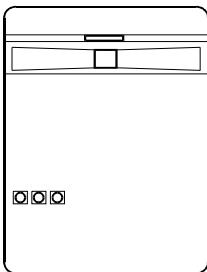


# Honeywell



## FlexGuard® Dual Technology Glassbreak Detector INSTALLATION INSTRUCTIONS

**Model**  
FG-730 30' range

The FG-730 is a **dual technology** glassbreak detector that uses flex detection and audio discrimination to detect breaking glass.

The flex and audio technologies are sensitive to different frequencies. The flex technology is sensitive to ultra low frequencies, the type generated by a blow to a glass window. The audio technology detects the frequency of breaking glass.

The audio technology remains off until the flex technology detects a blow to the glass. For an alarm condition to occur, the audio must detect the frequency of breaking glass within a defined time-window *after* the flex detects a blow to the glass. Because both technologies must detect and verify glass breakage, **false alarms are virtually eliminated**.

### FEATURES

- Dual flex/audio technology
- Low 10 - 14 VDC operation
- Low 25 mA at 12 VDC current draw
- No adjustment on audio
- Adjustment on flex detection to fit characteristics of each location
- Alarm memory
- Indicator LEDs
- Energized form C alarm relay
- Circuit protection
- Cover tamper switch
- Noise burst rejection circuit
- RFI immunity
- UL listed

### MOUNTING LOCATION

The FG-730 can be mounted on walls, in corners, even on false or suspended ceilings. Refer to the guidelines below when selecting a mounting location.

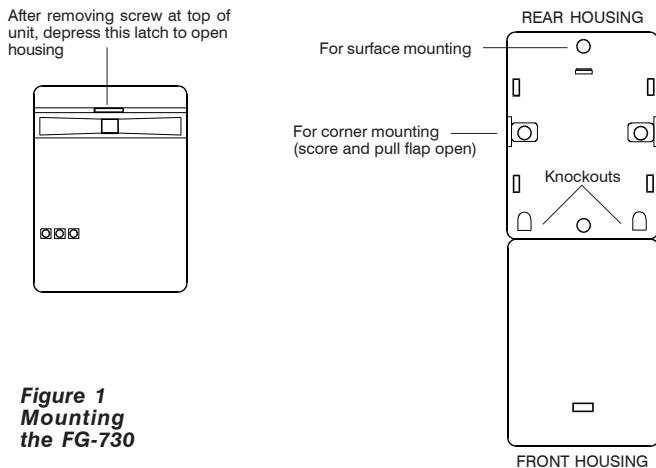
- The unit must have a direct line of sight to, and a clear view of, the protected glass.
- Locate the FG-730 **within 30'** (9 m) of the glass to be protected.
- Curtains, blinds, and other window coverings will absorb energy from breaking glass. Heavy curtains, for example, will effectively block the sound signal. In these cases, mount the unit on the window frame behind the window covering, or above the window. **Make sure to test the unit thoroughly for proper detection.**
- Do not mount the unit in front of air ducts or forced air fans, or close to bells measuring 2" (5 cm) or larger in diameter.

### MOUNTING PROCEDURE

Orient the unit as shown in Figure 1. Remove the screw located at its top. While depressing the latch near the top of the unit, swing the front cover forward. Use the back cover as a template to mark holes for the mounting screws and wiring, then drill the holes.

- **Note:** If you plan to corner-mount the unit, remove the printed circuit board *before* marking and drilling holes for the mounting screws.

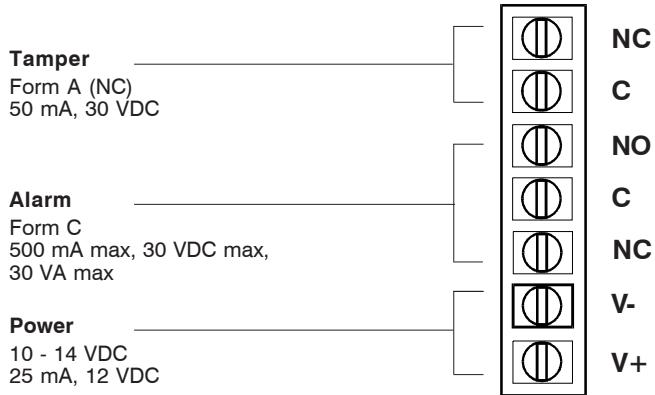
Pull the wiring into the unit through the back cover. Using the two mounting screws, mount the rear housing at the desired location.



**Figure 1**  
**Mounting**  
**the FG-730**

### WIRING

Observing the proper polarity, wire the unit as shown in Figure 2 (use 22 to 14 AWG). Reverse-polarity connections will not damage the unit.



**Figure 2** FG-730 Terminal Strip

### FLEX ADJUSTMENT

*To adjust the flex technology:* Use a screwdriver to set the flex sensitivity control (R5) at MAXIMUM by turning it all the way clockwise. Refer to Figure 3 on the back side of this page.

Turn on any heating/air conditioning system in the vicinity and observe the yellow flex LED (DS2) for approximately one minute. Excessive subsonic (inaudible) noise typically produced by air handling systems may cause the flex LED to flash randomly.

If it flashes randomly, turn the R5 control counterclockwise just until the flashing stops.

### TESTING THE FG-730

Use the FG-701 Glassbreak Simulator to test the FG-730 detector. The FG-700 may also be used.

Activate the simulator in MANUAL mode at the farthest point of the glass to be protected (30' maximum). If the green LED (DS1) on the detector flashes, the audio technology will detect breaking glass at that distance.

Test the flex technology by carefully striking the glass with a cushioned tool. If the yellow LED on the detector flashes, the flex technology will be sensitive enough to detect a blow to the glass at that distance.

## Testing the FG-730 (continued)

Switch the FG-701 simulator to the FLEX mode and generate a flex signal by carefully striking the glass. The simulator will automatically generate a burst of glass-break sound, and the red LED (DS3) on the FG-730 should light to indicate an alarm condition.

See the FG-701 operating instructions for additional testing information.

## FINAL TESTING

To ensure maximum protection against false alarms, activate any device in the area that may automatically cycle: pumps, generators, heating/air conditioning units, etc. If the cycling devices trigger an alarm, mount the unit in a different location.

There is no need to relocate the detector if the cycling only briefly triggers the flex technology (the yellow LED flashes).

## ALARM MEMORY

The FG-730 is equipped with a latching circuit for the alarm LED. When the latching circuit is activated, an alarm condition will make the red alarm LED on the units latch on. This feature is particularly helpful in determining which unit alarmed in a multiple detector installation.

To activate the latching circuit, install a jumper at position W2 on the printed circuit board. Refer to Figure 3. To reset the latched alarm LED, remove then restore power to the detector.

**Note:** The latching circuit has absolutely no effect on the alarm relay. The alarm relay will continue to function as normal.

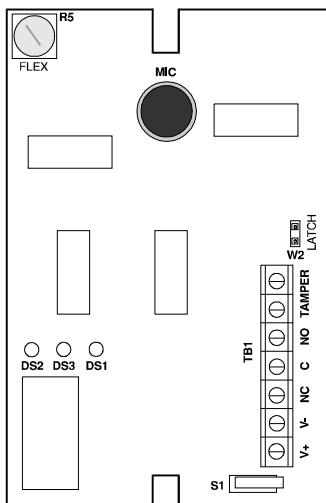


Figure 3 Testing the FG-730

## SPECIFICATIONS:

**Range:**  
FG-730 30' (9 m)

**Approvals:**  
UL listed  
CE

### Alarm relay:

Form C  
500 mA max  
30 VDC max

To obtain applicable EU compliance Declaration of Conformities for this product, please refer to our Website, <http://www.security.honeywell.com/hsc/international/index.html>. For any additional information regarding the compliance of this product to any EU specific requirements, please contact:

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Newhouse Industrial Estate  
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Tel: +44(0)1698 738200  
Email: [UK64Sales@Honeywell.com](mailto:UK64Sales@Honeywell.com)

### Tamper switch:

Form A (NC)  
50 mA, 30 VDC

**Power requirements:**  
10 - 14 VDC  
25 mA, 12 VDC

**Dimensions:**  
3.9" H x 2.4" W x 0.79" D  
(98 mm x 61.5 mm x 20 mm)

**Weight:**  
3 oz (85 g)

**Operating temperature:**  
32° F to 120° F (0° C to 49° C)  
(Indoor use environment)

**Glass types:**  
1/8", 3/16", and 1/4" plate;  
1/4" laminated, wired, and tempered;  
minimum size 10-7/8" x 10-7/8",  
single pane



**NOTE:** The FG-730 should be tested **at least once each year** to ensure proper operation.

**Important:** The FG-730 must be connected to a UL listed power supply or UL listed control unit capable of providing a **minimum of four hours** of standby power.

## IMPORTANT NOTICE

### All FlexGuard® Glassbreak Detectors

Due to the variation of acoustics in different environments, (i.e. ceiling mount units, big open rooms, soft environments), all units must be tested with the FG-701 Glassbreak Simulator. No unit should be mounted outside the effective range of the simulator.

For the latest U.S. warranty information, please go to: [www.honeywell.com/security/hsc/resources/wa](http://www.honeywell.com/security/hsc/resources/wa) or Please contact your local authorised Honeywell representative for product warranty information.

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