$\mathcal{S}$Cobra®

Operating Instructions for Your
Cobra® 6 Band™ Extra Sensory Detection®

RADAR/LASER DETECTOR

6)))BAND™

MODEL ESD-6060

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 ESD-6060. 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 the same number 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.

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⑤ Cobra

RADAR/LASER DETECTOR

MODEL **ESD-6060**

Congratulations

You've made a smart choice by purchasing the ESD-6060 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 signals
  - VG-2 signals
- **LASEREYE**® for 360° detection of laser signals
- **"INSTANT-ON"** speed monitoring detection

- **TONE ALERTS** with adjustable volume
- **ULTRABRIGHT™ DATA DISPLAY** is easy-to-read
- **CITY** or **HIGHWAY** modes to reduce false alerts
- **SAFETY ALERT**® Traffic Warning System
- **MANUAL MUTE** or **AUTO MUTE** of audio alerts

- 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-6060. 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

LASEREYE® for 360° detection of laser signals.

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

SPEAKER

MUTE button for MANUAL MUTE or AUTO MUTE of audio alerts.

CITY button for CITY or HIGHWAY modes to reduce false alerts.
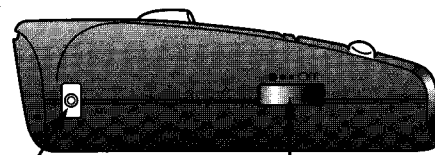
power indicator

12V DC POWER JACK

ON-OFF/VOLUME control
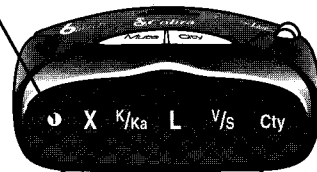
CITY/HIGHWAY mode indicators

radar indicator

laser indicator

VG-2 and safety indicators

windshield bracket mount

Table of Contents
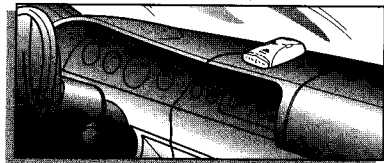
Where to Mount Your Unit

You will get optimum performance from your ESD-6060 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.
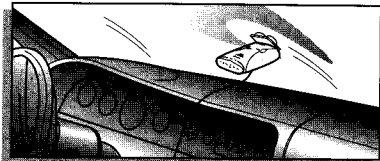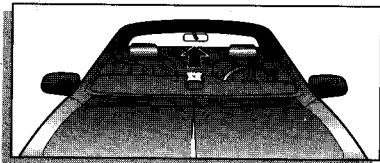

Windshield mounting

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:
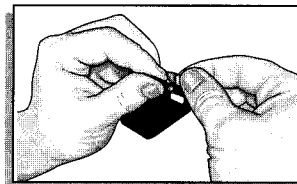
► windshield wiper blades

► 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)*

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.
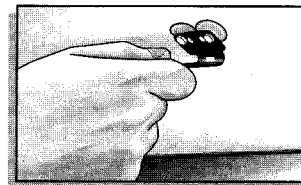
4. Attach the detector to the bracket. Check the angle of the unit.
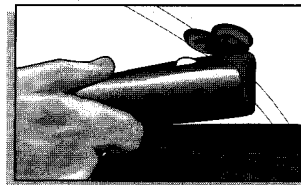
5. To adjust the angle if necessary, gently push or pull on the bracket to bend it. DO NOT use the detector to bend the bracket.
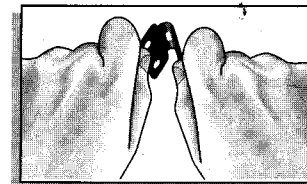
6. Plug the power cord into the detector.
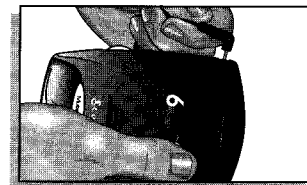
7. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.

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.
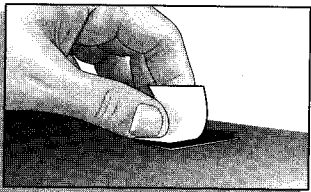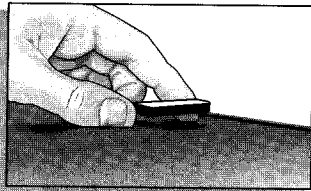
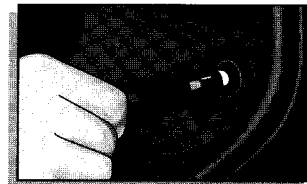**4.** Attach the detector to the hook-and-loop fastener. You can remove and reattach the unit as often as you like.
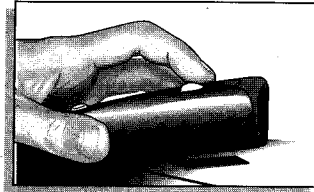
5. Plug the power cord into the detector.

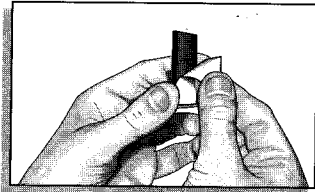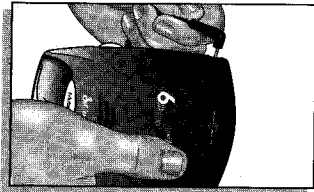**6.** Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.
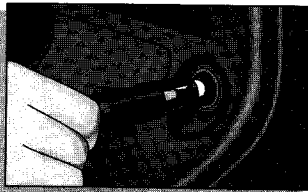
1. Turn on the unit and adjust audio volume by rotating the **ON-OFF/VOLUME CONTROL DIAL** clockwise (away from you).
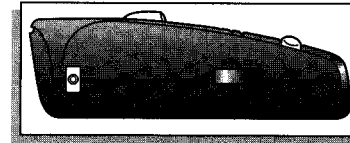
2. You will hear 3 beeps and the Power Indicator will light up in the display indicating that the power is on.
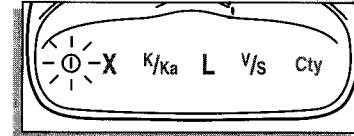
NOTE: *In some vehicles, power is supplied to the cigarette lighter even while the ignition is off. If this is the case with your vehicle, you should turn off or unplug your ESD-6060 when parking for lengthy periods.*

Highway/City Mode

Setting your ESD-6060 to City mode delays all X band audio alerts at lower signal strength levels. (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.
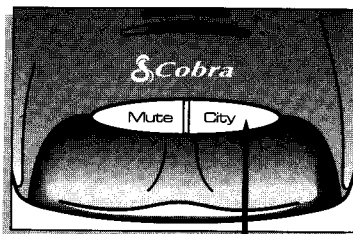
CITY button
Press and release

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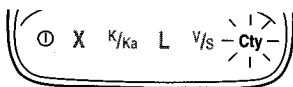
City mode
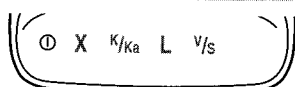
Highway mode

Muting an Alert

Your ESD-6060 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.

## 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.
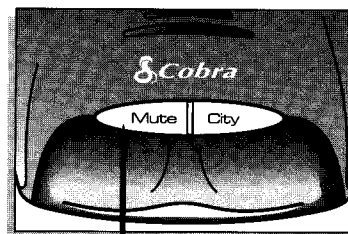
MUTE button
Press and release

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

Signals Detected

The tables on the following pages show you the types of signals your ESD-6060 will detect, as well as the voice and visual alerts it provides for each one.

Audio Alerts

A distinctly different alert tone is used for each type of signal detected. 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 11.)
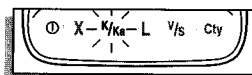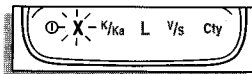
Visual Display

An indication of the type of signal detected will appear in the UltraBright™ Data Display.

During laser alerts the letter "L" will appear.
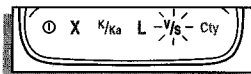
During VG-2 Alert® the letters "V/S" will appear.
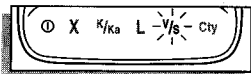
During Safety Alert® the letter "V/S" will appear.

	Type of Signal	Visual Display
Radar	X band radar K band radar Ka band radar	**X** **K/Ka** **K/Ka**
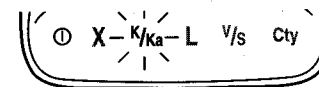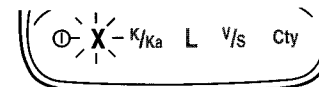
	Type of Signal	Visual Display
Laser*	LTI 20-20™* LTI Ultra-Lyte™* Kustom Signals ProLaser™* Kustom Signals ProLaser III™*	**L** **L** **L** **L**
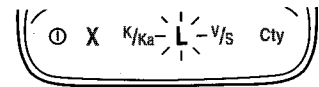
*your ESD-6060 provides LaserEye® 360° detection of these signals

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	Type of Signal	Visual Display
Safety Alert®	emergency vehicles road hazards trains	V/S V/S V/S

(⊕ X K/Ka L -V/S- Cty)
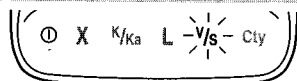
	Type of Signal	Visual Display
VG-2 Alert®	Interceptor VG-2™	V/S

(⊕ X K/Ka L -V/S- Cty)

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

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

Safety Alert® Traffic Warning System, VG-2 Alert® and LaserEye® are registered trademarks of Cobra Electronics Corporation.

Interceptor VG-2™ is a trademark of TechniSonic Industries LTD.
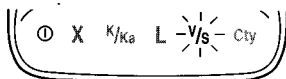
Instant-On Detection

Your ESD-6060 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®	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 ESD-6060 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-6060 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 ESD-6060, 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.

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-6060.

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 ESD-6060 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 24 hours a day, 7 days a week at 773-889-3087.

Customer Service Operators are available at the same number 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.

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 Cortland St.
   Chicago, IL 60707

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
www.cobra.com

COBRA ELECTRONICS CORPORATION

warrants that its Cobra® 6 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 6 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
Unit Dimensions & Weight			
Dimensions	2⅜"W x 1⅛"H x 3⅜"D		
Weight	110 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®
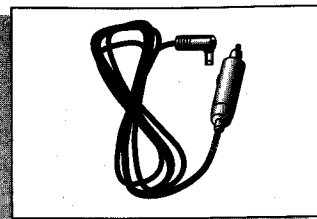
To order by phone

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

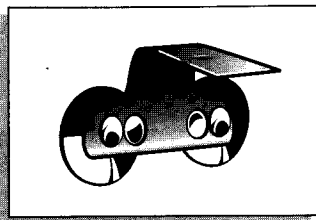Please fill out order form on next page, and mail/fax directly to Cobra®

To order online

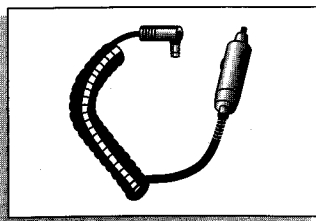Go to www.cobra.com and click on "shop Cobra®"

Straight 12V DC Power Cord

Includes plug and fuse
420-030-N-001 $10.00

Windshield Mounting Bracket

Includes suction cups
545-139-N-001 $7.00

Curled 12V DC Power Cord

Includes plug and fuse
420-026-N-001 $10.00

Item #	Description	Cost Ea.	Qty.	Amount
420-030-N-001	Straight 12V Power Cord	$10.00		
420-026-N-001	Curled 12V Power Cord	$10.00		
545-139-N-001	Windshield Mounting Bracket	$7.00		
		Subtotal		
		(Tax if applicable)		
		Shipping/handling		$4.00
		Total		

Prices subject to change without notice.

Tax Table
Illinois residents add 8.75%
Indiana residents add 5%
Michigan residents add 6%
Ohio residents add 6%
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 St.
Chicago, IL 60707
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_____

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