

# **GUARDLINE<sup>®</sup>**

**User Manual**

**GL2000 / GL5000**

**[www.guardlinesecurity.com](http://www.guardlinesecurity.com)**

## Welcome

Thank you for your purchase!

The GL2000 model has a 500 ft (150 m) range and the GL5000 model has a 1/4 mile (400 m) range. Both models are great for multiple applications, including:

- Alerting you when visitors enter your driveway
- Deterring trespassers and thieves from entering your property or building
- Alerting you to wildlife on your land
- Using in drive-thrus to signal that a customer has pulled in, and more!

If you have questions about your Guardline alarm, our USA-based customer service is available Monday through Friday, from 7am to 3pm Pacific Time at (888) 519-0413 or online in our Support section at [www.guardlinesecurity.com](http://www.guardlinesecurity.com)

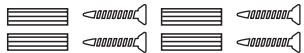
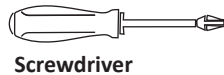
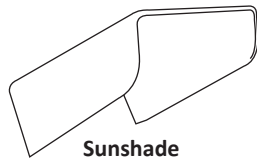
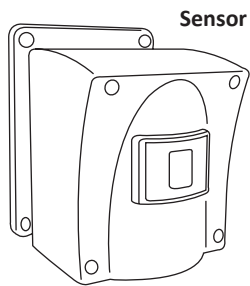
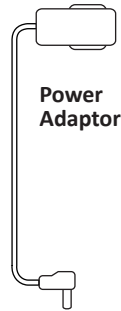
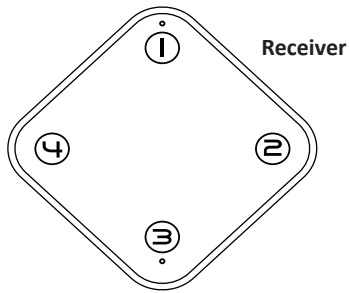
Sincerely,

*The Guardline team*

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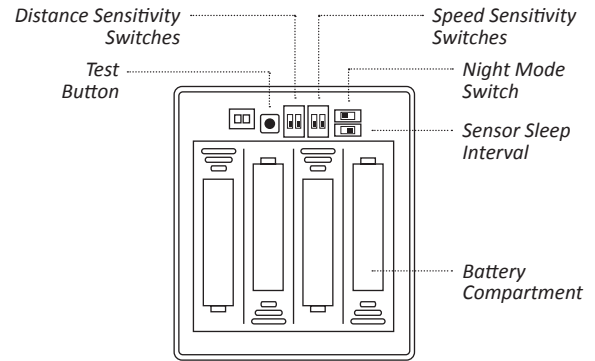
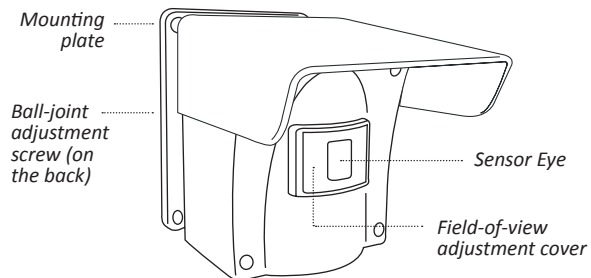
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## 1. What's included



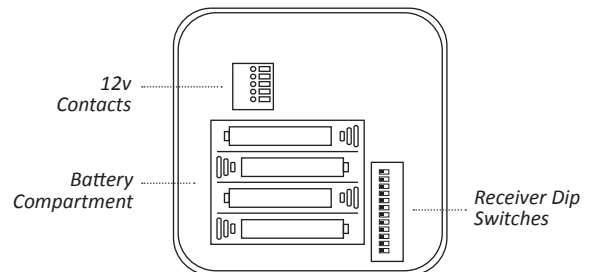
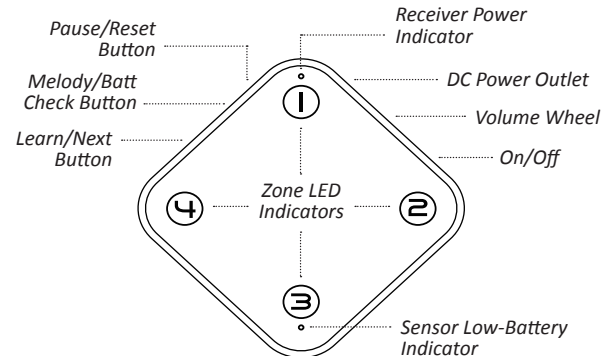
### 1.1 Sensor Overview

You can pair up to 16 sensors to your receiver (4 per zone), allowing you to receive alerts for a nearly-unlimited number of areas. Each sensor can have its own unique melody.



### 1.2 Receiver Overview

The receiver has up to four zones that you can use to cover a variety of locations. You can also have multiple receivers in different locations in your home or business, so you can hear the alarm chimes.



## 2. Getting Started

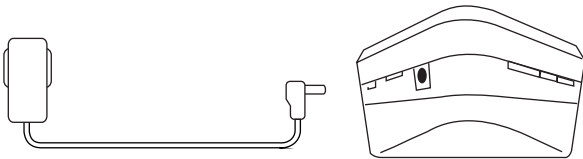
The basic steps for installing and setting up your Guardline alarm are:

- 2.1 Powering your Receiver
- 2.2 Powering your Sensor
- 2.3 Pairing your Sensor and Receiver
- 2.4 Installing your Sensor

### 2.1 Powering your Receiver

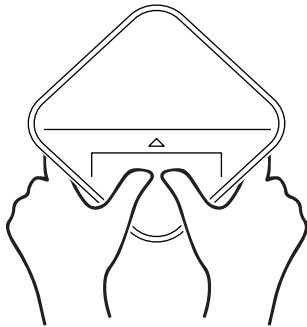
The main power source for the receiver is the included 12v/500mA AC/DC power adapter.

Simply plug the adapter into a wall outlet, then into the side of your receiver, near Zone 1.



We also recommend putting backup batteries into your receiver, to ensure you maintain coverage in the event of a power outage.

To insert batteries into your receiver, push up with your thumbs just below the Guardline sticker on the back of the receiver.



Install 4 (four) x AAA batteries and replace the cover until it snaps into place.



**Watch the video:**  
[www.guardlinesecurity.com/open-receiver](http://www.guardlinesecurity.com/open-receiver)

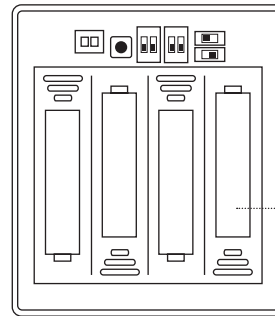
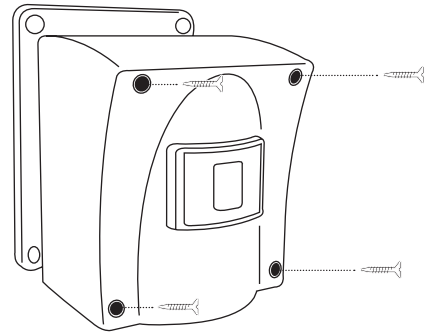
### 2.2 Powering your Sensor

The sensor runs on four (4) AA batteries (not included) and operates wirelessly at a maximum distance from the receiver of 500 ft (150 m) for the GL2000 model, or 1/4 mile (400 m) for the GL5000 model.

To insert batteries into the remote sensor:

1. Remove the screws from the four corners of the sensor to access the battery compartment.

**BE CAREFUL!** The screws are very small, don't lose them.

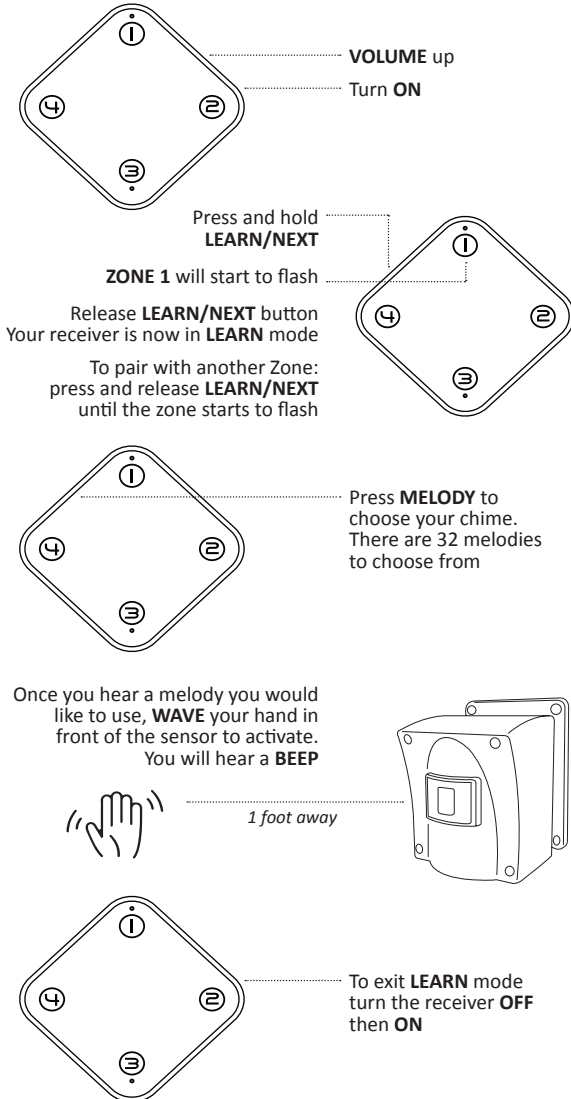


2. Install 4 (four) AA batteries, replace the cover and secure the screws.

### 2.3 Pairing Your Sensor and Receiver


Now that your sensor and receiver are powered, your sensor needs to be paired with your receiver before your system will function.

Have the sensor and receiver nearby and ensure the sensor is **turned away from you**.



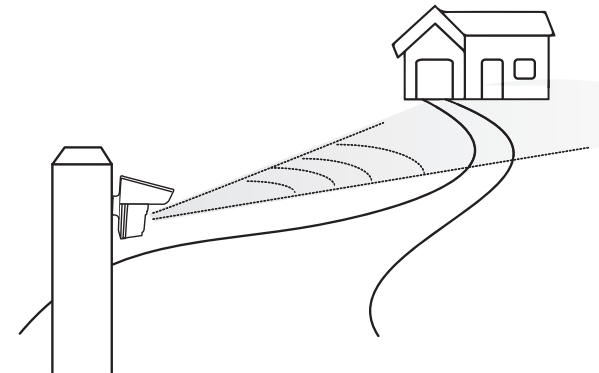
### NOTE

Learn mode has a time-out feature after 30 seconds of inactivity. If you didn't hear a beep confirming that your melody was paired, repeat the pairing process and make sure that your selected zone is still flashing when you activate the sensor.

 Watch the video:  
[www.guardlinesecurity.com/quickstart](http://www.guardlinesecurity.com/quickstart)

### 2.4 Installing your Sensor

We recommend mounting the motion sensor at least 3 to 4 ft (1 m) above the ground on a sturdy, non-metal surface (i.e. a wall, wooden post or tree) with the sensor eye pointed straight out over the area you wish to cover (such as up your driveway looking towards your house). This will decrease or eliminate false alarms from small animals, give you a longer area to pick up movement, and avoid unwanted alarms from nearby lawns/roads.



### NOTE

Always test that your sensor is working in your desired location before installing it. Avoid placing your sensor in a location where sunlight will shine directly into the sensor eye. Direct sunlight may cause false alarms and/or damage to the PIR sensor.

Tools you will need for installation:

- Pencil
- Phillips screwdriver
- Electric drill with 3/32" and 9/32" drill bits (recommended)
- Hammer (optional)

**1.** Mark the mounting surface with a pencil using the four mounting holes on the sensor mount as a guide.

**2.** If installing on a wooden surface, you only need to use the included screws. Drill out your pilot holes using a 3/32" drill bit to a depth of ¼". This will help prevent stripping of the screws and hold the sensor more securely.

**3.** If installing on any other surface, such as brick or masonry, you will use the included screws and anchors. Drill out your pilot holes using a 9/32" drill bit to a depth of 1". Gently tap the anchors into your pilot holes using a hammer until the anchors are flush with the mounting surface.

**4.** Screw the sensor mount onto the post just until tight. Do not over-tighten.

**5.** Adjust the angle of your sensor so that it is looking at your target area.

 **NOTE**

If your sensor swivel is too loose, you can adjust this by tightening the screw on the back of your sensor's mounting plate.

## 3. Adding Additional Units

### 3.1 Pairing Additional Sensors and Receivers

Your Guardline Driveway Alarm can support an unlimited number of receivers and up to 4 sensors per zone, for a total of 16 sensors per receiver. Each additional sensor can be paired to any available zone with any of the 32 available melodies. By pairing additional sensors to different zones, you can build a comprehensive security network that allows you to easily distinguish where your alerts are coming from.

Additional receivers let you receive alerts in more locations, such as your garage or workshop or in different rooms or different floors throughout your house.

To add an additional sensor or receiver to your existing Guardline Driveway Alarm setup, follow the steps in section 2.3



**Watch the video:**

[www.guardlinesecurity.com/additional-sensor](http://www.guardlinesecurity.com/additional-sensor)



**Watch the video:**

[www.guardlinesecurity.com/additional-receiver](http://www.guardlinesecurity.com/additional-receiver)

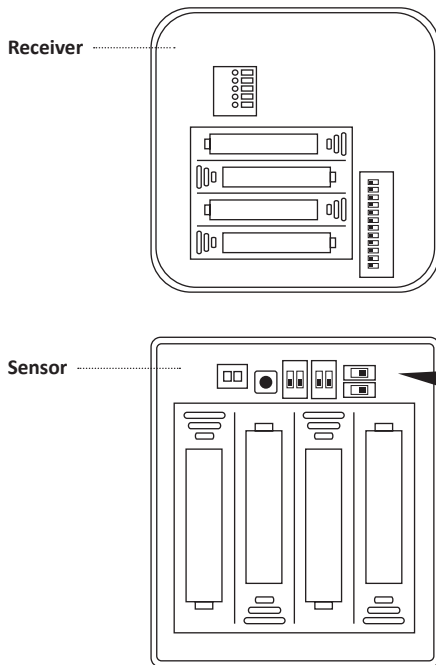
## 4. Advanced Settings

Though your Guardline Driveway Alarm System is factory-set to the most common uses, sometimes your needs may require a more customized setup.

For example, you may need to:

- Turn on the night mode if you only want to receive alerts when it is dark or dimly lit.
- If your sensing area is only a sidewalk-width away and not across the road, you may want to change the Distance Sensitivity to just 13 ft (4 m).

### 4.1 Manufacturer Default Settings



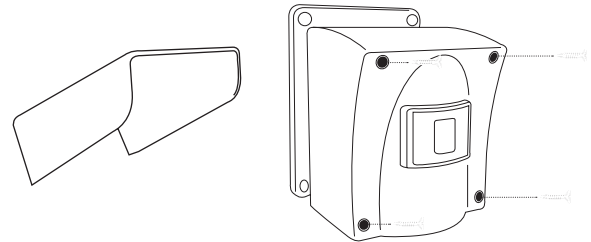
### NOTE

Our system has been pre-set to the most commonly used settings. It is recommended that users test the unit(s) under the default settings before adjusting.

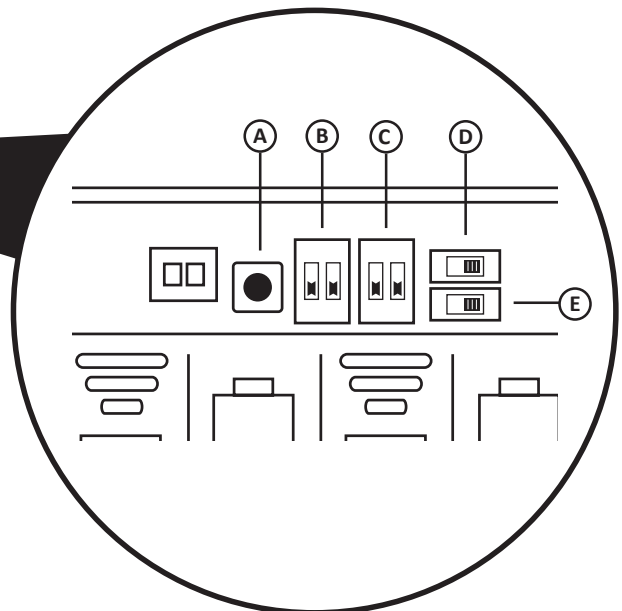
### 4.2 Sensor Adjustments

Several switches inside the sensor battery compartment regulate various sensor functions including Distance Sensitivity, Night Mode, Delay or Sleep Interval, and Speed Sensitivity. Follow this guide to adjust your unit to the desired setting(s):

1. Remove the sunshade and the four screws holding the sensor cover in place.



2. Inside the sensor unit is a battery compartment and rows of switches that control the sensor settings.







3. Use the following guide to set the sensor according to your preferences, using a pen or other hard, narrow object to move the various switches.

### A Test

Press the Test button during setup to test that the sensor is correctly paired with its receiver. The Test button is also used to recode the sensor in cases where more than one receiver is being used (see Pairing the Sensors with the Receiver).

### B Distance Sensitivity



These switches control how far away your sensor will detect objects passing in front of it. By default, both switches are in the 'down' position, allowing the maximum distance sensitivity of 39 feet. Use a shorter distance for shorter driveways or to avoid picking up objects past your driveway. To change the distance sensitivity, find your desired distance below and change the switches accordingly:

- 40 ft - Switch 1 down, Switch 2 down 
- 26 ft - Switch 1 down, Switch 2 up 
- 23 ft - Switch 1 up, Switch 2 down 
- 13 ft - Switch 1 up, Switch 2 up 

If you are experiencing false alarms from cars or animals in the distance, reducing the distance sensitivity can help reduce or eliminate those false alarms.

### C Speed Sensitivity



This determines the speed at which objects can be detected by your sensor.

- Standard speed (2 mph or greater) -  both switches down
- Slow speed (less than 2 mph) -  both switches up

Unless you are using your sensor to be alerted to slow-moving animal activity, we strongly urge you to keep this setting at the standard speed.



### D Night Mode

Turn this **ON** only if you want your sensor to work during low light or dark settings and **not** during the day. In the default **OFF** position, your sensor will work in both day and night settings.

- 24/7 operation (sensor is always on) - Switch is set to the left 
- Night-only mode (sensor only works at night) - Switch is set to the right 

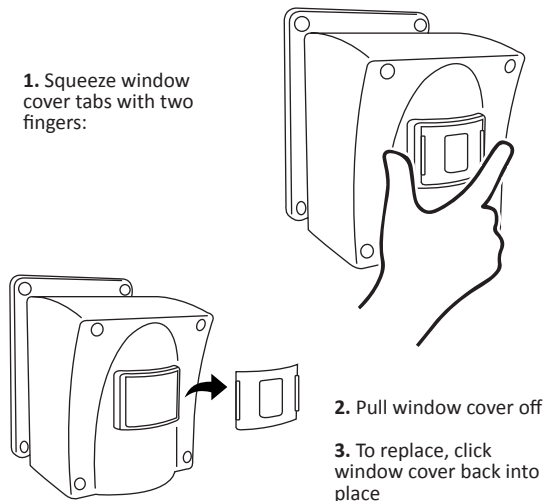
### E Sleep Interval

After detecting motion, the sensor can 'sleep' for either 7 or 30 seconds, allowing an object to pass through the field of vision without setting the alarm off again.

- 7 second interval - Switch is set to the right 
- 30 second interval - Switch is set to the left 

### 4.3 Adjusting Sensor Field of View

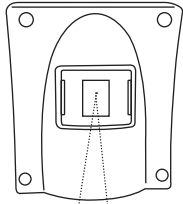
From the factory, your sensor has a 9-degree field of view. You can increase each sensor's field of view to 12 degrees by removing the sensor's window cover:





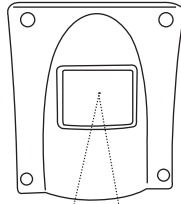
Sensor field-of-view angles:

Window cover on:



9-degree  
(Standard)

Window cover off:



12-degree

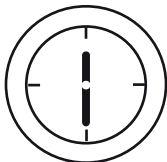
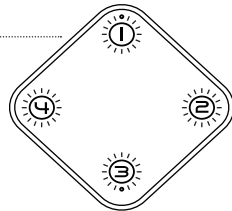
## 5. Additional Features

### 5.1 Pause Mode

Your Guardline receiver has the ability to temporarily pause the functioning of your driveway alarm. This is especially useful if you don't want to disturb others as you leave your house, or if you'll be working near your sensor and don't want your driveway alarm to continually go off.

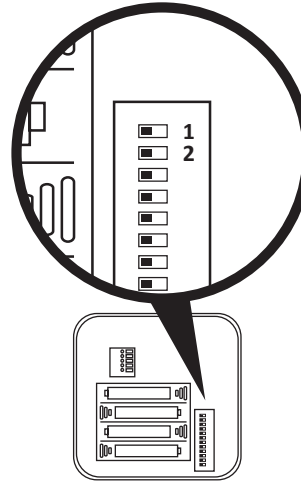
To put your receiver in pause mode:

1. Hold **PAUSE/RESET** button for a few seconds. All zones will light up



2. In **PAUSE** mode, all zone LEDs will cycle for **30 mins** at the standard setting before returning back to Live mode. You can press the **PAUSE/RESET** button at anytime to exit **PAUSE** mode

To change these settings:



**Switch 1: pause duration**

- 30 mins
- 60 mins

**Switch 2: pause mode**

STANDARD mode

Your receiver will automatically exit Pause mode once the end of the pause duration is reached.

MANUAL mode

Your receiver will beep at the end of the pause duration, but it will stay in Pause mode. To exit Pause mode, press **Pause/Reset** button.

### 5.2 Battery Check

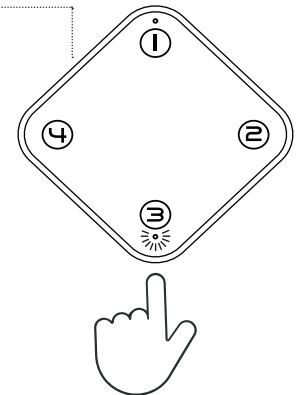
When one or more of the sensor batteries are low, the low-battery indicator LED will blink every 5 seconds.

To check which sensor has low batteries:

1. Press and hold **BATT CHECK** until Low Battery LED lights up
2. Release. Zone 1 will flash. You can now check battery status of Zone 1
3. Press and hold **BATT CHECK**. The zone LED will light up to signal which sensor(s) paired to Zone 1 have low battery

If no LEDs light up, all sensors paired with this zone are good

4. Press **LEARN/NEXT** to advance to the next zone
5. Repeat step 3 to check battery
6. Repeat steps 3 & 4 for all zones
7. To exit, press **LEARN/NEXT**



**Watch the video:**

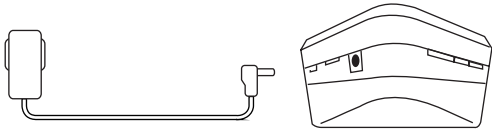
[www.guardlinesecurity.com/battery-check](http://www.guardlinesecurity.com/battery-check)

### 5.3 Connecting an External 12v Device

Your Guardline Driveway Alarm can trigger external devices whenever a signal is received on your receiver. You can use the 12v relay feature to activate powered or unpowered 12v external devices such as strobes or sirens. You can even use the 12v relay to tie your Guardline Driveway Alarm into an existing home alarm system.

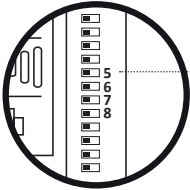
#### 5.3.1 To add an unpowered 12v external device:

1. Receiver must be plugged in with the power adapter



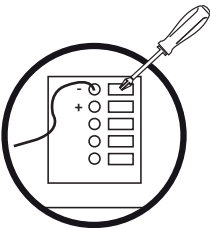
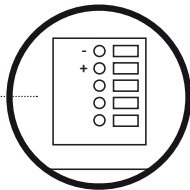
2. Remove back plate and feed wires through

3. Turn on the switches that correspond to the zone(s) on your receiver that you want to activate:



5: Zone 1  
6: Zone 2  
7: Zone 3  
8: Zone 4

4. Locate the 5 orange tabs and follow the instructions with your 12v device on how to connect it. If you don't have the instructions, follow the steps below:



5. Use the + and - terminals

6. Depress orange tab for the + terminal and insert red wire fully, do the same with the - terminal and insert black wire

7. Activate your sensor to make sure it's working fully

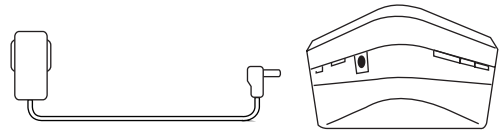


Watch the video:

[www.guardlinesecurity.com/12v-relay](http://www.guardlinesecurity.com/12v-relay)

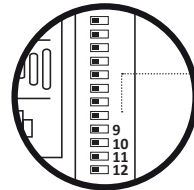
#### 5.3.2 To add a powered 12v accessory

1. Receiver must be plugged in with the power adapter



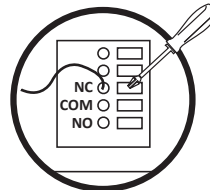
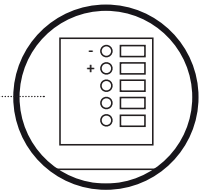
2. Remove back plate and feed wires through

3. Turn on the switches that correspond to the zone(s) on your receiver that you want to activate:



9: Zone 1  
10: Zone 2  
11: Zone 3  
12: Zone 4

4. Locate the 5 orange tabs and follow the instructions with your 12v device on how to connect it. If you don't have the instructions, follow the steps below:

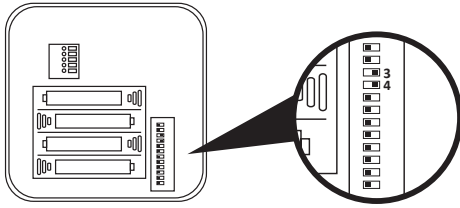


5. Use the **NO** or **NC** and the **COM** terminals. Consult the instructions on your 12v device to confirm whether you should use NC or NO terminals

6. Depress orange tab for either the NO or NC terminal, then insert red wire fully. Do the same with the COM terminal and insert black wire

7. Activate your sensor to make sure it's working fully

### 5.3.3 Customizing Your 12v Relay Settings

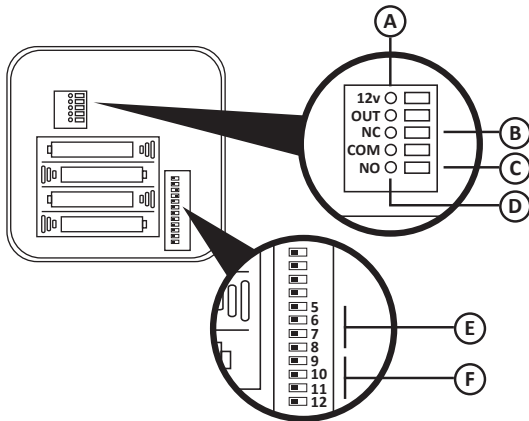


#### Delay Time Setting: C. 12v Relay Duration

Switches **3** and **4** control how long your external 12v relay device will stay activated after it has been triggered:

- 1 second - Switch 3 right, Switch 4 right
- 5 seconds - Switch 3 right, Switch 4 left
- 10 seconds - Switch 3 left, Switch 4 right
- 60 seconds - Switch 3 left, Switch 4 left

**Output Terminal:** External devices, such as gate openers, door releases, or external speakers, can be wired to the receiver using the 12V out relay. Reference the instructions that came with your 12v device to see how it should be installed.



**(A) 12V Out:** This terminal outputs 12V/300mA when the selected zone is triggered in cooperation with “E” (12V Output Control). **Note:** See section “E” (12V Output Control) below for assigning zones.

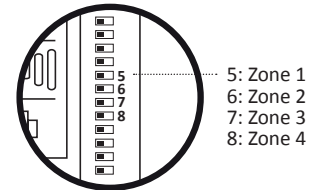
**(B) NO (Normally Open):** Outputs to a closed circuit when the selected zone is triggered in cooperation with “F”. See section “F” (NO/NC Control) below for assigning zones.

**(C) COM:** Neutral/Grounding terminal.

**(D) NC (Normally Closed):** Outputs to an open circuit when the selected zone is triggered. See section “F” (NO/NC Control) below for assigning zones.

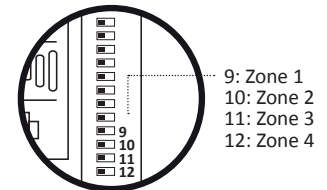
The NO and NC outputs cooperate with “F” (NO/NC Control).

**(E) 12V Output Control:** Selects which zone(s) will trigger your 12v device that is plugged into either the + or - terminal. Switches 5-8 are linked to zones 1-4. For example, engaging switch 5 will allow signals from zone 1 to trigger the attached 12v device.



Switches 5-8 only affect 12v devices that are connected to the + and - terminals. If your device is connected to the NO or NC terminals, use switches 9-12.

**(F) NO/NC Control:** Selects which zone(s) will trigger your 12v device that is plugged into either the NO or NC terminals. Switches 9-12 are linked to zones 1-4. For example, engaging switch 9 will allow signals from zone 1 to trigger the attached 12v device.



Switches 9-12 only affect 12v devices that are plugged into either the NO or NC terminal.

## 6. Troubleshooting

Most issues that arise can easily be resolved by changing the settings on your Guardline Driveway Alarm or performing a simple reset. Use the table below to find your exact issue and possible solutions for it.

Issue	Cause	Solution
<b>No alarms</b>	Sensor and/or receiver not turned on/ powered up	Confirm that your sensor and receiver have working batteries and/or are plugged in and turned on. Your receiver will have a solid red or blue LED above zone 1 when it is powered on. Your sensor eye will light up red when it is activated
	Volume not turned up	Ensure volume wheel on the receiver is turned up (turn towards 12V port for max volume)
	Sensor not paired with receiver	Follow instruction in Pairing the Sensors with the Receiver
	Incorrect sensor settings	Reset all sensor dip switches to factory settings (see Manufacturer Default Settings)
	Sensor out of range of receiver/ interference issue	If your sensor eye lights up when activated, but you aren't getting the alarm on your receiver, then your sensor is out of range. If there is heavy interference between sensor and receiver, your maximum effective range will be decreased. Move sensor and receiver closer together until you consistently receive alerts

Issue	Cause	Solution
<b>No alarms</b>	Multiple receiver conflict	Follow the steps below in "Multiple Receiver Conflicts" to reset your pairing code.
<b>Sensor eye not lighting up</b>	Sensor batteries are low, depleted or not installed	If your sensor is paired with your receiver, look at the LED below zone 3 on the receiver. If that LED is lit or flashing, the sensor batteries need to be changed
	Incorrect sensor settings	Reset all sensor dip switches to factory settings (see Manufacturer Default Settings)
<b>Inconsistent alarms</b>	Sensor not paired properly	Reset all zones on your receiver and re-pair your sensor(s). See the "Resetting the Zones" section for reset instructions
	Signal Interference	Move sensor to new location at least 5 feet from metal gates, poles or structures. Receivers used in buildings with metal siding or stucco may experience inconsistent signals
	End of functional range	Move sensor closer to your receiver and/ or remove any physical objects between sensor and receiver. If using in a heavily wooded area, or signal passes through multiple buildings, your effective range will be reduced

Issue	Cause	Solution
<b>Inconsistent alarms</b>	Incorrect sensor settings	Reset all sensor dip switches to factory settings (see Advanced Settings)
	Low Batteries	Replace your sensor batteries and re-pair your sensor to your receiver. See Pairing the Sensors with the Receiver for re-pairing. Alkaline batteries can be severely depleted in cold temperatures. We recommend using lithium batteries in your sensor to avoid temperature-related issues
	Multiple receiver conflict	Follow the steps below in Multiple Receiver Conflicts to reset your pairing code
<b>False Alarms</b>	Sensor or Receiver receiving electrical interference	Move sensor and/or receiver away from electrical transformers or other cause of interference
	Moisture inside sensor	Take sensor inside, remove backplate and batteries, and air dry for 24 hours, then test it the following day. When re-installing, ensure backplate is securely screwed on and sensor is protected from the elements
	Low batteries	When the batteries in your sensor or receiver are low, it can cause your device to behave erratically. See Checking Battery Status to determine battery health

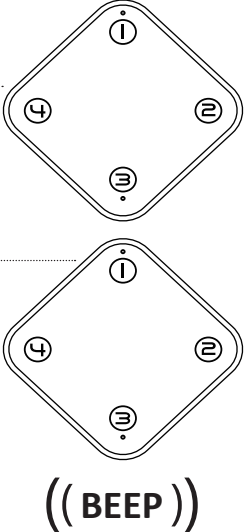
Issue	Cause	Solution
<b>Can't change melody/wrong melody?</b>	Sensor paired with different melody	Follow instructions in Changing your Chime to resolve
<b>Sensor doesn't stay where pointed</b>	Sensor swivel screw too loose	Use a phillips head screwdriver to tighten the screw on the back of the mounting plate

**6.1 Resetting the Zones**

Resetting the zone(s) on your receiver removes any sensors that are paired to it, allowing you to re-pair those sensors to a different zone. Resetting is also useful when troubleshooting common issues.

To clear sensors from a zone:

1. Press and hold **LEARN/NEXT** for 3 seconds to enter Learn mode and select Zone 1
2. To select another zone, press **LEARN/NEXT**
3. Press and hold **PAUSE/RESET** for 3 seconds to unpair all sensors in that zone. The receiver will beep when the zone is unpaired
4. Repeat steps 2 and 3 to reset additional zones; to exit Learn Mode, turn the receiver off and then on again
5. Any sensors that were unpaired during this process will have to be re-paired to your receiver in order to receive alerts from them



**6.2 Changing your Chime**

To change your chime, follow the steps in section 2.3, "Pairing your Sensor and Receiver" with both your sensor and your receiver nearby. If done correctly you will hear a double-beep on your receiver confirming that a new melody has been set.

### 6.3 Multiple Receiver Conflicts

You may have receiver conflicts if you are experiencing interference with the sensors, if you have multiple receivers, and/or if you have over 16 sensors with one or more using the same signal code. You will need to manually change the code in one or more of your sensor units.

To manually change the signal code:

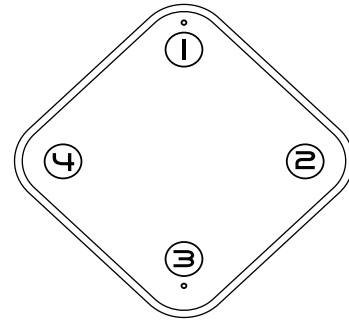
1. Remove one (1) battery from the sensor.
2. Press and hold the Test button.
3. While holding the test button, re-insert the battery.
4. Continue holding the test button until the sensor LED flashes five times. When the LED flashes five times, the sensor has a new signal code to use with the receiver.

See Section 2.3, "Pairing Your Sensor and Receiver" for instructions.

## 7. Accessories

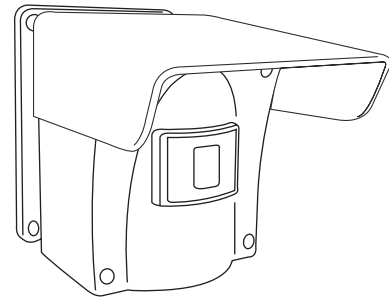
### 7.1 GUARDLINE Extra Receiver for Driveway Alarm

Add-on Receiver compatible with the Guardline Driveway Alarm.



### 7.2 GUARDLINE Extra Sensor for Driveway Alarm

- Additional sensor compatible with the Original Guardline Driveway Alarm
- Add up to 4 sensors per zone (for a total of 16)
- Sensor has a 40 ft (12 m) detection range
- Weather resistant and ready to withstand the elements
- An unlimited number of receivers can be added



## 8. Questions?

Call Customer Service at:

**(888) 519-0413, 7am - 3pm Pacific**

or email us at:

**info@guardlinesecurity.com**

Find useful installation videos and how-to articles in the support section at:

**[www.GuardlineSecurity.com/Pages/Help](http://www.GuardlineSecurity.com/Pages/Help)**