Cobra®

Operating Instructions for Your
Cobra® 10 Band™ Extra Sensory Detection®

RADAR/LASER DETECTOR

MODEL **ESD-9860**

10 BAND ULTRA™

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 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 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. CST.

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.

RADAR/LASER DETECTOR

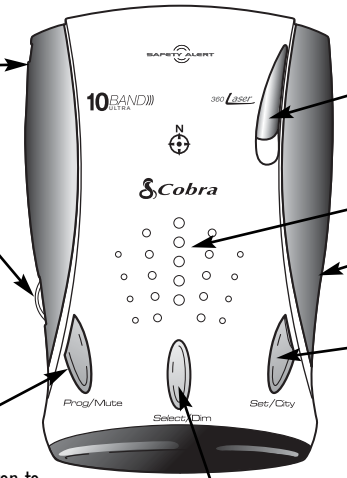
MODEL **ESD–9860**

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**™
- **INTELLIMUTE™** 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 detector. It also provides helpful information about how radar and laser guns are used and how you can interpret the alerts you receive.



12V DC POWER JACK

ON-OFF/VOLUME control allows you to adjust the volume of the TONE or VOICE alerts.

PROGRAM/MUTE button to manually mute audio alerts (and to enter programming mode).

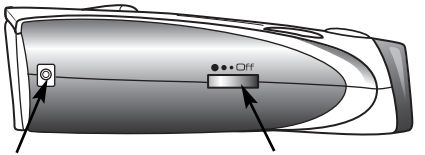
LASEREYE® for 360° detection of laser and strobe signals.

SPEAKER

AUXILIARY AUDIO JACK

SET/CITY button for CITY or HIGHWAY modes for fewer false alerts (and to change user mode settings while programming).

SELECT/DIM button to adjust the display brightness for easy reading (and to scroll through user mode settings while programming).



12V DC POWER JACK

ON-OFF/VOLUME control

alpha/numeric dot matrix text display showing*:

- user mode settings
- programming instructions
- signal strength indicators
- CITY/HIGHWAY mode indicators
- radar, VG-2 and safety/strobe indicators

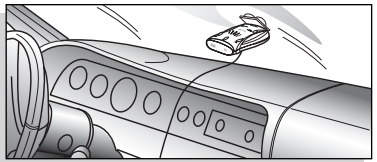
**See "Operations" (pages 5-19) for more information about display features.*

windshield bracket mount

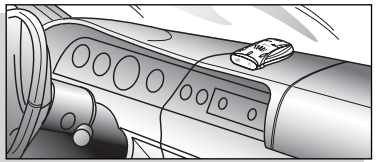
Table of Contents

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.

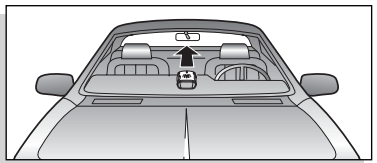


Windshield mounting



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.



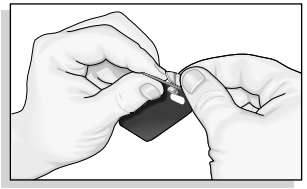
Radar and laser signals pass through glass but not through other materials and objects. Objects that can block or weaken incoming signals include:

- ▶ 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)*

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

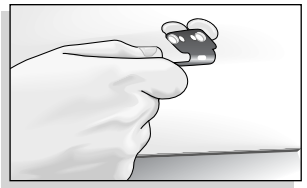
Windshield Mounting

1. Attach the rubber cups to the bracket.

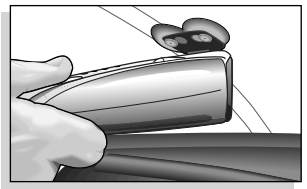


2. Make sure the rubber cups and your windshield are clean.

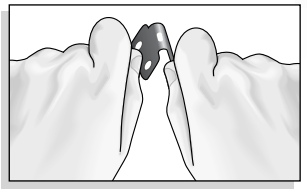
3. Push the bracket firmly onto the windshield.



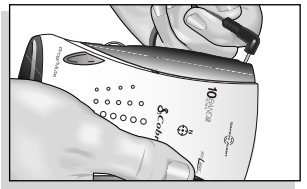
4. Attach the detector to the bracket. Check the angle of the unit.



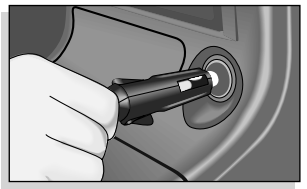
5. To adjust the angle if necessary, gently push or pull on the bracket to bend it. DO NOT use the detector to bend the bracket.



6. Plug the power cord into the detector.



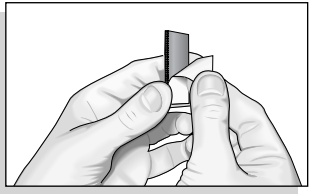
7. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.



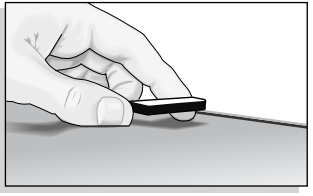
8. You can temporarily remove the detector whenever you wish by sliding it off of the bracket.

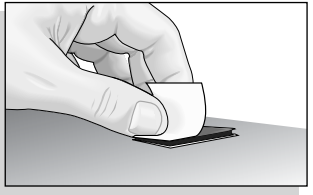
Dashboard Mounting

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.

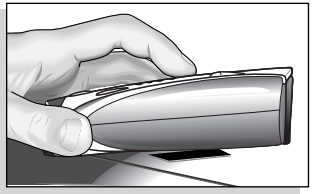


3. Attach the pad to the dashboard at your chosen location and remove the other paper backing.

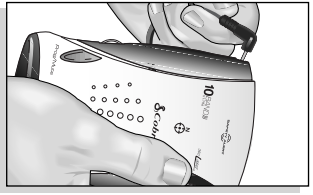




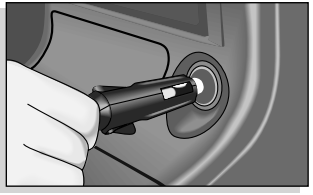
4. Attach the detector to the hook-and-loop fastener. You can remove and reattach the unit as often as you like.



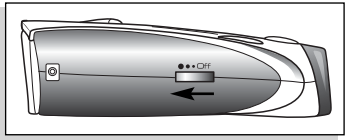
5. Plug the power cord into the detector.



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



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 (IntelliMute™ 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, i = IntelliMute™ 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 detector when parking for lengthy periods.

All user mode settings on your detector 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 IntelliMute™ activation point.

See page 13 for instructions on calibrating the compass.

EasySet™ Programming Menu

1. Press and release the PROG/MUTE button to enter Program mode.

2. Press and release the SELECT/DIM button to cycle through the user modes:	**3. Press and release the SET/CITY button to choose the desired setting for each user mode:**	
VISUAL	VISUAL	RESULT
IntelliMute Mode	**IntelliMute On**	All alerts (except for strobe signals from emergency vehicles) are automatically muted below the engine rev point you set .
	IntelliMute Off	Normal operation.
IntelliMute Set *(not shown if IntelliMute™ is off)* *(see page 10 to set activation point)*	**Set IntelliMute**	Allows you to set the engine rev point when using IntelliMute.™
Auto Mute Mode	**AutoMute On**	The audio volume of all alerts will be automatically muted after 4 seconds for as long as the signal is detected.
	AutoMute Off	All alerts will sound at full volume for as long as the signal is detected.
Voice/Tone Alert Mode	**Voice Alert™**	Voice is heard for alerts and confirmation of user settings.
	Tone Alert	Tone is heard for alerts and confirmation of user settings.
Set Compass *(see page 13 to calibrate compass)*	**Set Compass**	Allows you to calibrate the compass.
VG-2 Detect	**VG-2 Detect On**	The unit will detect VG-2 signals.
	VG-2 Detect Off	The unit will not detect VG-2 signals.
VG-2 Audio *(not shown if VG-2 Detect is off)*	**VG-2 Audio On**	With VG-2 Detect On, the unit will give audible alerts for VG-2 signals.
	VG-2 Audio Off	With VG-2 Detect On, the unit will give only visual alerts for VG-2 signals.
Display Brightness*	**Display Bright**	Display is at full brightness.
	Display Dim	Partially dimmed for dusk or night driving.
	Display Dimmer	More dimmed for dusk or night driving.
	Display Dark	Display is off.
Highway/City Mode*	**Highway Mode On**	All X band alerts are sounded immediately.
	City Mode On	Audio for all X band alerts are blocked until signal strength reaches level 3.
Program Exit	**EXIT PROGRAM**	Allows you to exit Program mode.

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

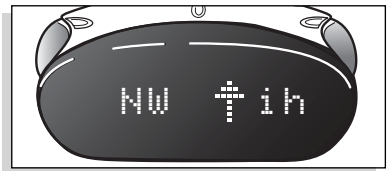
** The settings for these user modes can also be changed with the one-button method. See the description of each user mode (following) for details.*

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 all 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 10). Whenever the revs are below that point, IntelliMute™ will begin muting. The activation point will be stored in memory and recalled each time power is turned on.

When you turn IntelliMute™ on while in Voice Alert™ mode, you will hear "intelli mute on." In Tone mode you will hear two beeps. "**i**" will appear in the display. When you turn IntelliMute™ off while in Voice Alert™ mode, you will hear "intelli mute off." In Tone mode you will hear one beep. (See page 7 for instructions using the Program mode to select IntelliMute™.)



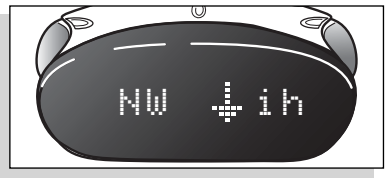
The factory setting is IntelliMute™ Off.

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 modes when appropriate.

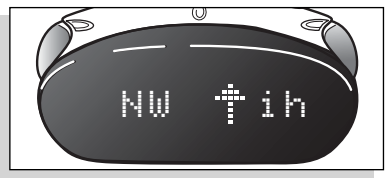
What to Remember While Using IntelliMute™

IntelliMute™ 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, IntelliMute™ 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 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.*

1.

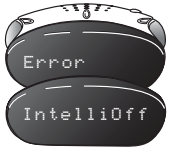
Procedure	Tone	Voice	Visual Display
In Program mode, go to Set IntelliMute. Press and release the **SET/CITY** button to begin setting IntelliMute™.	2 beeps	**"set engine revs"**	**Press SET again at desired RPMs...**

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	none	none
NOTE: *If the unit is unable to sense usable pulses within three seconds, IntelliMute™ will indicate an error and automatically turn off.*	1 beep	**"intelli mute error"** followed by **"intelli mute off"**	**Error Intelli Off**

3.

Procedure	Tone	Voice	Visual Display
At the desired rev level, press and release the **SET/CITY** button.	3 beeps	**"intelli mute set"**	**Intelli** then **SET!**
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.*	1 beep	**"intelli mute error"** followed by **"intelli mute off"**	**Error Intelli Off**



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

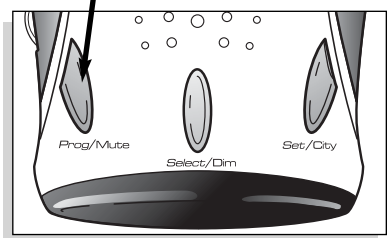
Auto Mute will automatically reduce the audio volume of all alerts after 4 seconds for as long as the signal is detected. When you turn Auto Mute on or off while in Voice Alert™ mode, you will hear "auto mute on" or "auto mute off." In Tone mode, you will hear 2 beeps for Auto Mute on and 1 beep for 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 detector 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.

PROG/MUTE button
Press and release



Voice/Tone Setting

You can set your detector 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 Mode 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 detector 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 detector 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.

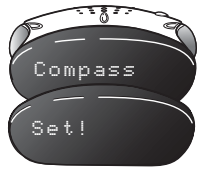
To calibrate the compass:

1.

Procedure	Tone	Voice	Visual Display
In Program mode, go to Set compass. Press and hold the **SET/CITY** button to begin setting the compass.	2 beeps	**"set compass"**	**Drive in 2 circles… Press SET when done...**

2.

Procedure	Tone	Voice	Visual Display
Within 2 minutes, drive your vehicle in a circle twice, then press the **SET/CITY** button again.	3 beeps	**"compass set"**	**Compass Set!** for 2 seconds followed by direction of travel (**N**, **NE**, **E**, **SE**, **S**, **SW**, **W**, or **NW**)



	Tone	Voice	Visual Display
NOTE: *If you do not press the SET/CITY button within 2 minutes, compass calibration will automatically terminate*	1 beep	1 beep	**Error** for 2 seconds

3.

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 Program mode.	none	none	none

VG-2 Alert®

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 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.

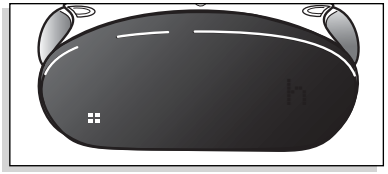
When you turn VG-2 audio on or off while in Voice Alert™ mode, you will hear "VG-2 audio on" or "VG-2 audio off." In Tone mode, you will hear 2 beeps for VG-2 audio on or 1 beep for VG-2 audio off. (See page 7 for instructions on using the Program Mode to turn VG-2 alerts on and off.)

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

DigiView® Data Display Brightness

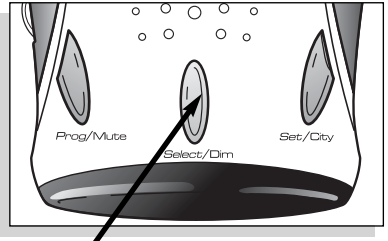
You can choose from four settings for brightness of the display:

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



Dark indicator

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

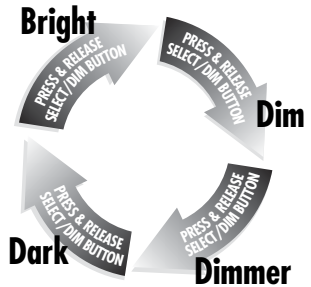


SELECT/DIM button
Press and release

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.

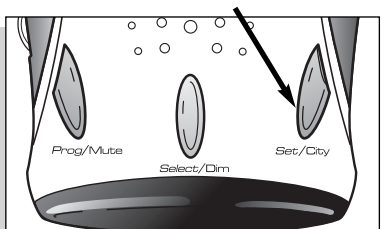
The factory setting is Bright.



Highway/City Mode

Setting your detector 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

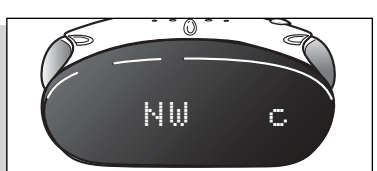


When you set City mode "**c**" will appear in the display. In Voice Alert™ mode, you will hear "city." In Tone mode, you will hear 1 beep.

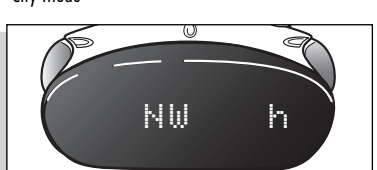
When you set Highway mode "**h**" will appear in the display. In Voice Alert™ mode, you will hear "highway." In Tone mode, you will hear 2 beeps. (See page 7 for instructions on using the Program mode to select Highway or City mode.)

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.



City mode



Highway mode

Signals Detected

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

Audio Alerts

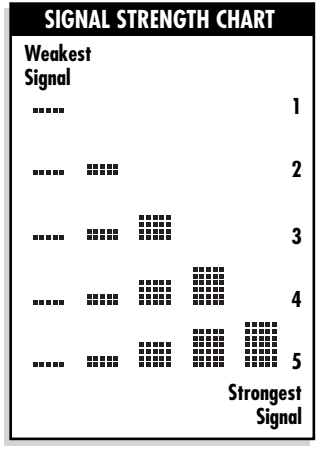
In Voice Alert™ mode you will first hear several tones, then a voice message announcing the type of signal detected, followed by more tones. In Tone mode, you will hear the tones only.

In both Voice Alert™ and Tone 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.

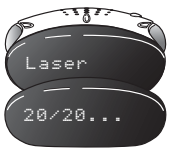
SIGNAL STRENGTH CHART

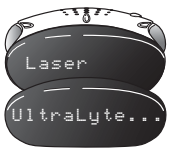


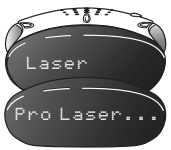
	Type of Signal	Voice	Visual Display
Radar	X band radar K band radar Ka band radar	"**X alert**" "**K alert**" "**Ka alert**"	**X** **K** **Ka**

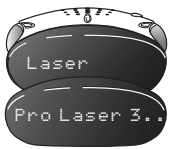
	Type of Signal	Voice	Visual Display
Laser*	LTI 20-20™*	"**laser alert**"	**Laser 20/20...**
	LTI Ultra-Lyte™*	"**laser alert**"	**Laser UltraLyte...**
	Kustom Signals ProLaser™*	"**laser alert**"	**Laser Pro Laser...**
	Kustom Signals ProLaser III™*	"**laser alert**"	**Laser Pro Laser 3...**

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









	Type of Signal	Voice	Visual Display
Strobe Alert™*	3M Opticom™ or Tomar®	"**emergency vehicle approaching**"	**Emergency Vehicle...** (flashing)

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

** your detector provides LaserEye® 360° detection of these signals*

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

	Type of Signal	Voice	Visual Display
VG-2 Alert®	Interceptor VG-2™	**"VG-2 alert"**	**VG2**

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

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

10 Band Ultra™, EasySet™, Strobe Alert™ and IntelliMute™ are trademarks of Cobra Electronics Corporation.

DigiView®, Safety Alert® Traffic Warning System, VG-2 Alert® and LaserEye® are registered 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.

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

Description	Interpretation	Recommended Response
tone repeats slowly at first, then speeds up rapidly	probably police radar	FULL ALERT
tone sounds one time only	probably a false alarm, but possibly pulsed radar	exercise caution
tone instantly begins repeating rapidly	radar or VG-2 nearby has been activated suddenly	FULL ALERT
tone repeats slowly as you approach a hill or bridge, then speeds up sharply as you reach it	probably police radar beyond the hill or bridge	FULL ALERT
tone repeats slowly 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 Alert® or Strobe Alert™	you are nearing an emergency vehicle, railroad crossing, or road hazard (construction, accident, etc.)	exercise caution

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

SAFETY ALERT 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.

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 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 detector.

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 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. CST.

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.
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.

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

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.

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 3/16"W x 1 5/16"H x 4 11/16"D		
Weight	170 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.

You can find these fine accessories at your local Cobra® dealer. If you wish, you can order directly from Cobra.®

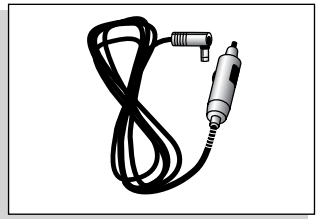
To order by phone

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

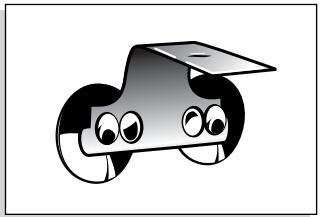
To order by mail or fax

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

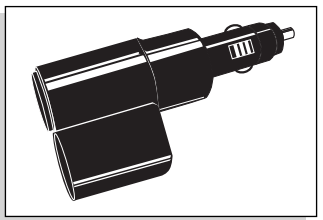
To order online
Visit www.cobra.com.



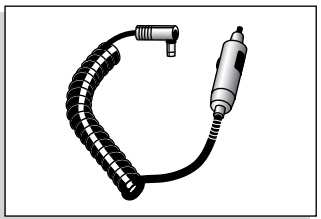
Straight 12V DC Power Cord
Includes plug and fuse
420-030-N-001



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

10 ORDER FORM

Item #	Description	Cost Ea.	Qty.	Amount
420-030-N-001	Straight 12V Power Cord			
420-026-N-001	Curled 12V Power Cord			
545-139-N-001	Windshield Mounting Bracket			
CLP-2B	Dual Port Power Adapter			

Prices subject to change without notice.

Subtotal	
(Tax if applicable)	
Shipping/handling	$4.00
Total	

Tax Table

California residents add 7.25%
Illinois residents add 8.75%
Indiana residents add 6%
Michigan residents add 6%
Ohio residents add 5%
Wisconsin residents add 5%

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®"

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

GPS (Global Positioning Systems)

Accessories

HighGear™ Accessories

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to order any of our products,
please visit our website:

www.cobra.com

<u>Nothing</u> comes close to a Cobra™

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