

# ADEMCO

## ASC-SS1 Glass Break Sensor

Quantity 5

### Applications

The ASC-SS1 loop powered shock sensor protects all types of glass: plate, wired, tempered, and laminated. The sensor will protect the glass within a 6' to 8' radius from the sensor for glass up to 1/4" thick. Laminated glass and glass over 1/4" thick can reduce range. Verify range by testing as described on back. For glass larger than 8' radius, multiple units are recommended. This sensor is designed for detecting large breaks to prevent reaching, crawling, or walking through an opening. Shock sensors may not detect cracks, small holes, removal of glass panes, or careful entry with glass cutting devices. Armor coated glass and plexiglass will reduce the sensor's range to 4' radius.

### Specifications

<b>Loop Voltage:</b>	3VDC (min) to 20VDC (max)
<b>Loop Current:</b>	100mA maximum
<b>Power Requirements:</b>	Less than 1mA
<b>Transient Suppression:</b>	600 watts for 1mS
<b>Alarm Output Type:</b>	Normally-closed solid-state output, non-polarized with powered loop
<b>Alarm Output Resistance:</b>	20 $\Omega$ maximum (closed/non-alarm condition); 1M $\Omega$ minimum (open/alarm condition)
<b>Alarm Output Timing:</b>	Open for 1 second minimum during an alarm condition
<b>Operating Temperature:</b>	0°F to +130°F (-18°C to +55°C)
<b>Case Dimensions:</b>	1.4" L x .95" W x .3" D (35.6mm L x 24.1mm W x 7.6mm D)
<b>Wiring Leads:</b>	22AWG, 2 conductor zip cord
<b>Color:</b>	White



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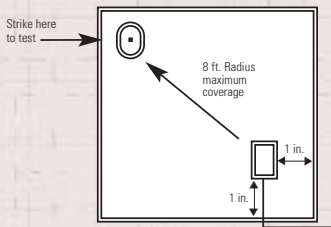
# ASC-SS1 Installation Instructions

## Installation

The ASC-SS1 shock sensor must be mounted in a corner of the glass. For best performance, do not mount the sensor closer than 1" from the window frame.

Shock sensors mount with double coated acrylic foam tape designed to resist the types of environmental stresses the shock sensor will experience after installation.

- ◆ To obtain optimum adhesion, the bonding surfaces must be clean and dry. Rubbing alcohol is the recommended cleaning solution.
- ◆ Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and thus improves bond strength.
- ◆ After application, the bond strength will increase as the adhesive flows onto the surface. At room temperature, approximately 50% of the ultimate strength will be achieved after 20 minutes, 90% after 24 hours, and 100% after 72 hours. In some cases bond strength can be increased and ultimate bond strength can be achieved more quickly by exposure of the bond to elevated temperatures (e.g. 150°F (66°C) for 1 hour).
- ◆ Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Minimum suggested temperature is 50°F (10°C).



## Wiring

The ASC-SS1 shock sensor is a two wire loop powered electronic device which draws current (< 1mA) from the protective loop and requires minimum loop operating voltage of 3 volts. When glass is broken, the sensor provides a normally-closed solid-state output (circuit opens on alarm) which is not polarity sensitive. The sensor employs transient suppression devices to protect against lightning.

The ASC-SS1 shock sensor does not require a processor.

The ASC-SS1 shock sensor may be wired in series with multiple sensors. Care should be taken to ensure that the total resistance of the sensors in series does not exceed the capabilities of the alarm control panel.

Not recommended for use with wireless transmitters powered by 3 volt batteries.

## Testing

To test the shock sensor, install in a powered loop alarm circuit and hit the protected glass on the corner furthest from the sensor (see diagram) using a blunt plastic or hard rubber object. This impact should create enough energy for the sensor to generate an alarm condition and activate the alarm panel. Actually breaking the glass would create more energy than the test, so if the test impact causes the sensor to generate an alarm, protection is assured.

An alternate test method is to connect the sensor to an ohm meter in series with a 3 volt battery and watch the resistance (less than 20 $\Omega$  when not in alarm) increase to greater than 1M $\Omega$  for at least 1 second (and no more than 10 seconds) during an alarm condition.

## ADEMCO SIX YEAR OVER THE COUNTER LIMITED WARRANTY

See ASC Sensor Source Book for warranty details.

**TO THE INSTALLER:** Regular maintenance by the installer and frequent testing by the User are vital to continuous satisfactory operation of any alarm system. The ASC-SS1 should be tested periodically, at least once a month, depending on conditions. The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing to ensure the system's proper operation at all times.

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