Table of Contents

Important information about...

Federal Laws, Safety Alert®/Strobe Alert® Safe Driving, Security of Your Vehicle, Customer Support	A1
1 Installation	
2 Operation—Getting Started	5
3 Operation—Settings	6-12
Highway/City Mode	6
UltraBright™ Data Display Brightness	7
Muting an Alert	8
Auto Mute Mode	8
IntelliMute®	9-11
VG-2 Alert® Audio Setting	12
4 Detection	13-16
Signals Detected	13
Audio Alerts	13
Visual Display	13-15
Instant-On Detection	
Responding to Alerts	
5 Understanding Radar and Laser	17-19
6 Maintenance and Service	20-21
7 Limited 1-Year Warranty	22
8 Specifications and Trademark Acknowledgement	23
9 Optional Accessories	
10 Order Info	25

INSTALLATION

Where to Mount Your Unit

You will get optimum performance from your detector if you mount it at a point approximately in the center of the vehicle, as low as possible on the front windshield without obstructing the unit's view of the road either to the front or rear. You can also mount it directly on the dashboard.



Radar and laser signals pass through glass but not through other materials and objects. Objects that can block or weaken incoming signals include:

- ▶ windshield wiper blades
- ► dark tinting at the top of the windshield
- ► heated windshields currently available on some vehicles (Instaclear for Ford,® Electriclear for GM[®] consult your dealer to see if you have this option)

Windshield mounting



Dashboard mountina

The unit's lenses must not be blocked and the LaserEye® should have a clear view out the back window to allow 360° detection.



- ▶ mirrored sun screens

Windshield Mounting

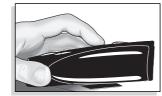
1. Attach the rubber cups to the bracket.



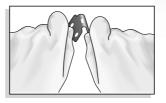
- 2. Make sure the rubber cups and your windshield are clean.
- **3.** Push the bracket firmly onto the windshield.



4. Attach the detector to the bracket. Check the angle of the unit.



5. To adjust the angle if necessary, gently push or pull on the bracket to bend it. DO NOT use the detector to bend the bracket.



INSTALLATION

6. Plug the power cord into the detector.



7. Plug the cigarette lighter adapter on the power cord into your vehicle's ciaarette liahter.



8. You can temporarily remove the detector whenever you wish by sliding it off of the bracket.

3

Instaclear for Ford® is a registered trademark of Ford Motor Company, Inc Electriclear for GM[®] is a reaistered trademark of General Motors Corporation.

INSTALLATION

Dashboard Mounting

- Place the detector on the dashboard to find a location where the unit has a clear, level view of the road. The angle can NOT be adjusted after mounting.
- **2.** Remove the paper backing from one side of the hook-and-loop fastener.



3. Attach the pad to the dashboard at your chosen location and remove the other paper backing.





4. Attach the detector to the hook-and-loop fastener. You can remove and reattach the unit as often as you like.



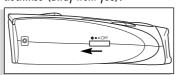
5. Plug the power cord into the detector.



6. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.



 Turn on the unit and adjust audio volume by rotating the ON-OFF/VOLUME CONTROL DIAL clockwise (away from you).



2. You will hear 3 beeps and the letter "h" will appear in the display indicating that the power is on.

OPERATION • GETTING STARTED



NOTE: In some vehicles, power is supplied to the cigarette lighter even while the ignition is off. If this is the case with your vehicle, you should turn off or unplug your detector when parking for lengthy periods.

When changing the settings on your detector, please keep in mind:

- Buttons can have multiple functions.
- All settings will be stored in memory when the power is turned off and recalled when the power is turned back on.

Highway/City Mode

6

Setting your detector to City mode delays all X band audio alerts until the signal strength reaches level 3. (A single beep will sound when the signal is first detected.) This will reduce false alerts while you are driving in or near urban areas where there are many sources for conflicting X band signals such as microwave towers and automatic door openers.

To change settings, follow the procedure in the table below, which indicates what you will see and hear as you complete each step. The factory setting is Highway mode.



	Procedure	Tone	Visual Display
 To change from Highway mode to City mode 	Press and release the CITY button.	1 beep	appears in the display
 To change from City mode back to Highway mode 	Press and release the CITY button again.	2 beeps	h appears in the display



UltraBright™ Data Display Brightness

You can choose from three settings for brightness of the display.



Bright Pass Monthly Dim

DIM button Press and release

	Procedure	Tone	Visual Display
To change the brightness to Dim	Press and release the DIM button once.	1 beep	Display dims
To change the brightness to Dark	Press and release the DIM button again.	1 beep	Display remains dim (No visual alerts will be seen)
To change the brightness to Bright	Press and release the DIM button a third time.	2 beeps	Display returns to full brightness

OPERATION • SETTINGS

You can cycle through the settings by repeatedly pushing the DIM button *The factory setting is Bright.*

Muting an Alert

Your detector allows you to quickly turn off an audio alert by momentarily pressing the MUTE button. If you press the MUTE button a second time during the alert, the audio alert will be turned back on.



	Procedure	Tone	Visual Display
To turn Auto I off	 Press and release the MUTE button while no alert is occurring.	1 beep	none
To turi Auto I on	Press and release the MUTE button again while no alert is occurring.	2 beeps	none

Auto Mute Mode

Auto Mute will automatically reduce the audio volume of all alerts after 4 seconds for as long as the signal is detected. *The factory setting for Auto Mute is On.*

IntelliMute®

IntelliMute[®] is a unique new feature of the detector that allows you to avoid alerts you don't need to hear because you are stopped or moving slowly. By sensing the "revs" (RPMs) of your engine, IntelliMute[®] knows when you are at low speed and automatically mutes alerts (except for strobe signals from emergency vehicles).

Before IntelliMute[®] will work, you must set an activation point for your engine's revs (see page 11). Whenever the revs are below that point, IntelliMute[®] will begin muting. The activation point will be stored

> IntelliMute® button-Press and release

in memory and recalled each time the power is turned on. *The factory setting is IntelliMute® Off.*

OPERATION • SETTINGS

NOTE: IntelliMute[®] may not work with some vehicles because it cannot sense the engine's revs. In such cases, you can reduce unwanted audio alerts by using Auto Mute and City mode when appropriate.



1		Procedure	Tone	Visual Display
	• To turn IntelliMute® on	Press and release the IntelliMute® button.	2 beeps	dot appears next to the large character on the right
	To turn IntelliMute® off	Press and release the IntelliMute® button again.	1 beep	none

8

What to Remember While Using IntelliMute[®]

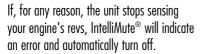
IntelliMute[®] works with both City and Auto Mute modes.

Whenever your engine revs are below the activation point, the dot next to the large character on the right side of the display will remain lit. Above the activation point, the dot will blink twice every 2 seconds.

 \lor

XKKaVS

14



The rev point you set will be stored in the unit's memory when power is turned off, and recalled each time the power is turned on.

The rev point must be reset if you use your detector in a different vehicle. Important: When initially choosing your

IntelliMute[®] activation point, a setting of approximately 300 to 600 RPMs above idle is recommended. You can reset the activation point at any time to fit your individual preferences and driving style.

Setting the IntelliMute® **Activation Point**

Your detector must be installed in your vehicle.

Caution: Do not attempt to set the rev point while driving. Your vehicle should be *parked* and *idling*.

IntelliMute[®] must be turned on. You will hear a series of beeps as you follow these steps:

I. 2.

OPERATION • SETTINGS

11

y.		
Procedure	Tone	Visual Display
Press and hold the IntelliMute® button for 2 seconds.	2 beeps	none
Procedure	Tone	Visual Display
Rev your engine to the level you wish to set. Rev the engine slightly above idle and hold revs steady for 2 seconds.	none	three bars flash in succession 1 2 000 3 000
IOTE: If the unit is unable to ense usable pulses within three econds, IntelliMute [®] will indicate in error and automatically turn off.	Tone 1 beep	Visual Display E appears

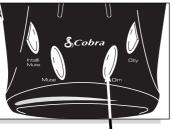
3.	Procedure	Tone	Visual Display
	At the desired rev level, press and release the IntelliMute® button.	3 beeps	all three bars flash three times
	NOTE: If you do not set a rev point within 20 seconds of beginning these steps, IntelliMute® will indicate an error and automatically turn off.	Tone 1 beep	Visual Display E appears

10

VG-2 Alert[®] Audio Setting

The detector is undetectable by police VG-2 detection devices, and will alert you when such a device is in use near your vehicle. During the alert, the unit continues to detect other signals. You can choose whether or not you want your unit to sound VG-2 alerts.

The factory setting is VG-2 Audio On.



DIM button Press and hold for 2 seconds

	Procedure	Tone	Visual Display
 To turn off VG-2 audio alert 	While no signal is being detected, press and hold the DIM button for two seconds.	1 beep	vill blink once in the display
To turn on VG-2 audio alert	While no signal is being detected, press and hold the DIM button for two seconds again.	2 beeps	V will blink twice in the display.



Signals Detected

The tables on the following pages show you the types of signals your detector will detect, as well as the visual alerts it provides for each one.

Audio Alerts

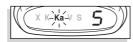
A distinctly different alert tone is used for each type of signal detected (including separate tones for each laser signal). For X, K, and Ka band radar signals, the tones will repeat faster as you approach the signal source. The repeat rate of the tones gives you useful information about the signal detected. (See Responding to Alerts, page 16.)

Visual Display

An indication of the type of signal detected will appear in the UltraBrightTM Data Display. During X, K and Ka alerts, a number will also appear, indicating the strength of the signal detected. (1 = weakest, 5 = strongest)







DETECTION

During laser alerts the letter "L" will appear, instead of the signal strength indication.



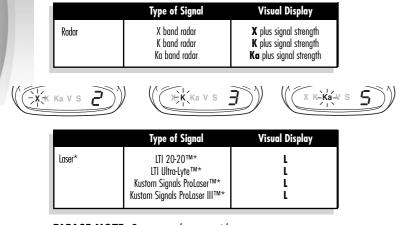
During VG-2 Alert® the letter "V" will appear.



During Safety Alert $^{\otimes}$ and Strobe Alert $^{\otimes}$ the letter "S" will appear.



DETECTION



PLEASE NOTE: Beep rate changes with different laser alerts



	Type of Signal	Visual Display
Strobe Alert®*	3M Opticom™ or Tomar®	S



 Type of Signal
 Visual Display

 emergency vehicles
 S

 road hazards
 S

S

PLEASE NOTE: There are different	
tones for each Safety Alert®	

trains

Safety Alert®

	Type of Signal	Visual Display
VG-2 Alert®	Interceptor VG-2™	۷



DETECTION

DETECTION

Instant-On Detection

Your detector is designed to detect instant-on speed monitoring signals, which can suddenly appear at full strength. You should take appropriate action immediately whenever an alert is given.

Responding To Alerts

Descri	ption	Interpretation	Recommended Response
tone repeats slov speeds u		probably police radar	FULL ALERT
tone sounds o	one time only	probably a false alarm, but possibly pulsed radar	exercise caution
tone instar repeatinę		radar or VG-2 nearby has been activated suddenly	FULL ALERT
tone repeats s approach a hill speeds up sharph	or bridge, then	probably police radar beyond the hill or bridge	FULL ALERT
tone repeats slowly	r for a short period	probably a false alarm	exercise caution
any type of	laser alert	laser alerts are never false alarms	FULL ALERT
any Safety Strobe		you are nearing an emergency vehicle, railroad crossing, or road hazard (construction, accident, etc.)	exercise caution

UNDERSTANDING RADAR & LASER

Radar Speed Monitoring Systems

Three band frequencies have been approved by the Federal Communications Commission (FCC) for use by speed monitoring radar equipment:

X band 10.525 GHz K band 24.150 GHz Ka band 33.400-36.00 GHz Your detector detects signals in all three radar bands.

VG-2

VG-2 is a "detector detector" that works by detecting low-level signals emitted by most radar detectors. Your detector does not emit signals that can be detected by VG-2, but does detect VG-2 signals and will alert you when a device is in use near your vehicle.

Safety Alert® Traffic Warning System

SAFET FCC-approved Safety Alert® transmitters emit

microwave radar signals that indicate the presence of a safety-related concern. Depending on the frequency of the signal emitted, it can indicate a speeding emergency vehicle or train, or a stationary road hazard.

Because these microwave signals are within the K band frequency, most conventional radar detectors will detect Safety Alert[®] signals as standard K band radar. Your detector, however, is designed to differentiate between standard K band and Safety Alert[®] signals, and give separate alerts for each.

Safety Alert[®] technology is relatively new. Safety Alert[®] transmitters can be found in limited numbers in all 50 states, but the number is growing. Depending on your location, you may not receive these alerts regularly and may often encounter emergency vehicles, trains, and road hazards without being alerted. As the number of transmitters increases, these alerts will become more common.

When you receive such an alert, please watch for emergency vehicles ahead of you, on cross streets, and behind you. If you see an emergency vehicle approaching, please pull over to the right side of the road and allow it to pass.

UNDERSTANDING RADAR & LASER

Strobe Alert®

Special strobes mounted on the light bars of authorized emergency vehicles (fire trucks, police cars, ambulances) automatically change traffic signals as the vehicle approaches an intersection. These strobes and the special strobe detectors located on the traffic signals, introduced fairly recently by 3M and Tomar, are already in use in more than 1000 cities nationwide. Cobra's exclusive Strobe Alert[®] detector will detect these special strobes and give an Emergency Vehicle alert.

When you receive such an alert, please watch

for an approaching emergency vehicle and pull

coverage in your area, contact your local fire

over to allow it to pass. To inquire about

and police departments.

LIDAR (laser)

The correct name for the technology that most people refer to as laser is actually LIDAR, which stands for Light Detection and Ranging. LIDAR operates much like radar. Its signal spreads out like a radar signal, though not as quickly. Unlike radar, LIDAR must have a clear line of sight to its target vehicle throughout the entire measurement interval. Obstructions such as sign posts, utility poles, tree branches, etc., will prevent valid speed measurement.

Some common questions about LIDAR include: Does weather have any Can LIDAR operate affect on LIDAR? while in motion? Yes. Rain, snow, smoke, fog, No. Because LIDAR operates by or airborne dust particles will line of sight, the person using it reduce the effective range of cannot drive the vehicle. aim. LIDAR and can, if dense and operate the gun all at the enough, prevent its operation. same time. Is LIDAR legal to use? Can LIDAR operate through glass? Yes. It is legal in all 50 states. Yes. Newer LIDAR guns can obtain readings through most types of glass. However, the laser pulse also can be received through glass to trigger an alarm by your detector.

UNDERSTANDING RADAR & LASER

18

MAINTENANCE & SERVICE

Maintenance of Your Radar Detector

Your detector is designed and built to give you years of trouble-free performance without the need for service. No routine maintenance is required.

If your unit does not appear to be operating properly, please follow these troubleshooting steps:

- Make sure the power cord is properly connected.
- Make sure the socket of your vehicle's cigarette lighter is clean and free of corrosion.
- Make sure the power cord's cigarette lighter adapter is firmly seated in your cigarette lighter.
- Check the power cord fuse. (Unscrew the ribbed end cap of the cigarette lighter adapter and examine the fuse. If required, replace it with a 1-amp fuse only.)

Service

You can receive technical assistance with your unit through one of our customer support services:

Automated Help Desk is available in English only 24 hours a day, 7 days a week at 773-889-3087.

Customer Service Operators are available in English or Spanish at 773-889-3087 Monday through Friday, 8:00 a.m. to 6:00 p.m. Central Time. Questions can be faxed in English or Spanish to 773-622-2269.

Automated Technical Assistance is available in English or Spanish 24 hours, 7 days a week via e-mail at: productinfo@cobra.com

On-line answers to frequently asked questions can be found in English only at: www.cobra.com. For assistance outside the USA, please contact your local dealer.

If you suspect that your unit requires service, please call 773-889-3087 BEFORE shipping it to Cobra. This will ensure that you receive service as quickly as possible.

If you are asked to send your unit to the Cobra factory, please follow these steps:

- 1. Send the complete unit, including power cord. (It is not necessary to include the mounting bracket.)
- 2. For warranty repair, enclose some form of proof-of-purchase, such as a photocopy or carbon copy of a sales receipt. If you send the original receipt, it cannot be returned.
- 3. Enclose a typed or clearly written description of the problem you are having with your unit, plus the name and address where you want the unit returned.
- Pack the unit securely to prevent damage during transit. If possible, use the original packing materials.

 Ship prepaid and insured using a traceable carrier such as United Parcel Service (UPS), Federal Express, or first class mail with delivery confirmation. Ship to:

MAINTENANCE & SERVICE

Cobra Factory Service Cobra Electronics Corporation 6500 West Cortland Street Chicago, IL 60707 USA

6. Please allow 3 to 4 weeks before contacting us about the status of your service. Call 773-889-3087 for assistance.

If your unit is under warranty, it will either be repaired or replaced upon receipt, depending on the model. If your unit is out of warranty, you will receive a letter informing you of the repair or replacement charge.

WARRANTY



Cobra Electronics Corporation 6500 West Cortland Street, Chicago, Illinois 60707 USA www.cobra.com

COBRA ELECTRONICS CORPORATION

warrants that its Cobra 10 Band[®] Radar/Laser Detectors, and the component parts thereof, will be free of defects in workmanship and materials for period of one (1) year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

Cobra will, without charge, repair or replace, at its option, defective 10 Band® Radar/Laser Detectors, products or component parts upon delivery to the Cobra Factory Service Department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt.

You must pay any initial shipping charges required to ship the product for warranty service, but the return charges will be at Cobra's expense, if the product is repaired or replaced under warranty.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.

Exclusions: This limited warranty does not apply; 1) to any product damaged by accident; 2) in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs; 3) if the serial number has been altered, defaced or removed; 4) if the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty.

Cobra shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

SPECIFICATIONS

Cobra®, 6 Band®, 9 Band®, 10 Band®, 11 Band®, DigiView®, EasySet®, Extra Sensory Detection®, IntelliMute®, IntelliShield®, LaserEye®, Nothing Comes Close to a Cobra®, Safety Alert® Traffic Warning System, Strobe Alert®, VG-2 Alert®, Xtreme Range Superheterodyne® and the snake design are registered trademarks of Cobra Electronics Corporation, USA.

Cobra Electronics Corporation[™], 12 Band[™], Revolution[™] Series, SmartPower[™], Spectre Alert[™], UltraBright[™], and Voice Alert[™] are trademarks of Cobra Electronics Corporation, USA.

Opticom[™] is a trademark of 3M Corporation. Instaclear[®] for Ford is a registered trademark of Ford Motor Company, Inc. Electriclear[®] for GM is a registered trademark of General Motors Corporation. 20-20[™] and Ultra-Lyte[™] are trademarks of Laser Technology, Inc. ProLaser[™] and ProLaser IIII[™] are trademarks of Kustom Signals, Inc. Bee III[™] and Pop[™] are a trademarks of MPH Industries. Spectre[™] is a trademark of Stalcar. Interceptor VG-2[™] is a trademark of TechniSonic Industries LTD. Tomar[®] is a registered trademark of TOMAR Electronics, Inc.

Band		Frequencies	
X band	10.525	± 0.050	GHz
K band	24.125	± 0.125	GHz
Safety Alert® Traffic Warning System	24.070	± 0.010	GHz
	24.110	± 0.010	GHz
	24.190	± 0.010	GHz
	24.230	± 0.010	GHz
Ka band	34.700	± 1.300	GHz
Laser	910	± 50	nm
Strobe	700	± 300	nm
Unit Dimensions & Weight			
Dimensions	3"W x1¼"H	x 4 ¼"D	
Weight	140 grams		

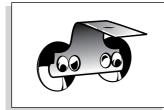
This radar detector is covered by one or more of the following U.S. patents: 5,497,148; 5,594,432; 5,612,685; 6,078,279; 6,094,148. Additional patents may be listed inside the product or pending.

• OPTIONAL ACCESSORIES

You can find quality Cobra products and accessories at your local Cobra dealer, or in the U.S.A., you can order directly from Cobra. See ordering info on page 25.



Straight 12V DC Power Cord Includes plug and fuse 420-030-N-001



Windshield Mounting Bracket Includes suction cups 545-159-N-001



Dual Port Power Adapter Includes adjustable plug (upto 90°) and fuse CLP-2B



Curled 12V DC Power Cord Includes plug and fuse 420-026-N-001



Congratulations

You've made a smart choice by purchasing the ESD 787 radar/laser detector from Cobra. Just look at some of the sophisticated features and capabilities your new unit includes:

- Detects and provides separate alerts for: radar signals (X, K, and Ka bands, with signal strength indicated) laser signals emergency vehicle safety and strobe alert signals
 LASEREYE® for 360° detection of
- LASEREYE® for 360° detection of laser and strobe signals

- "INSTANT-ON" speed monitoring detection
- TONE ALERTS with adjustable volume
- ULTRABRIGHT[™] DATA DISPLAY is easy-to-read with adjustable brightness
- CITY or HIGHWAY modes to reduce false alerts
- SAFETY ALERT[®] Traffic Warning System
 Strobe Alert[®]
- MANUAL MUTE or AUTO MUTE
- of audio alerts

IntelliMute[®] a mute function which automatically reduces false alerts by sensing engine RPMs

- Distinguishes important safety alerts, from other K band signals
- Mounts easily on windshield or dashboard
- This booklet describes the simple steps for mounting and setting up your detector. It also provides helpful information about how radar and laser guns are used and how you can interpret the alerts you receive.

Item #	Description
420-030-N-001	Straight 12V Power Cord
420-026-N-001	Curled 12V Power Cord
545-159-N-001	Windshield Mounting Bracket
CLP-2B	Dual Port Power Adapter

Ordering From U.S.A.

Call 773-889-3087 for pricing or visit www.cobra.com.

For Credit Card Orders

Call 773-889-3087 [Press one from the main menu] 8:00 a.m. to 6:00 p.m. Central Time, Monday through Friday.

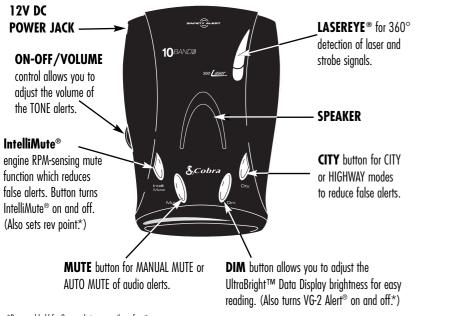
ORDER INFO

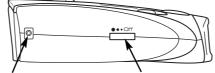
Make Check or Money Order Payable To

Cobra Electronics, Attn: Accessories Dept., 6500 West Cortland Street, Chicago, IL 60707 U.S.A.

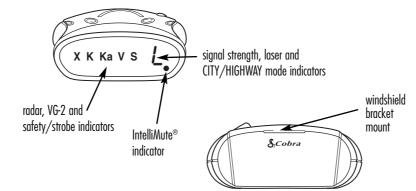
To Order Online

Please visit our website: www.cobra.com





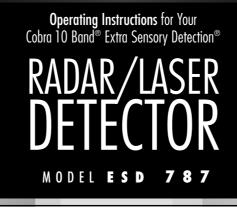
12V DC POWER JACK ON-OFF/VOLUME control





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SCobra®





Nothing Comes Close to a Cobra®

Important Information

Important information about...

Federal Laws Governing the Use of Radar Detectors

It is not against federal law to receive radar transmissions with your Cobra® radar detector. The Communications Act of 1924 guarantees your right to receive radio transmissions on any frequency. Local laws that contravene this Act, while illegal, may be enforced by your local law enforcement officials until and unless they are prohibited from doing so by federal court action.

Safety Alert®

Use of this product is not intended to, and does not, ensure that motorists or passengers will not be involved in traffic accidents. It is only intended to alert the motorist that an emergency vehicle equipped with a Cobra[®] Safety Alert[®] transmitter is within range as defined by that product. Please call local fire and police departments to learn if coverage exists in your area. Safe Drivina

Motorists, as well as operators of emergency or service vehicles, are expected to exercise all due caution while using this product, and to obey all applicable traffic laws.

Security of Your Vehicle

Before leaving your vehicle, always remember to conceal your radar detector in order to reduce the possibility of break-in and theft.

Customer Support

In this user's manual, you should find all the information you need to install and operate your detector. If you require further assistance after reading through this manual, Cobra® Electronics offers the following customer support services:

Automated Help Desk is available in English only 24 hours a day, 7 days a week at 773-889-3087. Customer Service Operators are available in English or Spanish at 773-889-3087 Monday through Friday, 8:00 a.m. to 6:00 p.m. Central Time. Questions can be faxed in English or Spanish to 773-622-2269.

Automated Technical Assistance is

available in English or Spanish 24 hours, 7 days a week via e-mail at: productinfo@cobra.com **On-line answers** to frequently asked questions can be found in English only at: www.cobra.com.

WARNING

Modifications or parts substitutions not approved by Cobra Electronics Corporation may violate FCC Rules and void your authority to operate this equipment.

A1