BLAUPUNKT

User Manual

GLASS BREAK DETECTOR
BP-GBD01



Enjoy it.

1.0 Specifications

Detection distance: up to 4.6m (15ft.),
omnidirectional, no minimum distance
Operating temperature: -20°C to 50°C (-4°F to 122°F)
Alarm duration: 5 seconds (not affected by alarm LED latching)
Alarm relay: Type C, 125mA, 25VDC
Tamper switch: front cover and wall tamper
Maximum 25mA, 24VDC
Anti-axial interference: 30V/m, 10MHz-1000MHz

Anti-static interference: 10kV in the case of discharge
Power supply requirements: 6-18VDC;
Typically 16mA at 12VDC
22mA max, (latching LED)

AC ripple: 4V peak-to-peak at 12VDC
Size: (4.5in.H*28in.W *1.05in.D)
Weight: 98g (3.5oz.)
Packaged product: 126g (4.5oz.)

2.0 Installation Consi

derations

NOTE: Always pre-test the detector's location using the Glass Breakage Tester.

▶Do Not…

…Mount the detector with obstructions between the glass being protected and the detector.
…Mount on the same wall as the glass being protected.
…Mount the detector closer than 5 ft. (1.5 m) to the wall that the glass being protected is on, or any hard, sound reflecting surface.
…Mount closer than 2 ft. (0.6 m) to heating or cooling outlets;mount as far away as possible. If drafts from these outlets blow on the detector, select a different location for the detector. Use the environmental test (see Section 4) to verify good installation locations.
…Install on 24-hour protection circuits.

▶If you must inst

all the detector in a zone that is armed when occupied...

…Avoid acoustically live areas such as kitchens and bathrooms.
…Use a delay zone to provide the user time to acknowledge the false alarms.
…Instruct system users how to respond to a false alarm. The best mounting location is 10 to 20 ft. (3 to 6 m) from the glass, in-line with the glass's center, and on the ceiling or opposite wall of the glass being protected. Do not exceed maximum range.
…The detector should be within ±30° of the center of the glass to be protected.
…Range will be reduced in areas that are acoustically soft. This may be due to carpeting, drapes, plants, or other sound absorbing materials. Glass Breakage Tester should be used to verify range in all installations.
…Glass break detectors are intended only as a component of a perimeter protection system. They should always be used in conjunction with motion sensors.
…Glass breakage detectors are designed to detect the breakage of framed glass and may not detect such things as bullet holes, spontaneous breakage of glass (with no impact), and removal of glass.

▶Maximum range:

The maximum detection range is 15 ft. (4.6 m) from the farthest corner, for glass sizes 12" by 12" (0.3 m by 0.3 m) and larger.
Hint: Tie a 15 ft. (4.6 m) string to the detector. The string should be able to touch every part of the glass being protected. If any part of the glass can not be touched by the string, it is outside of the detector's coverage and additional detectors should be used.

3.0 Selecting a Mounting Location

Opposite Wall Mounting

▶Mount the detector where there are no objects between itself and the glass.
▶Do not mount the detector closer than 5 ft. (1.5 m) to the wall that the glass being protected is on, or any hard, sound reflecting surface.
▶The detector should be within ±30° of the center of the glass to be protected (line B in Figure A).

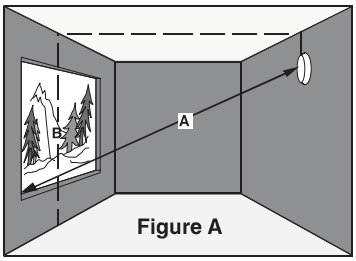


Figure A

▶Make sure the detector is no farther than 25 ft. (7.6 m) from any corner of the glass (line A in Figure A).

Ceiling Mounting

▶The recommended location is half the distance between the glass and its opposite wall or 2/3 of the rated range, whichever is smaller.
• Mount the detector where there are no objects between itself and the glass.
▶Mounting to drop ceiling tiles is acceptable.

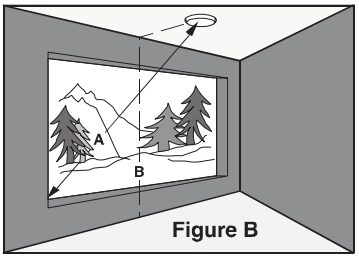


Figure B

▶Do not mount the detector closer than 5 ft. (1.5 m) to the wall that the glass being protected is on, or any hard, sound reflecting surface.
▶Make sure the detector is no farther than 15 ft. (4.6 m) from any corner of the glass (line A in Figure B).
▶The detector should be within ±30° of the center of the glass to be protected (line B in Figure B).

Adjacent Wall Mounting (not preferred)

▶Mount the detector where there are no objects between itself and the glass.
▶Do not mount the detector closer than 5 ft. (1.5 m) to the wall that the glass being protected is on, or any hard, sound reflecting surface.
▶Make sure the detector is no farther than 15 ft. (4.6 m) from the farthest corner of the glass (line A in Figure C).

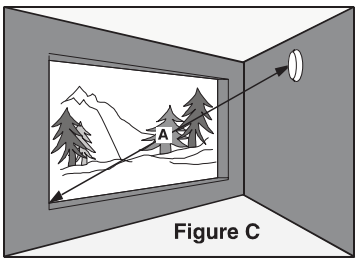


Figure C

Multiple Detectors

In some installations, multiple detectors must be used to protect larger glass.
As a general rule, if the glass is wider than 10 ft. (3 m), multiple detectors should be used.
▶Place each detector in-line with the center of each 10 ft. (3 m) section of glass.

▶Space the detectors evenly across the glass, but no farther than 10 ft. (3 m) apart (line B in Figure D).
▶Do not mount the detector closer than 5 ft. (1.5 m) to the wall that the glass being protected is on, or any hard, sound reflecting surface.

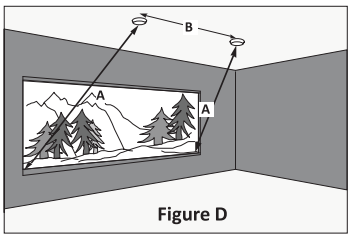


Figure D

▶ Make sure each detector is no farther than 15 ft. (4.6 m) from any corner of its 10 ft. (3 m) section (lines A in Figure D).

4.0 Testing

The MD-343 should be tested at least once a year using the FG-701 glass break simulator. It can also be used for testing if the FG-701 glass breaking simulator is set to high temperature glass sound. Other simulators cannot accurately test the detection distance.

To enter test mode manually:

1. Open the face cover

2. Use a screwdriver to short-circuit the test mode points on the printed circuit board (refer to the diagram on the next page)

3. Cover the top cover.

The detector green LED indicator flashes approximately once per second to indicate that the detector has entered test mode.

To enter test mode with FG-701:

1. Stand within 4.6m (15ft) of the detector.

2. Set FG-701 to "Start" and "Manual" mode.

3. The front end of the emulator points to the detector. Press the red "Start" button and the emulator beeps briefly. When the detector enters test mode, the detector's green LED flashes approximately once per second. If the green light is not on, bring the emulator close to the detector and repeat the above steps.

Test detectors (low frequency and acoustic signals)

Test the MD-343 as follows:

1. Start the detector into test mode.

2. Turn the FG-701 switch to the "Test" and "Low frequency" positions.

3. Place the FG-701 at the furthest point on the window and point towards the detector.

If the window has a cover, close the cover and use the FG-701 to test between the window and the cover.

4. Press the red "Start" button. The emulator will initiate an 8S arming time.

5. Use a cushioned tool to carefully tap the glass to create a low frequency signal.

The FG-701 will have a glass breaking sound response. If the detector receives both low frequency and audible signals, its red warning light will illuminate. (Test mode red warning light is not latched)

Test the detector (only for sound signals):

The FG-701 can also be used to test the detector's ability to receive only acoustic signals. (For more information, see FG-701 Operating Instructions)

When the detector receives an audible signal, the green light will flash.

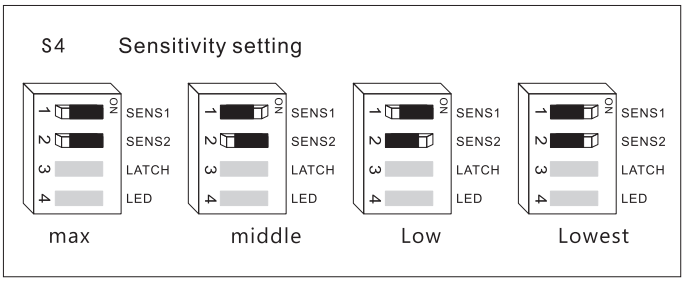
To exit test mode:

After completing the test, exit the test mode in the same way as entering the test mode.

If the MD-343 does not detect an event signal within 5 minutes, it will automatically exit the test state.

5.0 DIP switch function

1 and 2 switches are sensitivity switches
3 The switch is the function switch of the lock alarm indicator light, which locks when it is ON, and does not lock when it is OFF (lights on for 5 seconds)
4 The switch is a function switch for controlling the indicator light. When it is set to ON, the indicator light is on, and the OFF indicator light is off.



6.0 Detection sensitivity (range)

The maximum detection range of the detector is 4.6m, and the sensitivity of the detector can be set.
Detection range using the FG-701 Glass Break Simulator.

7.0 Alarm lockout LED indicator setting

When the DIP switch 3 is set in the ON state, the two LED indicators are in the waiting mode, ready to enter the enabling mode. When the detector alarms, the red light is on and it is blocked.

(Alarm duration is not affected by latching alarm LEDs.)
The alarm LEDs can be restored to normal by powering off/on, or by putting the detector in and out of test mode.

The detector has two LEDs: a green event LED and a red alarm LED. When the LEDs are enabled, they display the working status of the detector in different bright ways. The following table lists the LED information.

Status	Green LED	Red LED
Normal, no event	OFF	OFF
OK, event detected	Flashing	OFF
Normal, alarm latching	OFF	ON
POST	On for one second	On for one second
Low voltage	On/off alternately	On/off alternately
Test Mode	On once per second	OFF
Test mode, event detected	Flashing	OFF
Test mode, alarm	Flashes once per second	Bright for 5S

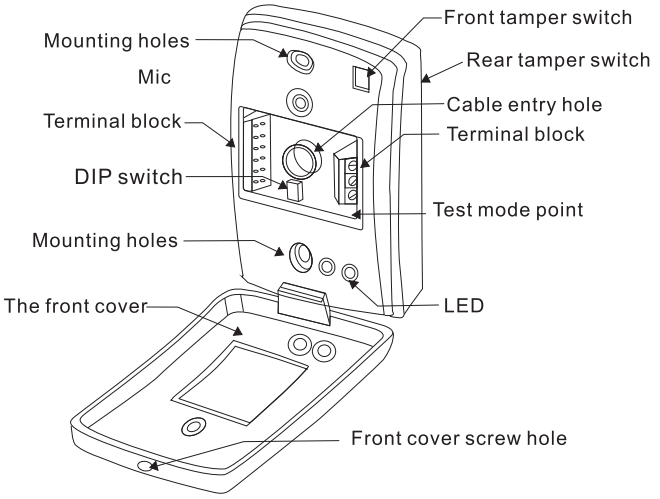
8. 0 Nominal Glass Thickness Table

Types	Rated thickness	
	min	max
Ordinary glass*	2mm(3/32in.)	10mm(3/8in.)
Tamper-proof glass	3mm(1/8in.)	10mm(3/8in.)
Laminated glass	3mm(1/8in.)	14mm(9/16in.)
Wired glass	6mm(1/4in.)	6mm(1/4in.)
Film glass[b]	3mm(1/8in.)	6mm(1/4in.)
Double insulating glass	3mm(1/8in.) [13mm(1/2 in.)overall]	6mm(1/4in.) [19mm(3/4 in.)overall]
Ordinary glass	7-8mm	400*400

The minimum size of all kinds of glass is 28 square centimeters, and the glass must be framed in the room or installed in a partition wall with a width of more than 0.9m (36in.). It can only be detected when both sides of the glass are shattered. The thickness of the safety film of the laminated glass should not exceed 0.35mm (14mils).

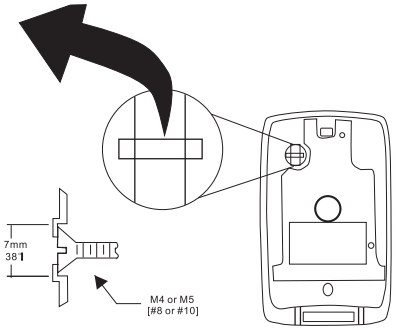
9.0 Front cover screws

After the detector is installed, in order to protect the front cover, the prefabricated holes on the front cover can be knocked out, and a #4 (2.2mm) screw can fix the front cover.



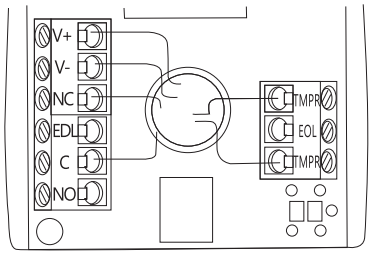
10.0 Wall tamper switch enable

Remove the plastic sheet from the back of the detector.
Install the tamper switch screws as shown.
Adjust the screw depth so that the screw just presses the switch into the hole after the detector is installed.

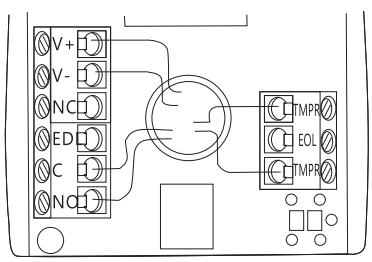


11.0 Detector connection

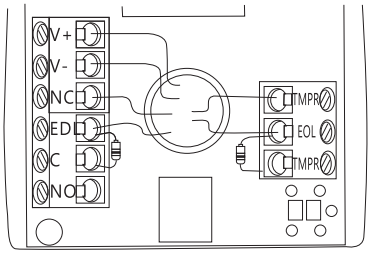
Use 18-22AWG wire with the end stripped (1/4) to connect the detector. As shown in the following figure, use the correct connection method:



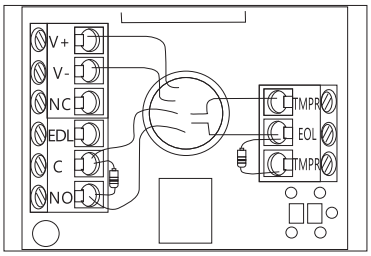
Normally Closed Loop (NC) / No EOL Resistor



Normally Open (NC) / No EOL Resistor



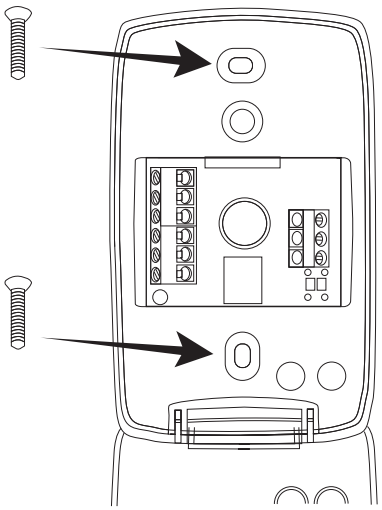
Normally closed loop (NC)/with EOL resistance



Normally open circuit (NC)/with EOL resistance

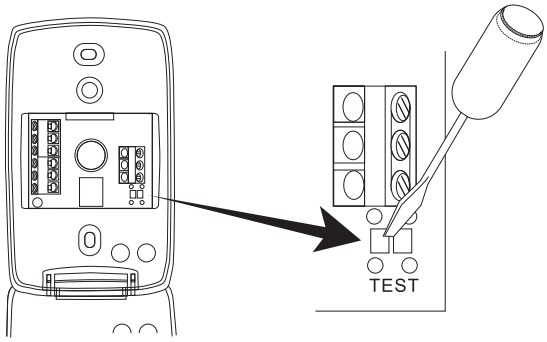
12.0 Install the detector

If used, place the detector on the wall tamper switch.
Use mounting holes as templates to mark ceilings or walls.
Install the detector using a suitable tool.

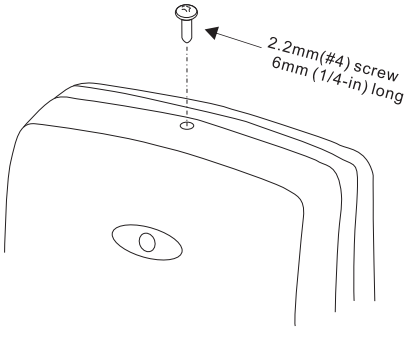


Test the detector installation

Use the FG-701 to enter test mode (see detector instructions on next page) or manually enter test mode by shorting the test mode point.



Install the front cover screws (optional)



For Inquiries, Please contact:

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