

Wireless GlazeAlarm Detector

Model GA-20-a/b

USER'S MANUAL

INTRODUCTION

This device is to detect the breaking of a well sealed glazed unit, whose interior physical characters are different with the characters of the atmosphere.

This device is typically used on detecting the breaking of a Double-Glazed or Triple-Glazed window. In a Double or Triple Glazed Unit window (also called Double-Glazing, Double-Pane, Triple-Glazing, Triple-Pane or Insulated Glazing), the space between the two or three panes of glass is well sealed, with desiccant inside.

The GA-20 generates a 'breaking' signal (also called the 'alarm signal') when a pane of the insulated glazing is broken and outside air goes into the sealed space.

The GA-20 has a powerful self-check capability. It sends reports when the battery strength or condition is weak and when these problems are restored.

The GA-20 is a 2-way wireless device with a supervision function, which means it can not only send messages to, but also receive instructions from, the system controller. It sends periodic reports to the controller, and the interval can be determined by the user and set accordingly.

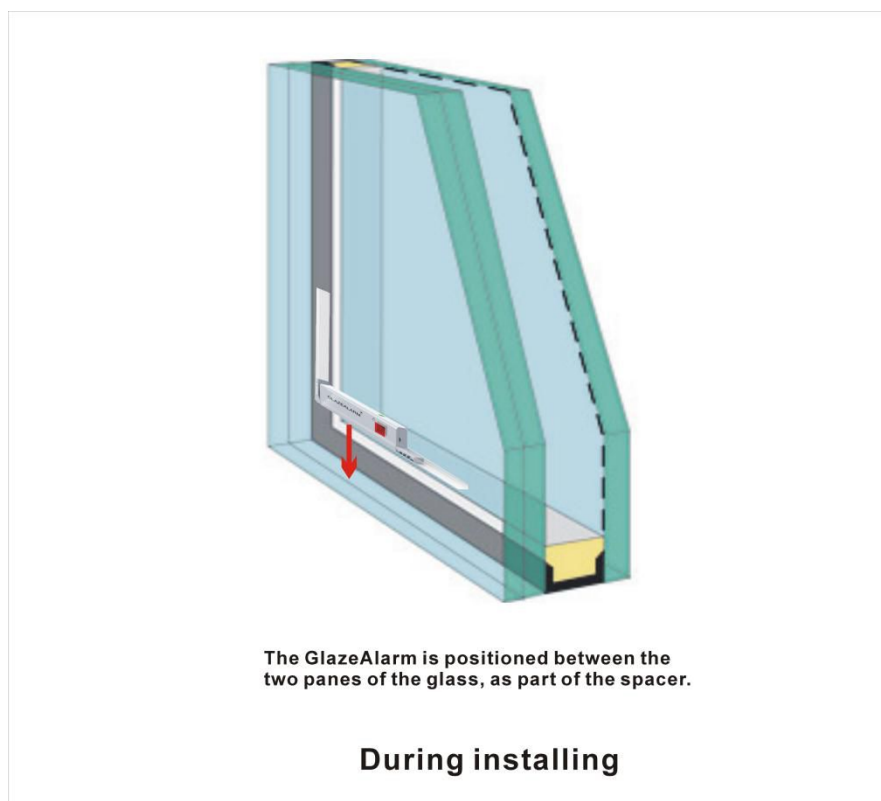
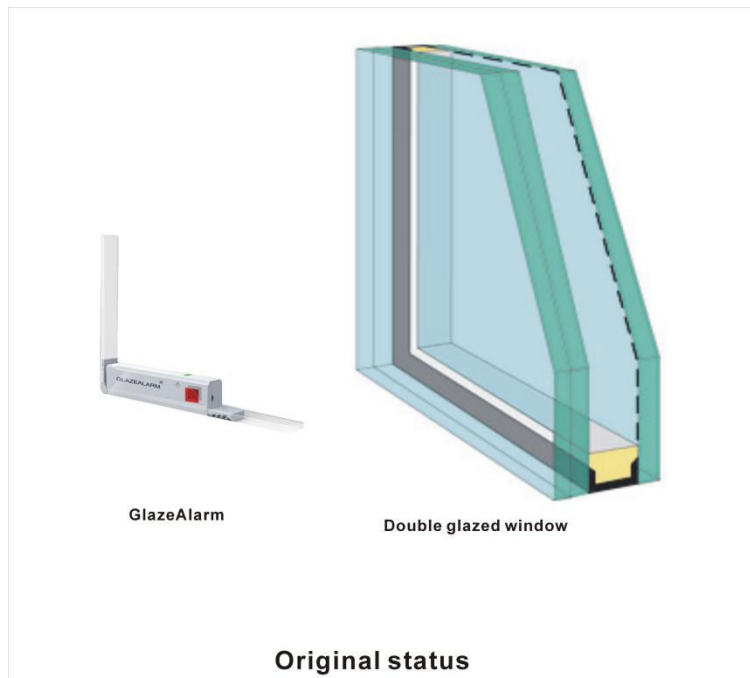
This detector should be used as a peripheral, but integral, device of the GlazeAlarm wireless system.

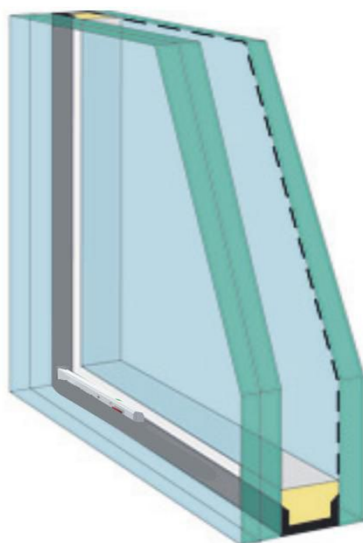
PURPOSE

The GA-20 has two usages.

Security usage. Most burglars enter the target houses by breaking a window. The GA-20 can detect the breakage of a window and send out the alarm immediately.

Energy conservation. A well sealed DGU can obviously reduce our daily heat loss. If the DGU is leaking, the heat loss will greatly increase. The GA-20 can detect the leakage of a DGU and present a maintain notice.





After installation, most part of the GlazeAlarm is hidden to avoid impact on the visual outlook of the window, while a small part of the GlazeAlarm is above the spacer to guarantee the strength of the wireless signals.

Final status



REAL RATIO !!

No impact on the view

SPECIFICATION

Model: GA-20-a / GA-20-b

Wireless frequency: 868.2Mhz FSK (Europe). 921.0Mhz (North America).

2-way wireless.

Power: 1 x ER17505 Lithium Thionyl-Chloride battery.

Working voltage 3.6V – 2.8 V

Battery life expectancy: 13 years (for typical use)

Battery condition monitoring: automatic transmission of battery condition data as part of periodic report.

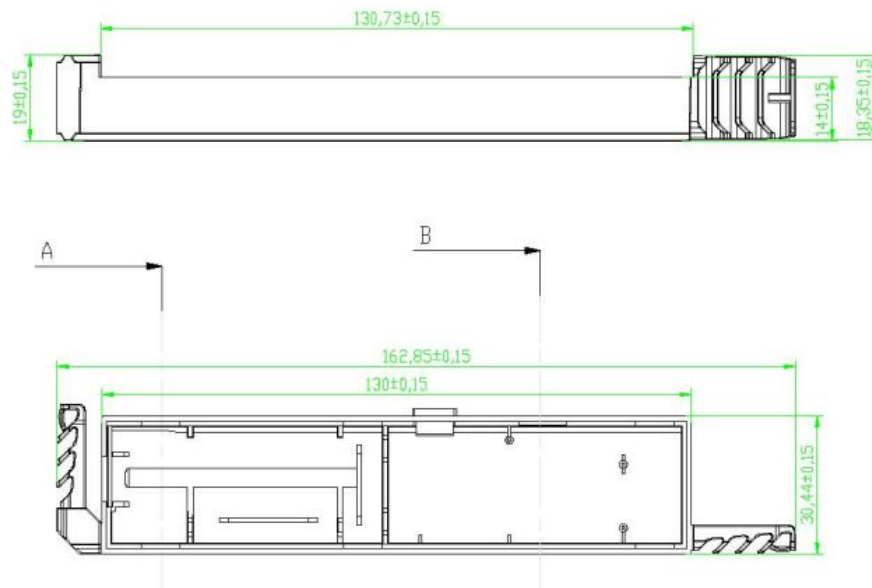
Periodic report interval: adjustable, default value 2 hours.

Dimension: 115mm(W), 32mm(H), 19.5mm(L)

Weight: 71g (without batteries), 103g (with batteries)

Current consumption: 12 microamp (standby), 32milliamp (reporting)

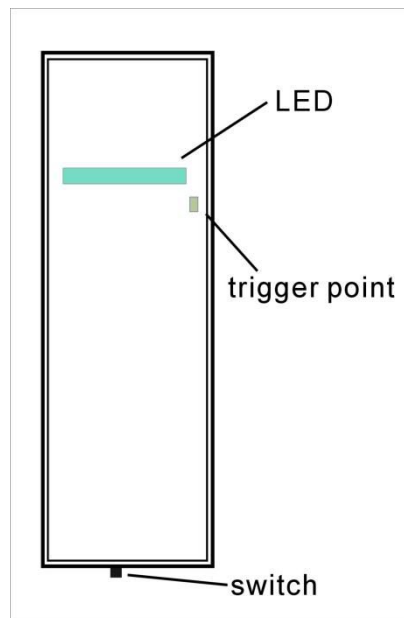
FCC ID: 2AC2XGAD20A014A



WHAT IS INCLUDED

Detector (with battery inside)

POWERING ON

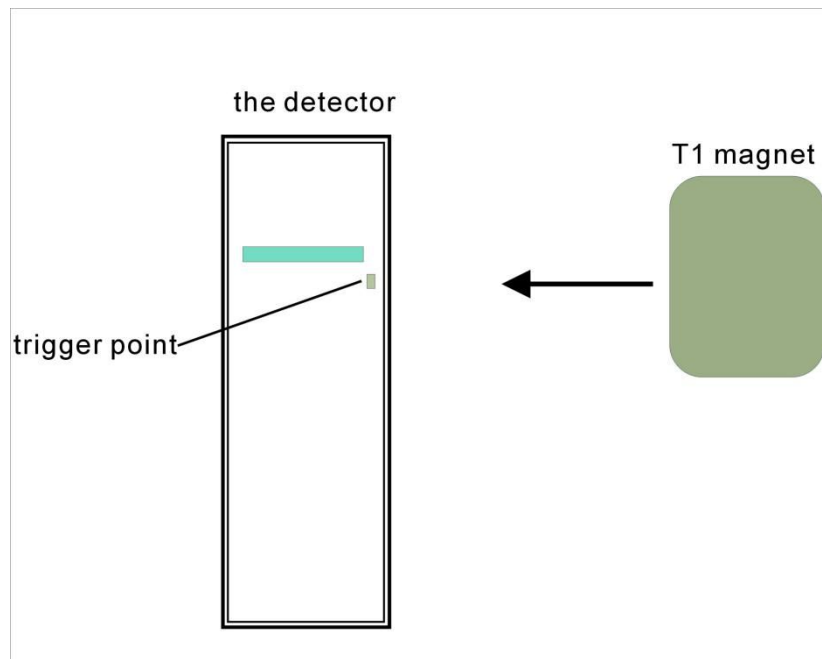


Before sealing this Detector into the double-glazed unit, please turn the power on by pushing the switch on the end of the Detector. The LED lights for one second when the power is switched on.

INTERACTING

This device can interact with a magnet (T1 device from Glazealarm).

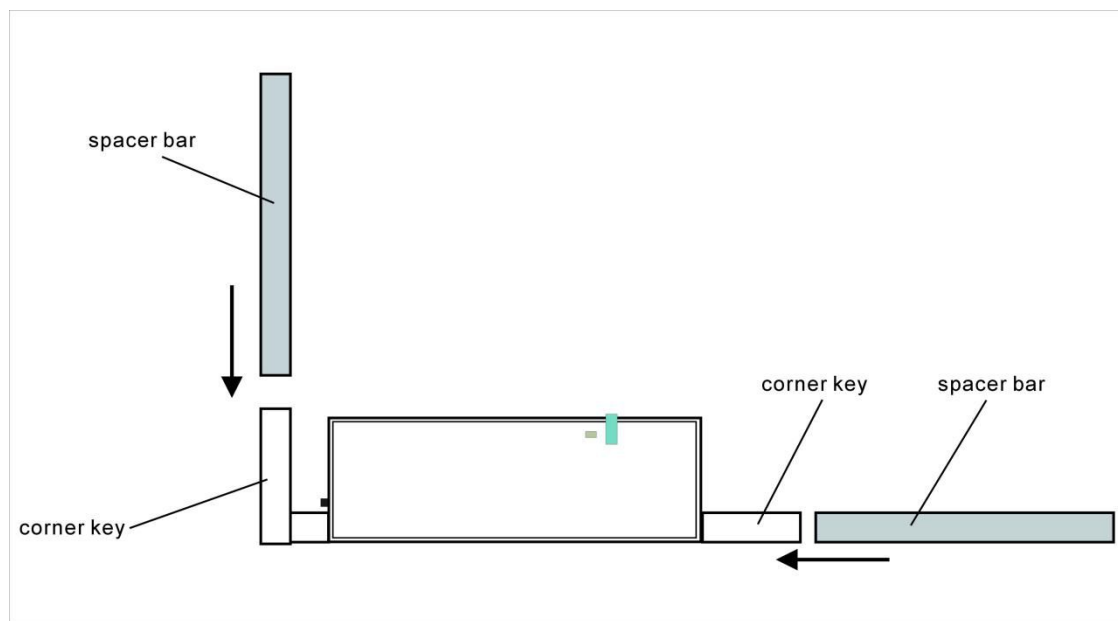
Move the magnet close to the 'trigger point' (at the arrow icon on the case of the detector), then the LED will shine several times. If you move the magnet away, the detector will respond differently according the following table 1. By this way the installer/service technician can know the status of the detector.



Move the T1 magnet away from the 'trigger point' when you see	How the detector will react	What can the technician do and tell from the reaction
the LED shines once	lights the LED for a while	Knows the Detector is alive. This function is useful for glass factories to check the quality
the LED shines twice	Sends a "teaching" signal	Enroll this Detector into the system
the LED shines three times	send a periodic signal	Knows the current temperature and humidity inside the sealed space

Table 1

SEALING INTO DOUBLEGLAZE WINDOW



The Detector must be sealed at the top-left (right???) corner of the Double or Triple Glazed Unit. The Detector casing replaces part of the aluminum spacer bar.

Whenever you want to know if the Detector is alive/working, please use a T1 magnet to interact with the Detector (see above interacting).

ENROLL INTO YOUR SYSTEM

Even after the sealed glazed unit is installed, this Detector is still a 'stand-alone' device - It can't be understood by the system.

To let this device be recognized, you must enroll it into the system.

You can use 'learning mode' to enroll this device:

- 1) Set the controller into 'learning' mode (see the controller manual).
- 2) Move the T1 magnet close to the 'trigger point', and then move it away after the LED shines twice (see above "INTERACTING"). The detector will send a teaching signal and the controller will learn this detector.

Since now, this Detector becomes part of your system - its signal can be perceived.

NOTICE: Before it sends the first teaching signal, the GA-20 does not detect any shock and/or glass breakage. Doing this avoids the power consumption caused by bumps/shocks during delivery from the window factory to the installation place. Once the GA-20 has been triggered to send its first teaching signal, it begins to detect

shocks and glass breakage, and the detection cannot be stopped.

INTELLIGENCE

This Detector can learn its working environment intelligently. The whole learning process lasts for 48 hours after the sealed glass unit glass has been installed into the building.

After 48 hours, the Detector starts to monitor the shock and breakage of the sealed glass unit.

USAGE

When the sealed glass unit is moved, shocked, or heavily touched, the LED will automatically light, and a notice will be sent out. If the window is touched frequently within a short period of time, the LED will light only once.

When the sealed glass unit is broken, this device will send out an alarm message. Usually it takes several seconds for this Detector to confirm the breakage.

Tampering with the broken glass unit cannot stop the alarm.

MAINTAINANCE

If the service person wants to know the working status of a particular Detector, what he needs to do is to use the T1 magnet to interact with the Detector - move the T1 close to the 'trigger point', and then move it away after the LED shines twice (see above "INTERACTION"). His portable reader will display the information of that Detector, including its ID, its battery status, and the temperature and humidity inside the sealed glass unit

FCC WARNING STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class

B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to

provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not

installed and used in accordance with the instructions, may cause harmful interference

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

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