location must be selected for optimal Glasstrek detection performance. Look for installation locations on the ceiling or walls adjacent or opposite to the protected glass. Avoid proximity to noisy objects such as bells, fans, compressors and loud machinery. Determine the exact location and orientation of Glasstrek by making sure that the microphone side of the detector has a direct and unobstructed view of the protected glass and that the detector is positioned so that the protected glass lies within the optimal detection angle. If Glasstrek is on a wall opposite to the protected glass, this may affect the efficiency of detection if the glass to be protected is outside the optimal detection angle. See Fig.1.

### INSTALL GLASSTREK: (Refer to Fig.2)

- 1) Remove the cover by pressing the opening pin(1) on the side of the detector.
- 2) Run the wire through one of the holes at the back or side openings of the case.
- 3) Connect the terminals.
- 4) Mount the detector in its location with a screw inserted into screw holes (2) and (3).
- 5) Setting of sensitivity.
- 6) Replace the cover.
- 7) Test the Glasstrek.



## SETTING THE SENSITIVITY

The Glasstrek includes unique patented Yellow turbulence LED. This LED flashes when environmental noise is high enough to cause false alarms, thereby allowing instant sensitivity setting.

To set sensitivity, hold a thin flexible plastic ruler flat against the inside of a glass window within the unit's protection range. Rick up one end of the ruler while holding the other end down, and then let the ruler snap against the glass window. This should cause the Yellow LED to come ON, but the Red LED should not light. If the Red LED comes ON with a slight snap, the Glasstrek may be too sensitive, and the sensitivity control VR should be turned counterclockwise with a small screwdriver. If the Yellow LED does not come ON, the sensitivity should be increased by turning the VR clockwise. Continue snapping the ruler on the window until the Yellow LED comes ON but the Red LED does not. Repeat this process With each window to ensure that Glasstrek is set for every pane of glass.

When the correct sensitivity is found using the above procedure, determine whether the sensitivity is high enough to trigger the alarm (red LED ON) by snapping the ruler harder to simulate a break-in. If the Red LED does not come ON, the sensitivity must be increased.

When setting sensitivity, make sure that the room's environment is as close as possible to what it will be when the Glasstrek is in use. For instance, if the curtains are usually closed at night when the alarm is armed, then set sensitivity with the curtain closed. If a window in the room is left open, then set the sensitivity with window open. The sensitivity should always be retested when the environment of the room changes, such as when furniture is moved.

Note: Do not set sensitivity any higher than necessary to protect the glass in the detector's range. Setting sensitivity higher than needed increases the chance of false alarms without increasing protection. Leaving a door or window open will also increase the chance of false alarms.

### GLASS BREAK SIMULATION TEST BY METER:

When using Testtrek meter, move to the part of the protected surface furthest from the Glasstrek detector to conduct the test. Press and hold the "push" switch on the Testtrek until a full glass break test tone is generated. The Glasstrek's red LED should respond to this tone. If the red LED does not respond to the test tone, the sensitivity should be increased (turn VR clockwise).

### SPECIFICATION:

Power	12VDC (7.5V-15V)
Current Drain(Standby)	5mA
Current Drain(alarmed)	80mA
Detection Output	N.C.contact
Tamper Output	N.C.contact
Yellow LED	Indicates environmental noise level
Red LED	Indicates trigger signal sent to alarm
Temperature Range	-10°C to 50°C
Case Construction	ABS Fire Resistant Plastic