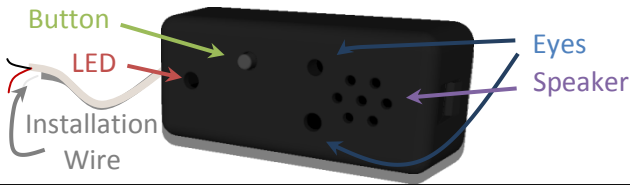# BLACK DEVICES   Garage Guardian

INTRODUCTION

Black Devices LLC's (blackdevices.com) Garage Guardian closes the garage if you forget. It uses a programmable timer and "eyes" to see and time how long your door is left open, and closes it after the time expires. Features include:

- Audio warning beeps 16 times prior to closing
- Programmable timer at minute intervals (can be disabled)
- Programmable via your existing wall button
- Battery saver technology (with low battery warning)
- Detect Open/Detect Closed modes
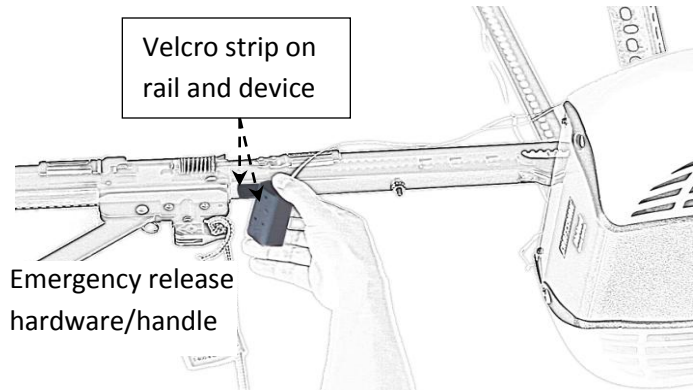- Retains programming across battery changes

⚠ WARNING

FOR YOUR SAFETY – This product operates your door autonomously. Before installing this product, ensure that your garage door is equipped with an external entrapment protection device, such as an "electric eye" which "sees" an object obstructing the door without having actual contact with the object. Do NOT install this product if your garage door is not equipped with the auto reverse mechanism. To prevent possible SERIOUS INJURY or DEATH, REPLACE YOUR GARAGE OPENER IF IT IS NOT EQUIPPED WITH THE AUTO-REVERSE MECHANISM.

INSTALLATION

This device operates in two modes. *Detect-Open* mode and *Detect-Closed* mode. Most installations will operate under *Detect-Open* mode. You should have received your device already in *Detect-Open* mode. If you need to change the mode of operation, see "*Changing Detect-Open/Closed Modes*" under the **OPERATION** section of this manual .
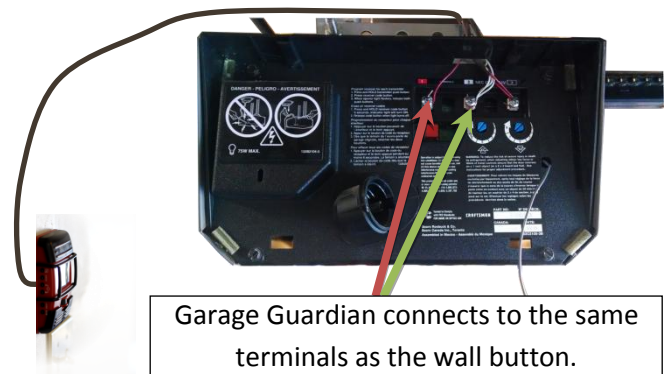
1. **Pull lid off and install 2 AAA batteries. Replace lid.**
2. **Select an installation location**:
a) Use your garage door opener to fully open door. With the door open, select a location to mount the device with the "eyes" of the device close to (1" to 2") and facing the garage door/hardware. Ensure the device is able to "see" the door open by holding the device in position and watching for a flashing LED. After 3 consecutive flashes, the device beeps 4 times to confirm that it sees the door open. The LED only flashes when something is immediately in front of it. The part it sees should only be there with the door open. Sticking tape (included) on the door/hardware may help.
b) Ensure the surface of the rail is clean prior to applying the Velcro strip. Secure the device at the location by applying the supplied Velcro strips on both the device and on the rail.

INSTALLATION (Continued)

Note: *Recommended placement is underneath the central chain guide rail; between the top of the garage door and the garage door opener with the "eyes" of the device pointing toward the emergency release hardware (shown in the figure above).* Do not unplug the opener during installation.

3. **Connect the wires from the device to the opener**:
a) Be prepared for opener to operate unexpectedly! First, locate terminals on the garage-door-opener. You may have to remove a cover to access the terminals. **Refer to the garage door opener manual to determine where the wall button terminals are located**. Garage Guardian connects to the same opener terminals that the wall button connects to.

Garage Guardian connects to the same terminals as the wall button.

b) Connect the black wire to the common/ground terminal on the opener (typically labeled with a white terminal or a "2").
c) The red wire shares the terminal with the other wire in the pair of wires leading from the wall button to the opener (typically labeled with a red terminal or a "1").

Note: If the wires are connected in reverse, the device's red LED will illuminate and the device may start beeping as long as the wires remain connected. The garage opener may also operate! That's ok, simply reverse the wires to correct the polarity.

4. **Program the device for the desired amount of time and verify door closes after set time (see OPERATION).**

OPERATION

Note: *Changing the operation of the device is done with the button on the device. It can also be done with your wall button if the device has been properly installed and connected to your garage door opener. (The opener can make noise if you use the wall button. Try pushing it twice—the second push may stop it).*

Programming the Timer

To change the time, hold the button down for one second (until you hear a beep). You are now in programming mode. Any subsequent beep represents an additional minute the door is to remain open.

For example, to program the device for 10 minutes:

1) Hold the button down for one second until you hear a beep.
2) Continue holding down the button until you count 10 more beeps (1 beep for each minute).
3) Release the button. The device will play a tune representing that it has just been programmed and is now enabled.

Note: Programming the timer automatically enables the device.

Note: Low battery warning is a quick 3-beep chirp.

Disabling/Enabling the Timer

Disabling the timer is useful if you want the door to remain open indefinitely. It is easy to disable the timer and enable it again. To toggle between *enabled* and *disabled*:

1) **Hold the button down until you hear a single beep.**
2) **Release the button.**
3) **Listen for the tune being played.**
   Device Enabled: A scale increasing in pitch played, first slowly and then fast.
   Device Disabled: A scale in decreasing pitch played at a fast rate, followed by the same scale played at a slower rate.

*Note: If you hold the button down too long and hear a second (or more) beeps, you are programming the timer delay (see **Programming the Timer**). Make sure you set the desired delay.*

Changing Detect-Open/Detect Closed Modes

Garage Guardian was designed primarily for garage door openers where the door is closest to the opener when the door is fully open (common to those found in the USA). However, it can be used in many other types of door/gate/garage applications.
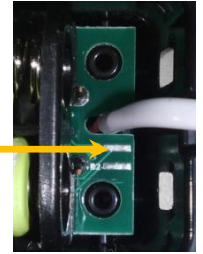
In some of these other configurations, the door/gate is closest to the opener when the door is closed. Installing the device where it would instead "see" the door/gate only when it is closed (rather than open) is more convenient. This mode must also be used for outdoor installations where thick fog may be present.

In order to support such an installation location, the device needs to have its mode of operation changed (from "Detect Open", to "Detect Closed").

To change the "Detect-Open/Detect Closed":

1) **Remove the lid. (It just pulls off.)**
2) **Touch the black wire to (only) the silver colored pad shown.**
3) **Listen for the response:**
   1 Beep: The device is in **Detect-Open** mode
   2 Beeps: The device is in **Detect-Closed** mode
4) **Reattach the lid.**