

**INSTALLATION AND
OPERATING
INSTRUCTIONS
FOR THE BGE-7500
AUDIO SWITCH™
GLASS BREAK
DETECTOR**



BLUE GRASS ELECTRONICS
A DIVISION OF PITTSWAY CORPORATION
149 Eileen Way
Syosset, NY 11791
(516) 921-8668
1-800-645-5430
FAX: (516) 921-0088

I. INTRODUCTION

The BGE-7500 Audio Switch™ is designed to be used only in unoccupied areas to detect the common sounds of shattering glass when a window is broken. The BGE-7500 is specifically designed to be used in conjunction with the Ademco Vector control panel and is connected via the two wire multiplexing system.

The BGE-7500 Audio Switch™ has a red alarm indicator that can be programmed for LED latch or auto reset. The unit also has a high/low audio sensitivity setting. Both features are selectable by shunts located on the unit. (Refer to illustration A). The system is protected against tampering by way of a microswitch located inside the unit, which results in an alarm when the cover is removed.

The BGE-7500 incorporates the Ademco transponder IC for interfacing with their proprietary two wire multiplexed zones. There is an 8 position dip switch used to set up each unit's address setting.

II. INSTALLATION

1. LOCATION: The BGE-7500 is best located on the ceiling just above the glass barrier to be protected. However, it can protect an open area of approximately 20 foot in radius from the glass when mounted on the ceiling, opposite wall, or adjacent walls. The BGE-7500's sensitivity should be set on "HI" when protecting glass over 10 feet away. The "LOW" setting is used

when the BGE-7500 is mounted within 10 feet of the glass to be protected. When the BGE-7500 is mounted on the same wall, all sensitivity distances should be reduced by 50%.

The BGE-7500 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. Illustrations B and C indicate various correct applications of the BGE-7500. Do not mount the unit closer than 4 feet to; door bells, air compressors, large fans or air vents. These sources tend to generate noise interference.

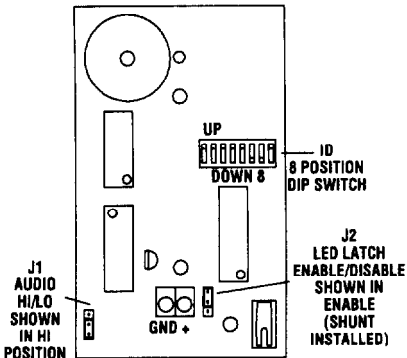


ILLUSTRATION "A"

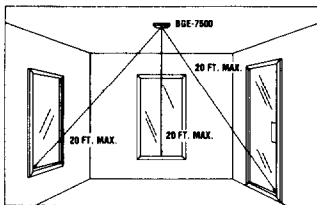


ILLUSTRATION "B"

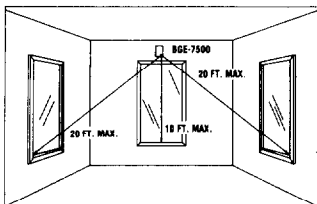


ILLUSTRATION "C"

2. TESTING: The installer should always insure proper operation of the BGE-7500 after locating the unit. Testing of the unit should be done to insure good audio reception at the desired mounting location. The BGS III Simulator™, shown in illustration D, should be used to

test the BGE-7500. To test the BGE-7500, aim the simulator at the glass break detector while holding it near the furthest glass to be protected. Activate the BGS III simulator by pressing the button on top. The BGE-7500 should go into alarm if the glass is within its protection range. The BGS III is very directional and must be aimed directly at the BGE-7500.

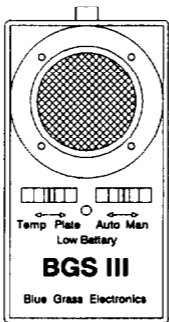


ILLUSTRATION "D"

3. **SELECTING AN ID NUMBER:** Make all identification number selections by arranging the switches on the circuit board. The ID number is equal to the sum of the switch values in the "DN" position. Each switch has a different value and should be set according to TABLE #1.

III. OPERATION

1. INDICATORS: RED-(ALARM) This LED indicates that a valid alarm condition has been detected. The BGE-7500 has an optional alarm indicator memory feature to aid in installation and trouble shooting. The memory feature can be enabled and disabled through the Ademco Vector control panel and is intended for testing purposes only.

IV. SPECIFICATIONS

- 1. ALARM DURATION: 2 seconds**
- 2. ALARM INDICATION: Via the Ademco Two Wire Multiplexing System**
- 3. CIRCUIT PROTECTION: Built in Electronics**
- 4. DIMENSIONS: 3.9" x 2.5" x 0.73"**
- 5. MAXIMUM STAND BY CURRENT: 1.5 mA**
- 6. MAXIMUM ALARM CURRENT: 3mA**
- 7. OPERATING TEMPERATURE: 0°C (32°F) TO 55°C (130°F)**
- 8. POWER SUPPLY: Via the Ademco Two Wire Multiplexing System**
- 9. MAXIMUM AUDIO RANGE: 20 feet**
- 10. MINIMUM WIRE SIZE: 22 AWG**

APPLICATIONS AND MOUNTING TABLE

TYPE OF GLASS PROTECTED

1/8" and 1/4" Plate Glass

1/4" Tempered Glass

1/4" Laminated Glass

1/4" Wired Glass

SENSOR LOCATIONS

Location	Recommended
Same Wall as Glass	Yes
Adjoining Wall	Yes
Opposite Wall	Yes
Ceilings - Structural (Fixed)	Yes
Ceilings - Non-Fixed	Yes
Acoustical Drop Tile Ceilings	Yes
Maximum Range	20'

MOUNTING SURFACE

Surface	Recommended
Drywall/Sheetrock	Yes
Metal	Yes
Brick	Yes
Concrete Block	Yes
Poured Concrete	Yes
Wood	Yes

TABLE #1

SWITCH NUMBER
switch value:

1	2	3	4	5	6	7	8		ID No.
128	64	32	16	8	4	2	1	=	1
UP	UP	UP	UP	UP	UP	UP	DN	=	2
UP	UP	UP	UP	UP	UP	DN	UP	=	3
UP	UP	UP	UP	UP	UP	DN	DN	=	4
UP	UP	UP	UP	UP	UP	DN	UP	=	5
UP	UP	UP	UP	UP	DN	DN	UP	=	6
UP	UP	UP	UP	UP	DN	DN	DN	=	7
UP	UP	UP	UP	DN	UP	UP	UP	=	8
UP	UP	UP	UP	DN	UP	UP	DN	=	9
UP	UP	UP	UP	DN	UP	DN	UP	=	10
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UP	UP	UP	UP	DN	DN	UP	UP	=	12
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UP	UP	UP	DN	UP	UP	DN	UP	=	18
UP	UP	UP	DN	UP	UP	DN	DN	=	19
UP	UP	UP	DN	UP	DN	UP	UP	=	20
UP	UP	UP	DN	UP	DN	UP	DN	=	21
UP	UP	UP	DN	UP	DN	DN	UP	=	22
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UP	UP	UP	DN	DN	UP	UP	UP	=	24
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UP	UP	DN	DN	DN	DN	DN	UP	=	61
UP	UP	DN	DN	DN	DN	DN	UP	=	62
UP	UP	DN	DN	DN	DN	DN	DN	=	63
UP	DN	UP	UP	UP	UP	UP	UP	=	64

NOTE: The BGE-7500's current drain is equivalent to three Ademco's remote point modules. Refer to the Host panel installation instructions for allowable address settings.

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-7500 should be periodically tested 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 insure the system's proper operation at all times.

WARRANTY

Your BGE-7500 Audio 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 warrant its products to consumers. Consumers should inquire from their selling dealer as to the extent of the dealers 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 Audio Switch through its distribution channels. No other guarantee, written or verbal, is authorized by or on behalf of Blue Grass Electronics, Inc.