

# INSTALLATION AND OPERATING INSTRUCTIONS FOR THE BGE-5743 WIRELESS DUAL SWITCH™ GLASS BREAK DETECTOR



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## I. INTRODUCTION

The BGE-5743 Wireless Dual Switch™ is designed to detect intrusions initiated by the breaking of glass barriers such as windows and commercial doors. The BGE-5743 combines a unique decision making system which requires both the audio emissions and shock vibrations of breaking glass to validate an alarm. The BGE-5743 also incorporates the Ademco 5716 Alert III transmitter to form a completely wireless glass break unit.

The BGE-5743 Wireless Dual Switch™ has a red alarm indicator and two yellow indicators for shock or audio sensing. The two yellow indicators are only used during setup and installation. They should be turned OFF after adjustment via the shunt jumper located on the back of the unit. Refer to Illustration A. The unit's audio sensitivity can be set to HI or LOW via the shunt jumper also located on the back of the unit. The shock sensitivity setting can be adjusted by the control pot accessible from the bottom of the unit. Refer to Illustration C.

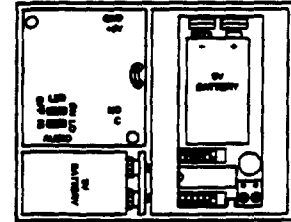


ILLUSTRATION "A"

The BGE-5743 also incorporates the Ademco 5716 Alert III Universal Transmitter for wireless communication to the Ademco 5700 or 4200 based wireless alarm systems. This transmitter is built into the BGE-5743 and is powered from the same 9 volt battery used by the BGE-5743. There are two 6 position dip switches used to set the unit's "House ID" and "Transmitter ID". Refer to installation instructions for proper ID setting.

## II. INSTALLATION

**1. LOCATION:** The BGE-5743 may be located on the ceiling just above the glass barrier to be protected, on the same wall or on an adjacent wall. The Wireless Dual Switch™ should be located with an open field between the unit and points of entry; no partitions, walls, furniture, etc. should be between the unit and the glass to be protected. The unit must be located within 15 feet of the glass being protected (15 feet must be wall surface, NOT DIRECT LINE OF SIGHT). Refer to Illustration B.

In choosing a location, it is important to keep in mind the transmission path of the 5716 wireless transmitter. A good transmission path should be established before permanently installing the BGE-5743.

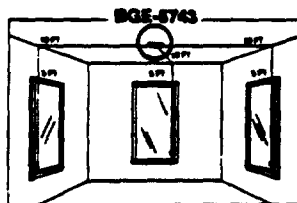


ILLUSTRATION "B"

**2. CALIBRATION:** To calibrate the BGE-5743, the BGE-D9 Dual Tester should be used. The shock sensitivity control should be turned slowly clockwise until the yellow "VIBRATION" indicator glows briefly when the BGE-D9 is operated on the furthest glass from the sensor, refer to Illustration C. Between each adjustment allow five seconds for stabilization.

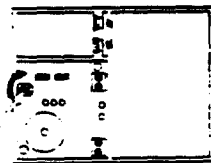


ILLUSTRATION "C"

The BGE-D9 Tester is also used to insure that the audio portion of the BGE-5743 is set properly. The BGE-5743's audio sensitivity should be set on HI when protecting glass over 7 feet away. The LOW setting is used when the BGE-5743 is mounted within 7 feet of the glass to be protected. Illustration A is shown with the audio set on HI sensitivity. During the calibration of the shock sensitivity, the BGE Dual Tester should also cause the alarm LED to light indicating audio detection.

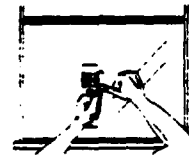


ILLUSTRATION "D"

**NOTE:** BGE-D9 should set flat against the glass surface when releasing the snap hook TO PREVENT GLASS BREAKAGE.

I. Hold the handle with left hand and pull the snap hook back all the way with the right hand.

II. Place the Dual Switch™ tester in the center of the glass at the furthest point of protection. Release. Refer to Illustration D.

III. Adjust the shock sensitivity control and audio HI/Low jumper according to the reaction of the unit.

When installation and calibration procedures are completed, activate any devices such as air conditioners, fans, blowers, etc. that may generate background vibrations and operate while the system is armed. For proper operation, machinery that may generate background vibrations should not cause the unit to go into alarm. If this condition results, relocate the unit to a new position where the

**APPLICATIONS**

Application Environment or Disturbance	Audio	Shock	Alarm	Comments
Temperature	NO	NO	NO	
Humidity	NO	NO	NO	
Thunder Storm	NO	MAY	NO	May cause alarm if audio is in alarm
Microwave	NO	NO	NO	
Infrared	NO	NO	NO	
Ultrasonic	YES	NO	NO	Ultrasonic Source should be placed at a distance from the BGE-5743.
HVAC	MAY	MAY	MAY	Run all HVAC blowers etc. during setup to insure against false alarms.
Phone/Door Bells	MAY	NO	NO	Try during setup.
School Alarm Bells	MAY	MAY	MAY	May cause alarm if very close to BGE-5743.
Metal door with crash bar	MAY	MAY	MAY	Do not mount close to door.
Generators/Large Motors	NO	MAY	NO	Run during setup.
Shop Equipment	MAY	MAY	MAY	Do not run equipment when protection is on, or test during setup.
Structural Vibration	NO	MAY	NO	If vibration cannot be adjusted out consider other alternatives such as relocation or other sensors.
2 or more sensors in the same room	NO	NO	NO	
Furniture, drapes, etc.	NO	NO	NO	May reduce range.
Background noise	MAY	NO	NO	
Keys, dogtags, etc.	MAY	NO	NO	
Outside construction	MAY	MAY	MAY	If construction is on same wall or frame as protected glass the protection should be by passed during construction.
Occupied Area Protection On	MAY	MAY	MAY	
Window Breakage	YES	YES	YES	

**TO THE INSTALLER**

Regular maintenance by the installer and frequent testing by the user are vital to maintain proper operation of any alarm system.

**NOTE:** The BGE-5743 should be tested at least once a year by the installer.

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 insure the system's proper operation at all times.

**WARRANTY**

Your BGE-5743 Wireless Dual Switch™ is guaranteed for twenty-four (24) months from date of purchase against defective parts and workmanship.

Blue Grass Electronics, Inc. warranty extends only to wholesale customers who buy directly from Blue Grass Electronics, Inc. or through normal distributor channels. Blue Grass Electronics, Inc. does not sell its products to consumers. Consumers should inquire from their buying sources as to the extent of the dealer warranty, if any.

If any defect appears during "warranty period", simply return the unit postage prepaid to the manufacturer. The unit will be repaired or replaced at the manufacturer's discretion and returned to you free of charge.

Blue Grass Electronics, Inc. assumes no liability for consequential or indirect damages and accepts no responsibility for repairing any damage to the product caused by misuse, careless handling or where repairs have been made by others.

Blue Grass Electronics, Inc. is liable only for the cost of the Dual Switch through its distribution channels.