

834L VIPER PLUS

FRAME MOUNT GLASSBREAK/SELECTIVE VIBRATION DETECTOR



Specifications

Operating Voltage: 10-15VDC (filtered and regulated)
 Power Consumption: 6mA (normal); 13mA (alarm)
 Range: Up to 10 ft. radius
 Voltage Monitor: Low or No Voltage cause alarm activation
 Voltage Supervision: Alarm Relay
 Relay Activation Time: 8 seconds
 Alarm LED: Latch or auto-reset
 Alarm Relay: SPST (form A) contacts, 0.5A @ 30VDC
 Installation: Hardwire 4 wires
 Operating Temperature: 0 ° to 120 ° F (-20° to 50°C)
 Mounting: Surface – screws included
 Sensor Size: 3.35" long x 0.90" wide x 1.00" high
 Weight: 2.1 ounces
 Color: White

Installation Instructions

IEI 834L GLASSBREAK/VIBRATION DETECTOR

The IEI 834L Viper Plus with Contact is a frame mount glassbreak/selective vibration detector. The Viper Plus contains a custom integrated circuit designed specifically to detect vibration signals associated with forced entry in a wide variety of surfaces including: windows, doors, walls and glass of all types. You can adjust the Viper Plus for sensitivity over a wide range, but it's immune to low frequency vibration. The Viper Plus is a standalone sensor with no additional processor required.

IEI 834L Viper Plus Features

- Patented Integrated Circuit Design
- Solid-State Piezoelectric Device
- No Separate Processor Required
- Latching Alarm LED
- Auto Reset Alarm Relay
- Simplified Calibration Test Mode
- Cover Tamper Contact
- Double Knock Feature For Alarm Verification
- Immune to Low Frequency Vibration
- High-Low Sensitivity Jumper

Auto-Reset Relay

When the Viper Plus goes into alarm, the relay contact remains open for 8 seconds before re-closing to detect a second independent attack, if necessary.

Cover Tamper Contact

The cover is monitored against unwanted sensitivity changes or tampering with a switch mounted on the circuit board. This switch is internally wired in series with the alarm relay. No additional wiring is necessary.

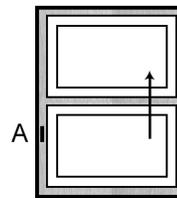
Double Knock Mode

Most unwanted signals fade within 200 milliseconds. Prolonged attack or breaking glass exceeds this time. When Double Knock Mode is enabled and the Viper Plus detects a signal above set sensitivity level it enters the active mode but ignores all levels of signal for approximately 200 milliseconds. If the vibration remains above the set sensitivity level for more than 200 milliseconds, or a second attack exceeds the set sensitivity level within 8 seconds, the Viper Plus goes into alarm.

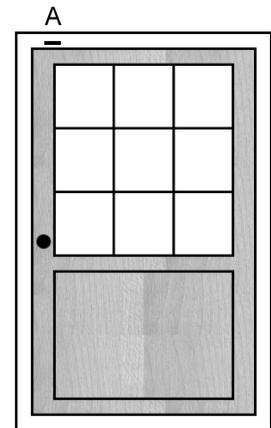
Calibration Test Mode

The first time you trip your Viper Plus there is an 8 second delay before the LED turns on (the relay opens for 8 seconds as it normally does). After this first trip the LED remains on and shows each subsequent trip by turning off for 8 seconds. When you are finished testing, interrupt the power to reset the LED for normal operation.

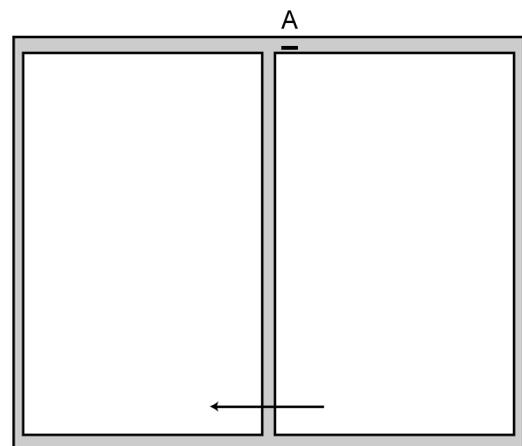
Double Hung Window



Door



Sliding Glass Door



A = Viper Plus Mounting Location

Mounting the Viper Plus

Mount the Viper Plus on the door or window frame, as shown in the illustrated examples. Do not install across structural members or at joints in construction in frames or bridge any other two components in a structure. Make sure you mount the Viper Plus on a flat surface, clear of bumps or grit. Also verify the mounting surface is in good physical condition with no loose or rattling parts. You must take additional care when installing in areas accessible to the public. In areas where protection is required for larger areas and low sensitivity desired for better false alarm rejection (such as windows adjacent to a public sidewalk) use two Vipers.

To remove the cover, unscrew the retaining screw on the front. The unit consists of two pieces, the cover and the base plate with the circuit board. Position the base plate on the surface and mark the mounting holes. The self-tapping screws are suitable for most materials. For metal frames, drill a 3/32" pilot hole. Be careful not to damage the circuit board in the base plate when driving screws.

Note: When mounted, the cover must not make contact with another surface.

Wiring the Viper Plus

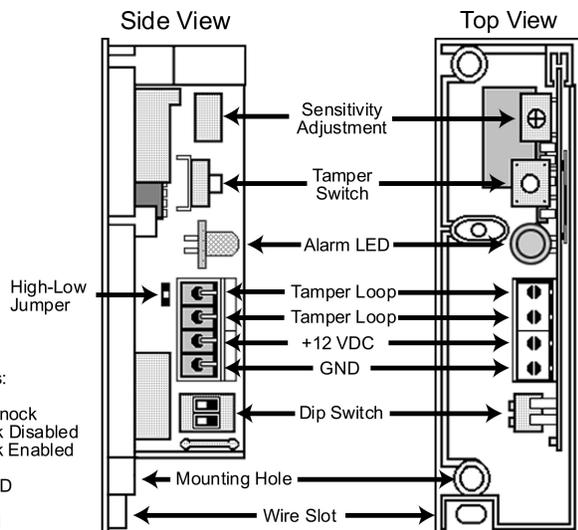
You can run the wires either through the back of the base plate using the wire slot (for concealed wiring - see diagram), or through the bottom of the cover using the rubber grommet. To use the grommet you must cut out the area on the bottom of the cover indicated by the indentations on the inside.

When mounting vertically install the Viper Plus so the wires enter from the bottom of the unit, to prevent water entry. When mounting horizontally, remember to add a drip to loop to prevent water from running along the wires and entering the case.

The diagram below shows the four terminal strip connections. Attach power leads to +12VDC and GND terminals. When connecting the power, you must observe polarity. Also, use a filtered and regulated power supply, with at least four hours of standby time. You should also provide a switch or other circuit to interrupt power to reset a latched alarm LED (if selected).

Attach a normally closed loop from your control panel to the remaining tamper loop terminals. These are "open" until the Viper Plus is powered up. The cover tamper switch and magnetic reed switch are in series with the alarm relay circuit. These must be in place for the circuit to close.

When finished wiring, secure the cover onto the base plate and turn on the power.



Calibrating the Viper Plus

The Viper Plus has a test feature that eliminates the need to manually reset power during testing. The first time you trip the Viper Plus there is an 8 second delay before the LED turns on (the relay opens for 8 seconds as it normally does). After the first trip the LED remains on and shows each subsequent trip by turning off for 8 seconds. When finished with testing, interrupt power to reset the LED for normal operation. To disable the LED turn dipswitch 2 off.

You should set the sensitivity as low as possible to reduce the change of false alarms. The Viper Plus has a High-Low jumper setting to increase or decrease its sensitivity. With the jumper in place, the Viper is set for Low sensitivity mode. By removing the jumper, the Viper becomes more sensitive. To set the sensitivity, use the IEI-815 calibration tool. This device puts a predetermined amount of shock into the window or doorframe. If you don't have the IEI-815 tool, simply protect the surface and impact it with a hard object like a small hamper or the back of a screwdriver, taking care not to damage the surface.

Trip the Viper Plus at the limit of protection desired. Remember that the Viper Plus will respond to one large blow or several small ones. Where it's likely that more than one blow is required to breach a window or door, apply several "hits" of the IEI 815 within an 8 second period to simulate the shock to set the sensitivity. Calibrate around the extremities of the area and progressively decrease sensitivity by rotating the sensitivity adjustment potentiometer counter clockwise. When you reach a point where the Viper Plus no longer trips, slightly increase the sensitivity until the LED response is obtained.

DO NOT USE THE CALIBRATION TOOL DIRECTLY ON GLASS!

Double Knock Setting

For increased resistance to false alarms use the "double knock" feature. After the initial shock, the Viper Plus continues to analyze the signal for another 8 seconds. If another large shock or several smaller ones occur within the next 8 seconds the Viper Plus goes into alarm. To enable this feature set dipswitch 1 to off. This feature is ideal for laminated and bulletproof glass.

IEI Limited Warranty

Because the manufacturer does not install or connect this security device the manufacturer cannot guarantee its performance. Therefore, there are no warranties, expressed or implied (except as stated below), attached to the sale of this product.

The manufacturer warrants against defects in material and workmanship in this device for 3 years from the date of manufacture. During the warranty period the manufacturer, at its sole option, will repair or replace free of charge any defective unit returned freight prepaid. This warranty shall remain in force and effect for 3 years provided the unit was properly installed and operated, has not been subject to misuse and has not been repaired or altered other than by the original manufacturer.

The forgoing states the buyer's sole and exclusive remedy for any breach of warranty or for any claim, whether sounding in contract, tort, strict liability, or negligence, based upon any defect in this security device.

The manufacturer shall in no event be responsible for any incidental or consequential damages incurred by the buyer.

This warranty supersedes all previous warranties.



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