Operating Instructions for Your Cobra® 10 Band™ Extra Sensory Detection™ RADAR/LASER DETECTOR
MODEL ESD-9860

Nothing comes close to a Cobra™
Congratulations
You've made a smart choice by purchasing the ESD-9860 radar/laser detector from Cobra®. Just look at some of the sophisticated features and capabilities your new unit includes:

- **ULTRA-SENSITIVITY**
- 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
  - VG-2 signals
- **8-POINT COMPASS** displays direction of travel
- **LASEREYE®** for 360° detection of laser and strobe signals
- **“INSTANT-ON”** speed monitoring detection
- **TONE ALERT or VOICE ALERT™** with adjustable volume
- **DIGIVIEW™ DATA DISPLAY** with easy-to-read alpha/numeric dot matrix text readout
- **CITY** or **HIGHWAY** modes to reduce false alerts
- **SAFETY ALERT®** Traffic Warning System
- **STROBE ALERT™**
- **SMARTMUTE™** a mute function which automatically reduces false alerts by sensing engine RPMs
- **MANUAL MUTE** or **AUTO MUTE** of audio alerts
- **EASYSET™** programming menu
- **AUXILIARY AUDIO JACK** for external speaker connection
- 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 ESD-9860. It also provides helpful information about how radar and laser guns are used and how you can interpret the alerts you receive.

*See “Operations” (pages 5-19) for more information about display features.*
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 Driving
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 ESD-9860. If you require further assistance after reading through this manual, Cobra® Electronics offers the following customer support services:

Automated Help Desk is available 24 hours a day, 7 days a week at 773-889-3087.
Customer Service Operators are available at 773-889-3087 Monday through Friday, 8:00 a.m. to 6:00 p.m. CST.
Questions can be faxed to 773-622-2269.
Automated Technical Assistance is available 24 hours, 7 days a week via e-mail at: productinfo@cobra.com
On-line answers to frequently asked questions can be found 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.
INSTALLATION

Where to Mount Your Unit

You will get optimum performance from your ESD-9860 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
► mirrored sun screens
► 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

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.
6. Plug the power cord into the detector.
7. Plug the cigarette lighter adapter on the power cord into your vehicle’s cigarette lighter.
8. You can temporarily remove the detector whenever you wish by sliding it off of the bracket.

Dashboard mounting

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

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

Dashboard Mounting

1. 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.

OPERATION • GETTING STARTED

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

2. You will see and hear the messages “TESTING” (3 beeps will sound), then “SYSTEM READY”, “VOICE ALERT”, indicating that the power is on.

3. The display will cycle through the user mode settings (SmartMute™ and City/Highway status) for approximately 1 second each.

4. Start-up is complete when the display continuously shows the current compass direction (N, NE, E, SE, S, SW, W, or NW) plus single letters indicating current user mode settings (c = city mode, h = highway mode, s = SmartMute™ on).

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 ESD-9860 when parking for lengthy periods.
3 OPERATION • USER MODE SETTINGS

All user mode settings on your ESD-9860 can be changed by using Program mode. When changing the settings, 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.

In general, the procedure for using Program mode is as follows:
1. Press and hold the PROG/MUTE button for 2 seconds to enter Program mode. You will hear 3 beeps and the word PROGRAM will appear in the display. Then brief programming instructions will scroll through the display two times.

2. While the programming instructions are scrolling, press and release the SELECT/DIM button to cycle through the user modes. You will hear 1 beep each time you press the button. As each mode is displayed, the current setting for that mode will be shown.

3. With the user mode you wish to change displayed, press and release the SET/CITY button to change the setting. You will hear either 1 or 2 beeps, depending on your selection. To move to the next selection, press SELECT/DIM again. When you exit Program mode, the new setting will automatically be saved.

4. When you have finished programming any or all of the user modes, press and release the PROG/MUTE button to exit Program mode. Or simply wait 10 seconds without pushing any buttons. SETTINGS SAVED will appear in the display.

NOTE: You cannot enter Program mode during an alert. The unit will not detect signals while in Program mode. During programming, if no buttons are pushed for 10 seconds, the unit will automatically exit Program mode and save the last settings.

EasySet™ Programming: Programming User Modes

The table on the next page shows you how to program all user modes and the settings you can choose from.

NOTE: On the following pages, you will find more detailed explanations of each setting.

See page 10 for instructions on setting the SmartMute™ activation point.

See page 13 for instructions on calibrating the compass.

EasySet™ Programming Menu

<table>
<thead>
<tr>
<th>EasySet™ Programming Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Press and release the PROG/MUTE button to enter Program mode.</td>
</tr>
<tr>
<td>3. Press and release the SET/CITY button to choose the desired setting for each user mode:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EasySet™ Programming Menu</th>
<th>VISUAL</th>
<th>VISUAL</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SmartMute Mode</td>
<td>SmartMute On</td>
<td>All alerts (except for strobe signals from emergency vehicles) are automatically muted below the engine rev point you set.</td>
<td></td>
</tr>
<tr>
<td>SmartMute Off</td>
<td>Normal operation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SmartMute Set</td>
<td>Set SmartMute</td>
<td>Allows you to set the engine rev point when using SmartMute. *</td>
<td></td>
</tr>
<tr>
<td>Auto Mute Mode</td>
<td>AutoMute On</td>
<td>The audio volume of all alerts will be automatically muted after 4 seconds for as long as the signal is detected.</td>
<td></td>
</tr>
<tr>
<td>AutoMute Off</td>
<td>All alerts will sound at full volume for as long as the signal is detected.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice/Tone Alert Mode</td>
<td>Voice Alert™</td>
<td>Voice is heard for alerts and confirmation of user settings.</td>
<td></td>
</tr>
<tr>
<td>Tone Alert</td>
<td>Tone is heard for alerts and confirmation of user settings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set Compass</td>
<td>Set Compass</td>
<td>Allows you to calibrate the compass.</td>
<td></td>
</tr>
<tr>
<td>VG-2 Detect</td>
<td>VG-2 Detect On</td>
<td>The unit will detect VG-2 signals.</td>
<td></td>
</tr>
<tr>
<td>VG-2 Detect Off</td>
<td>The unit will not detect VG-2 signals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VG-2 Audio</td>
<td>VG-2 Audio On</td>
<td>With VG-2 Detect On, the unit will give audible alerts for VG-2 signals.</td>
<td></td>
</tr>
<tr>
<td>VG-2 Audio Off</td>
<td>With VG-2 Detect Off, the unit will give only visual alerts for VG-2 signals.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Brightness*</td>
<td>Display Bright</td>
<td>Display is at full brightness.</td>
<td></td>
</tr>
<tr>
<td>Display Dim</td>
<td>Partially dimmed for dusk or night driving.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Dimmer</td>
<td>More dimmed for dusk or night driving.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display Dark</td>
<td>Display is off.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway/City Mode*</td>
<td>Highway Mode On</td>
<td>All X band alerts are sounded immediately.</td>
<td></td>
</tr>
<tr>
<td>City Mode On</td>
<td>Audio for all X band alerts are blocked until signal strength reaches level 3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: To reset user modes and settings to factory default, press and hold PROG/MUTE button while turning on the unit.

* The settings for these user modes can also be changed with the one-button method. See the description of each user mode (following) for details.
SmartMute™

SmartMute™ is a unique new feature of the ESD-9860 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, SmartMute™ knows when you are at low speed and automatically mutes all alerts (except for strobe signals from emergency vehicles).

Before SmartMute™ will work, you must set an activation point for your engine’s revs (see page 10). Whenever the revs are below that point, SmartMute™ will begin muting. The activation point will be stored in memory and recalled each time power is turned on.

When you turn SmartMute™ on while in Voice Alert™ mode, you will hear “SmartMute on.” In Tone mode you will hear two beeps. “s” will appear in the display. When you turn SmartMute™ off while in Voice Alert™ mode, you will hear “SmartMute off.” In Tone mode you will hear one beep. (See page 7 for instructions using the Program mode to select SmartMute™.)

The factory setting is SmartMute™ off.

NOTE: SmartMute™ 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 modes when appropriate.

What to Remember While Using SmartMute™

SmartMute™ works with both City and Auto Mute modes.

Whenever engine revs are below the activation point, an arrow pointing down will appear in the display.

Above the activation point, an arrow pointing up will appear.

If, for any reason, the unit stops sensing your engine’s revs, SmartMute™ will indicate an error and automatically turn off. 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 ESD-9860 in a different vehicle.

Important: When initially choosing your SmartMute™ 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 SmartMute™ Activation Point

Your ESD-9860 must be installed in your vehicle.

1. Procedure | Tone | Voice | Visual Display
--- | --- | --- | ---
In Program mode, go to Set SmartMute. Press and release the SET/CITY button to begin setting SmartMute™. | 2 beeps, “set engine revs” | Press SET again at desired RPMs... |

2. Procedure | Tone | Voice | 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, “smart mute error” followed by “smart mute off” | Error SmartOff |

3. Procedure | Tone | Voice | Visual Display
At the desired rev level, press and release the SET/CITY button. | 3 beeps, “smart mute set” | Smart then SET! |

4. Procedure | Tone | Voice | Visual Display
Press and release either the SELECT/DIM button to proceed to the next user mode or the PROG/MUTE button to exit the Program mode. | none, none | 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. When you turn Auto Mute on or off while in Voice Alert™ mode, you will hear “Auto Mute on” or “Auto Mute off.” In Tone mode, you will hear 2 beeps for Auto Mute on and 1 beep for Auto Mute off. (See page 7 for instructions on using the Program mode to select Auto Mute.)

The factory setting for Auto Mute is ON.

**Muting an Alert**

Your ESD-9860 allows you to quickly turn off an audio alert by momentarily pressing and releasing the PROG/MUTE button. If you press and release the PROG/MUTE button a second time during the alert, the audio alert will be turned back on.

**Voice/Tone Setting**

You can set your ESD-9860 to sound alerts and confirm user settings with either a voice or a tone. When you turn Voice Alert™ on, you will hear “Voice Alert.” When you turn Tone Alert on, you will hear “Tone Alert” and subsequent voice alerts will be turned off. (See page 7 for instructions on changing the Voice/Tone setting.)

The factory setting is Voice Alert™ mode.

**Auxiliary Audio Jack**

Use to connect an external speaker in environments with high ambient noise levels. The internal speaker will be disconnected.
Compass

Your ESD-9860 includes an internal 8-point compass that will continuously display your current direction of travel: N, NE, E, SE, S, SW, W, or NW.

Calibrating the Compass

Important: Before using it for the first time, you must calibrate the compass to provide accurate indications of direction. (See page 7 for instructions using the Program mode to select Set Compass.)

Calibration allows the compass electronics to measure and store information about the magnetic fields generated by your vehicle.

The compass will remain accurately calibrated as long as your ESD-9860 is mounted in the same place in your vehicle. If you change the location where the unit is mounted or move it to another vehicle, you must recalibrate the compass.

The compass temporarily may not provide accurate readings if you are inside a building or enclosure, or are close to a large metal tractor/trailer, truck, or train. Once you are away from such a location, the compass will work correctly again.

To calibrate the compass:

1. Press and hold the SET/CITY button to begin setting the compass.

   Tone: 2 beeps
   Voice: “set compass”
   Visual Display: Drive in 2 circles...

2. Within 2 minutes, drive your vehicle in a circle twice, then press the SET/CITY button again.

   Tone: 3 beeps
   Voice: “compass set”
   Visual Display: Compass Set! for 2 seconds followed by direction of travel (N, NE, E, SE, S, SW, W, or NW)

3. Press and release either the SELECT/DIM button to proceed to the next user mode or the PROG/MUTE button to exit Program mode.

   Tone: none
   Voice: none
   Visual Display: none

NOTE: If you do not press the SET/CITY button within 2 minutes, compass calibration will automatically terminate.

Error for 2 seconds
VG-2 Alert®

The ESD-9860 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 show VG-2 alerts. With VG-2 detection on, you can also choose whether or not you want your unit to sound audible VG-2 alerts.

When you turn VG-2 detection on or off while in Voice Alert™ mode, you will hear “VG-2 on” or “VG-2 off.” In Tone mode, you will hear 2 beeps for VG-2 on or 1 beep for VG-2 off.

When you turn VG-2 audio on or off while in Voice Alert™ mode, you will hear “VG-2 audio on” or “VG-2 audio off.” In Tone mode, you will hear 2 beeps for VG-2 audio on or 1 beep for VG-2 audio off. (See page 7 for instructions on using the Program Mode to turn VG-2 alerts on and off.)

The factory settings are VG-2 Detect On, VG-2 Audio On.

DigiView™ Data Display Brightness

You can choose from four settings for brightness of the display:

- Bright for daytime driving
- Dim for dusk driving
- Dimmer for night driving
- Dark (no visual alerts will be displayed)

You can cycle through the 4 settings by repeatedly pressing and releasing the SELECT/DIM button.

When you set display brightness while in Voice Alert™ mode, you will hear the corresponding voice message, “bright,” “dim,” “dimmer,” or “dark.” In Tone mode, you will hear 2 beeps for bright, 1 beep for dim, dimmer, and dark. (See page 7 for instructions on using the Program Mode to set Display Brightness.)

NOTE: You can set display brightness without entering Program Mode by repeatedly pressing and releasing the SELECT/DIM button.

The factory setting is Bright.
**Highway/City Mode**

Setting your ESD-9860 to City mode prevents 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.

**SET/CITY button**
Press and release

When you set City mode “c” will appear in the display. In Voice Alert™ mode, you will hear “city.” In Tone mode, you will hear 1 beep.

When you set Highway mode “h” will appear in the display. In Voice Alert™ mode, you will hear “highway.” In Tone mode, you will hear 2 beeps. (See page 7 for instructions on using the Program mode to select Highway or City mode.)

**NOTE:** You can also select Highway or City mode without entering Program mode simply by pushing and releasing the SET/CITY button.

*The factory setting is Highway mode.*

**Signals Detected**

The tables on the following pages show you the types of signals your ESD-9860 will detect, as well as the voice and visual alerts it provides for each one.

**Audio Alerts**

In Voice Alert™ mode you will first hear several tones, then a voice message announcing the type of signal detected, followed by more tones. In Tone Alert mode, you will hear the tones only.

In both Voice Alert™ and Tone Alert modes, 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 19.)

**Visual Display**

An indication of the type of signal detected will appear in the DigiView™ Data Display. During X, K, and Ka alerts, you will also see from 1 to 5 vertical bars, indicating the strength of the signal detected.

<table>
<thead>
<tr>
<th>SIGNAL STRENGTH CHART</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weakest Signal</td>
</tr>
<tr>
<td>······················· 1</td>
</tr>
<tr>
<td>······················· 2</td>
</tr>
<tr>
<td>······················· 3</td>
</tr>
<tr>
<td>······················· 4</td>
</tr>
<tr>
<td>······················· 5</td>
</tr>
</tbody>
</table>

*Strongest Signal*
### 4 DETECTION

#### Type of Signal | Voice | Visual Display
---|---|---
**Radar** | X band radar  
K band radar  
Ka band radar | "X alert"  
"K alert"  
"Ka alert" | X  
K  
Ka

#### Type of Signal | Voice | Visual Display
---|---|---
**Laser** | LTI 20-20™  
LTI Ultra-Lyte™  
Kustom Signals ProLaser™  
Kustom Signals ProLaser III™ | "laser alert"  
"laser alert"  
"laser alert"  
"laser alert" | Laser  
20/20...  
Ultra-Lyte...  
Pro Laser...  
Pro Laser 3...

#### Strobe Alert™  
3M Opticom™ or Tomar® | "emergency vehicle approaching" | "Emergency Vehicle... (flashing)"

#### Type of Signal | Voice | Visual Display
---|---|---
**Safety Alert®** | emergency vehicles  
road hazards  
trains | "emergency vehicle approaching"  
"road hazard ahead"  
"train approaching" | Emergency Vehicle...  
Road Hazard  
Train

**PLEASE NOTE:** Different tones for each Safety Alert®

**PLEASE NOTE:** Beep rate changes with different laser alerts

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

*your ESD-9860 provides LaserEye® 360° detection of these signals

20-20™ and Ultra-Lyte™ are trademarks of Laser Technology, Inc.

ProLaser™ and ProLaser III™ are trademarks of Kustom Signals, Inc.

9 Band Ultra™, EasySet™, Strobe Alert™ and SmartMute™ are trademarks of Cobra Electronics Corporation.


Opticom™ is a trademark of 3M Corporation.

Tomar® is a registered trademark of TOMAR Electronics, Inc.

Interceptor VG-2™ is a trademark of TechniSonic Industries LTD.
**Radar Speed Monitoring Systems**

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

<table>
<thead>
<tr>
<th>Band</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>10.525 GHz</td>
</tr>
<tr>
<td>K</td>
<td>24.150 GHz</td>
</tr>
<tr>
<td>Ka</td>
<td>33.400-36.00 GHz</td>
</tr>
</tbody>
</table>

Your ESD-9860 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 ESD-9860 detects VG-2 signals and will alert you when a device is in use near your vehicle.

**Safety Alert® Traffic Warning System**

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 ESD-9860, 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.

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**Responding To Alerts**

The following chart should aid you in interpreting the alert you are receiving and taking the appropriate action:

<table>
<thead>
<tr>
<th>Description</th>
<th>Interpretation</th>
<th>Recommended Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>tone repeats slowly at first, then speeds up rapidly</td>
<td>probably police radar</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>tone sounds one time only</td>
<td>probably a false alarm, but occasionally paused radar</td>
<td>exercise caution</td>
</tr>
<tr>
<td>tone instantly begins repeating rapidly</td>
<td>radar or VG-2 nearby has been activated suddenly</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>tone repeats slowly as you approach a hill or bridge, then speeds up sharply as you reach it</td>
<td>probably police radar beyond the hill or bridge</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>tone repeats slowly for a short period</td>
<td>probably a false alarm</td>
<td>exercise caution</td>
</tr>
<tr>
<td>any type of laser alert</td>
<td>laser alerts are never false alarms</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>any Safety Alert® or Strobe Alert®</td>
<td>you are nearing an emergency vehicle, railroad crossing, or road hazard (construction, accident, etc.)</td>
<td>exercise caution</td>
</tr>
</tbody>
</table>
Maintenance of Your Radar Detector

Your ESD-9860 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 and 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 24 hours a day, 7 days a week at 773-889-3087.

Customer Service Operators are available at 773-889-3087 Monday through Friday, 8:00 a.m. to 6:00 p.m. CST.

Questions can be faxed to 773-622-2269.

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

On-line answers to frequently asked questions can be found at: www.cobra.com.

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 Toman, 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 over to allow it to pass. To inquire about coverage in your area, contact your local fire 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 affect on LIDAR?**
Yes. Rain, snow, smoke, fog, or airborne dust particles will reduce the effective range of LIDAR and can, if dense enough, prevent its operation.

**Can LIDAR operate through glass?**
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 ESD-9860.

**Can LIDAR operate while in motion?**
No. Because LIDAR operates by line of sight, the person using it cannot drive the vehicle, aim, and operate the gun all at the same time.

**Is LIDAR legal to use?**
Yes. It is legal in all 50 states.
MAINTENANCE & SERVICE

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.
4. Pack the unit securely to prevent damage during transit. If possible, use the original packing materials.
5. 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:

   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 warrants that its Cobra® 10 Band Ultra™ 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.
You can find these fine accessories at your local Cobra® dealer. If you wish, you can order directly from Cobra®.

To order by phone
Call 773.889.3087
(Press 1 from the main menu 8 a.m.-6 p.m. M-F CST.)

To order by mail or fax
Please fill out order form on next page, and mail/fax directly to Cobra®.

To order online
Go to www.cobra.com and click on “shop Cobra®”

Windshield Mounting Bracket
Includes suction cups
545-139-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

### OPTIONAL ACCESSORIES

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<th>Band</th>
<th>Frequencies</th>
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<td>K band</td>
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<td>Safety Alert®</td>
<td>24.070 ± 0.010 GHz</td>
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<tr>
<td>Traffic Warning System</td>
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<td>24.190 ± 0.010 GHz</td>
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<td>Ka band</td>
<td>34.700 ± 1.300 GHz</td>
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<tr>
<td>Laser</td>
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<tr>
<td>Strobe</td>
<td>700 ± 300 nm</td>
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### SPECIFICATIONS

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<tr>
<th>Unit Dimensions &amp; Weight</th>
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<tr>
<td>Dimensions</td>
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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.
# ORDER FORM

For credit card orders fill out order form and fax to: 773.622.2269 or call 773.889.3087 (Press 1 from the main menu) 8:00 am - 6:00 pm, M-F, CST.

Make check or money order payable to: Cobra Electronics 6500 West Cortland Street Chicago, IL 60707 USA Attn: Accessories Dept.

To order online, please visit our website at: www.cobra.com and click "shop Cobra’s"

Prices subject to change without notice.

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<td>545-139-N-001</td>
<td>Windshield Mounting Bracket</td>
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<td>CLP-2B</td>
<td>Dual Port Power Adapter</td>
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**Subtotal**

**Shipping/handling** $4.00

**Total**

**Tax Table**
- Illinois residents add 8.75%
- Indiana residents add 5%
- Michigan residents add 6%
- Ohio residents add 5%
- Wisconsin residents add 5%

Please print clearly

Name

Address (No P.O. Box)

City, State, Zip

Telephone (_____ )

Credit Card No. [__________] Exp. Date [______]

Circle One:  Visa  MasterCard  Discover

Customer Signature

Allow 2-3 weeks for delivery. Offer valid in Continental U.S. only.
The Cobra® line of quality products includes:

- CB radios
- microTALK® radios
- Radar/Laser Detectors
- Safety Alert®
- Traffic Warning Systems
- Accessories
- HighGear™ Accessories

For more information or to order any of our products, please visit our website:

www.cobra.com

Click “shop Cobra™”

Nothing comes close to a Cobra™