

Instructions

P R D O X
SECURITY SYSTEMS®
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Overview

GlassTrek delivers effective coverage of plate, tempered, and laminated glass without the need for special sensitivity adjustments. GlassTrek can be used in most protected areas, including rooms with blinds, curtains, or multiple windows, as long as careful coverage tests are conducted using TestTrek. Breakage in panes of glass 40.6cm x 61cm (16in x 24in) or larger will be detected, for every standard thickness of plate (0.3cm x 0.6cm or 1/8in-1/4in).

DG457	Digiplex Mode or Stand-Alone Mode
457	Stand-Alone Mode only

! The GlassTrek detector should not be connected to 24 hour protection zones. Installation is not recommended in protected areas that contain any of the following: windows with closed wooden interior shutters, windows with insulated, lined, or sound-muffling drapes, and rooms with ceilings higher than 4.5m (15ft). If ceiling-mounted, it should not be mounted in rooms smaller than 3m x 3m (10ft x 10ft) where loud noise is common or rooms where machinery noise is present.

Installation Location

Look for installation locations on the ceiling or walls adjacent or opposite to the protected glass and ensure that the installation will respect the detection angle as shown in figure 1. Make 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. Avoid proximity to noisy objects such as bells, fans, compressors and loud machinery.

Installing GlassTrek (see figure 3)

1. Remove the cover by pressing the opening pin (A) on the side of the detector.
2. Remove the PCB and run the wires through one of the openings on the side (C) or back (D) of the case.
3. Mount the detector in its location by drilling screws into the screw holes (B).
4. Connect the PCB terminals (see figure 2).
5. Replace the PCB and close the cover.
6. Test the GlassTrek (see "Test Mode" under "Utilities").

Powering Up

After the initial power up sequence, the GlassTrek unit remains in test mode for approximately 1 minute.

Display Mode

Red LED:

1. Intermittent flashing takes place upon recognition of high level attack signals. (Can be tested by clapping or knocking close to the detector.)
2. 5-second illumination if a glass break is detected when alarm memory latch is "off" (J1 ON).
3. Continuous illumination upon detection of a glass break when alarm memory latch is "on" (J1 OFF).
4. 3-minute continuous flashing indicates unit is in "test" mode.

Green LED:

Will flash intermittently when spectrum analysis is in progress, indicating attack analysis has been successfully confirmed and part of the frequency spectrum is valid.

Detector Settings

Step	Details	
1 Operational Mode	Jumper	J3 ON = Combus mode; go to step 2 J3 OFF = Relay mode; go to step 3 (default)
2†		Enter detector programming mode. Press and hold [0] + [INSTALLER CODE] + [4003] (EVO) + S.N. (located on PCB)
3 Sensitivity Setting		Regular sensitivity If the environment has damping materials such as drapes, carpets, furniture. Install at 1.2m to 9m (4ft to 30ft) from the protected glass. Low sensitivity If the environment produces echoes, as when the walls and ceilings are concrete or metal. Install at 1.2m to 4.5m (4ft to 15ft) from the protected glass. Section [001]:[1] OFF = Regular Sensitivity (default) [1] ON = Low Sensitivity
	Jumper	J2 OFF = Regular Sensitivity (default) J2 ON = Low Sensitivity
		When an alarm occurs, the alarm relay remains latched for 5 seconds. The alarm memory feature can also latch the red LED upon detection.
4 Alarm Memory		Alarm memory disabled: The red LED illuminates for 5 seconds. Alarm memory enabled: The red LED remains on (latched) until you set jumper J1 on and remove it again, or you disable Alarm Memory in section [001], or you disconnect and restore power to the detector. Section [001]:[3] OFF = Alarm memory disabled (default) [3] ON = Alarm memory enabled
	Jumper	J1 OFF = Alarm memory enabled J1 ON = Alarm memory disabled (default)
5 Tamper Recognition		Select tamper recognition settings Section [001]:[5] OFF = Tamper recognition disabled (default) [5] ON = Tamper recognition enabled

† = DG457 only

Utilities

To test the GlassTrek detector you must enter test mode and use a TestTrek unit (459).

1. With the TestTrek unit (V2.0 or higher) within 2.5m (8ft) of the GlassTrek, hold the test button down. A series of beeps is produced which signals the GlassTrek to enter test mode. You can also enter 123 in section [002], or remove and replace Jumper J1.
2. The red and green LEDs illuminate for 5 seconds, followed by an intermittent flashing of the red LED to indicate it is in test mode. GlassTrek will exit test mode after approximately 3 minutes.
3. Place the TestTrek unit near the protected window and then press the red "push" button on the TestTrek unit. A beep is produced.

Test Mode

Red + Green LED = Test OK

The GlassTrek has detected the signal and generated an alarm.

Green LED only = Test Failed

Perform another test by carefully striking the protected surface with a cushioned tool. If both LEDs still do not illuminate, increase the sensitivity of the GlassTrek detector, or re-position the GlassTrek detector, or the room may be too large to support the GlassTrek detector.

Used for trouble-shooting, the voltage meter indicates the GlassTrek's input voltage.

Voltage Meter†

Enter section [900]. The 3-digit number that appears on the screen represents input voltage x 10 (e.g. [133] = 13.3V).

† = DG457 only

Technical Specifications.

Voltage	9 - 16Vdc
Current	DG457 (35mA) 457(25mA)
Coverage	High: 9m (30ft) / Low: 4.5m (15ft)
Size	9cm (3.5in) x 6.6cm (2.6in) x 2.5cm (1in)
Weight	100g (4oz)
Alarm output	150mA, 28VDC, Form A (N.C.) / via combus
Anti-tamper output	150mA, 28VDC, Form A (N.C.) / via combus
Operating temp.	-20°C to 50°C (4°F to 122°F)
Processing	<ol style="list-style-type: none"> 1. Attack rise time 2. Attack sound pressure level 3. 7-band audio spectrum analysis 4. Envelope duration 5. Infra-sound
Microprocessor type	12/8-bits
Compatibility	All Digiplex series (DGP/DGPNE) and all EVO series control panels.
Testing tool	TestTrek (DG459)
Certification (i.e. CE, UL)	For updated information, visit www.paradox.com

Warranty

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Figure 1: Detection Angle

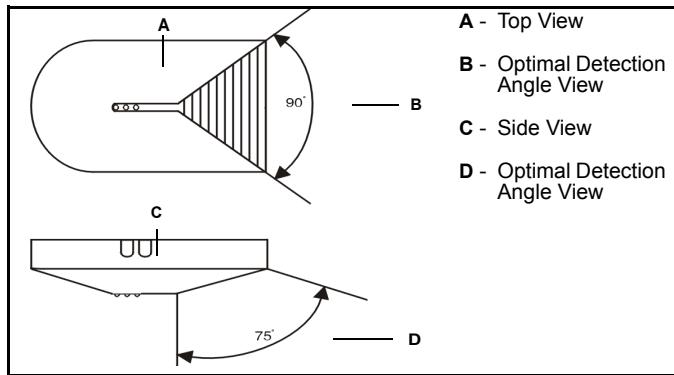


Figure 2: Connections

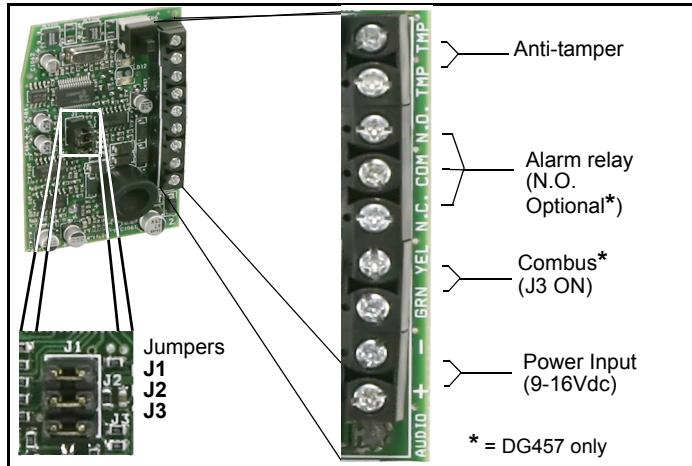


Figure 3: Exploded View

