

**Curb Alert Parking Sensor for Corvette C7  
(Kit # 5000-CA14)**

**Please read thoroughly before starting installation and check that kit contents are complete.**

**Items Included in the Kit:**

Main module  
Buzzer/speaker  
Front IR sensor  
3M cleaning pad  
Zip ties  
Allen wrench  
4 different mounts for IR sensor  
6 wire guides/clamps  
2 ringlets and nuts (attached to power harness)  
Inline fuse holder (attached to power harness)  
These instructions

**Tools & Supplies Needed:**

Wire strippers  
Wire cutters  
Electrical tape  
Zip ties  
Plastic panel removal tools  
Digital Volt Meter / BCM safe test light  
Screwdriver  
Socket set  
Wrench



**Safety Precautions:**

- Work in well ventilated area that is clear of obstructions.
- Secure vehicle with tire chucks in both front and rear of tires.
- Turn vehicle accessories OFF and ensure ignition key is in OFF position.
- Wear safety goggles and snug fitting clothes.
- Use tools only for their intended purpose and which are in good repair.
- Only perform this task if confidence, skill, and physical ability permit.

**NOTE: We strive to provide accurate and up-to-date installation instructions. For the latest full color instructions, as well as an installation video, please visit [www.brandmotion.com](http://www.brandmotion.com)**

**Step 1-** Determine the best mounting location for the sensor unit in the center of your vehicle. With both top mount and bottom mount (under bumper) brackets included, a broad variety of sensor mounting locations are possible to mount to almost any vehicle. Measure the ground clearance of the vehicle's lowest ground clearance point in the front fascia / air dam of the vehicle. If the lowest point is 5 inches for example, calibration of the Curb Alert unit to detect a 4-inch high curb height will be required to provide adequate front-end curb protection. If the sensor is mounted under the vehicle, it should be mounted as far back from the front end as possible or in a recessed / protected location to prevent damage on steep incline or declines.

**Step 2-** Clean the sensor mounting location with a suitable solvent to remove all wax or dirt that would reduce the adhesion of the 3M adhesive mounting tape on the mounting bracket. The use of 3M adhesion promoter 4298 is strongly recommended for plastic mounting surfaces. Remove the 3M release film from the bracket and mount the sensor unit to the predetermined mounting location. Mount the sensor unit being very careful to aim the unit directly forward and centered on the vehicle.

**Step 3-** At this point, you can connect all Curb Alert components outside the vehicle, connect the control box power leads to the battery, and calibrate the sensor. Start the vehicle, and then shut it off. This allows the control box to be used for approximately 20 minutes during sensor calibration thus making one person sensor calibration convenient. After the sensor is calibrated, proceed with the normal installation.

**Step 4-** Route the sensor cable through a convenient opening into the engine compartment (taking care to avoid any moving parts or hot areas). Use the supplied cable ties and clamps to securely fasten the cable in place. Continue routing the sensor cable into the passenger compartment through any available entry point usually a rubber grommet present on the firewall or other firewall opening. If no firewall entry point is available then a hole will have to be drilled and rubber grommet inserted in a suitable location.

**Step 5-** Mount the control box in the vehicle interior in a convenient location. Clean the mounting surface and remove the release film from the 3M tape. Alternately, use cable ties to secure the control box.

**Step 6-** Mount the buzzer in a convenient location in the driver or passenger side interior, again cleaning the mounting surface and removing the release film from the 3M tape or by using cable ties. Plug the buzzer jack into the control box and set the buzzer volume to high initially. The RED (+) power leads from the control

box can be connected directly to the battery. An in-line fuse holder [supplied and already connected] should always be used on the RED power lead. The BLACK ground lead must then be connected to a good ground. Curb Alert must detect voltage (>13.2 V) to activate and will automatically shut off in approximately 20 minutes when it does not detect charging voltage. Plug the sensor cable jack firmly into the control box to lock it in place. Apply a cable tie around the power leads, buzzer cable, and sensor cable at the control box connections to prevent any tension on these components. Please refer to the Sensor Calibration and User Instructions to complete the installation.

## Curb Alert Sensor Calibration

**Note:** The sensor calibration should be completed with the vehicle not running. With vehicles wired to a circuit that senses alternator voltage such as the battery, an ignition switch circuit, or fuse block, start your vehicle to activate the Curb Alert unit. The buzzer should "chirp" 4 times to notify you that the sensor has been activated in any of the wiring modes. Then shut off the engine. The Curb Alert will shut off automatically in approximately 20 minutes after the vehicle is shut off to allow time for sensor calibration with the car not running. If you need more time to calibrate your sensor, restart your vehicle, shut it off, and your Curb Alert will be activated again.

After mounting the Curb Alert sensor to your vehicle as described in the installation instructions, tighten the Allen head screw to the near-tight position. This will allow the sensor to rotate for curb height detection adjustment.

Now, you need to measure the ground clearance from the lowest part of your fascia to determine what curb height you want to detect to protect your front end. If your lowest ground clearance point is 5 inches, please adjust your curb height alert to 3-4 inches. to prevent any curb damage. Place either the 3-inch or 4-inch high side of the packing box (or any box with the desired height) on the floor at 20 inches or your desired alert distance from the bumper front or lower fascia front (directly in the front of the sensor). Setting the curb height too low will result in false road alerts!

***If the box is not triggering the system at the desired distance, move it closer to the sensor until the system is triggered.***

### Sensor Calibration—Distance Alert Adjustment

1—Rotate the sensor housing to a position parallel to the pavement. Place a large target box (8 in. high) at your desired alert distance from the front end of your vehicle. We suggest 12 inches as a starting point.

2—Press and release the red distance calibration button on the Control Box. You will hear a double beep or constant tone indicating that you have set the alert distance. If you don't hear the a double beep or constant tone when pressing the distance calibration button, then the sensor is not aimed at the target box. Once you hear the double beep or constant tone, slide the target box back several inches and then move it forward. A constant tone indicates the target box is being sensed and that your alert distance has been calibrated to that distance from the front of your vehicle.

3—Move the target back several inches and slide it forward to recheck the alert distance. You should now hear a constant tone indicating that your target is being sensed at your calibrated alert distance. Your Curb Alert unit is now in the calibration mode with a constant tone.

### Sensor Calibration—Curb Detection Height Adjustment

1—Place the shipping box (either the 3-inch or 4-inch height) directly in front of the sensor at a 11-inch distance. Rotate the sensor downwards very slowly until you first hear the constant tone.

2—When your desired curb detection height is correct, tighten the Allen head screw very tightly! At this point, you should recheck your curb detection distance and height to be sure that it hasn't changed from the final tightening of the Allen screw.

3—To check your curb height setting with high accuracy, slowly bring the shipping box down vertically in front of the sensor at your distance alert point and measure the distance from the bottom of the box to the pavement when the calibration alert sounds. To adjust the curb height setting, rotate the sensor up or down slightly and retest for curb height setting.

4—Your Curb Alert is now calibrated to alert you when a high curb is detected at your chosen distance from the front sensor. The curb height and alert distance are easily adjustable based on your vehicle and preferences! A detection distance of 12 inches from the

front of your vehicle's bumper is suggested as an initial distance setting. Modify as desired.

Your Curb Alert unit will shut off automatically in about 20 minutes after the engine has been turned off. It will then be in the **distance alert mode** with the three beeps curb alert. You can also disconnect and reconnect the fuse to put the Curb Alert in the distance alert mode immediately. Your distance alert is now programmed into your Curb Alert unit. Your curb detection height has been adjusted to your desired height. If your Curb Alert unit should alert often on straight road conditions, your curb height adjustment is too low and should be readjusted.

### Curb Alert User Instructions

When you start your vehicle, you will hear a "chirp" sound indicating that your Curb Alert unit is activated.

Volume of the buzzer alerts can be set to "off", "low", or "high" based on your preferences. Approach the parking curbs **slowly** for the highest accuracy. Stop when you hear the triple beep!

Parking at an angled parking curb will reduce the stopping distance from the curb! **Park only against straight curbs.**

You will experience curb alerts on steep inclines and declines warning that the front end of your vehicle may scrape on those steep inclines or declines. Angling your vehicle into those areas will reduce the frequency of alerts and also potential damage to your vehicle.

**Keep your sensor lens clean for optimum performance!** The distance sensor transmits an infrared beam and requires a relatively clean lens.

**Do not rely on Curb Alert in snowy conditions,** since the snow could block transmission through the lens.

Your Curb Alert draws only 35 milliamps when activated. It will shut off automatically in 20 minutes after your vehicle is shut-off.

A video created by one of our partners demonstrating Curb Alert calibration is available online at: <https://www.youtube.com/watch?v=JJxg0oTqWcs>

## Troubleshooting/FAQ's

Example showing sensor location:



Optional add-on LED Part# 5000-CLED



**- My curb alert is no longer giving me audible alerts.**

Try holding the red calibration button down for 35-40 seconds. This will not give you any audible alert but it will hard reset the system. Afterward, start recalibration at step 1 on the top of page 3.

**- I can only get my system to alert me when the box is almost against the sensor.**

Place the box as close as it needs to be in order to trigger the sensor. Once you've accomplished that, move the box back in 3-4 inch increments. Hit the calibration and recheck distance each time you move to box back. Do this until you've reached your desired alert distance

**- Does the orientation of the sensor matter?**

No. The sensor can be in any orientation. The most important factor in regards to accuracy is the calibration and making sure there is nothing that will impede the view of the sensor.

**- If I remove the battery in my vehicle for replacement will I have to recalibrate?**

No. Your calibration is actually saved within the sensor head. Removing the battery will not delete the calibration