

Installing and Using Your
Cobra®
6 BAND™
 DETECTION SYSTEM
 Model ESD™-6100

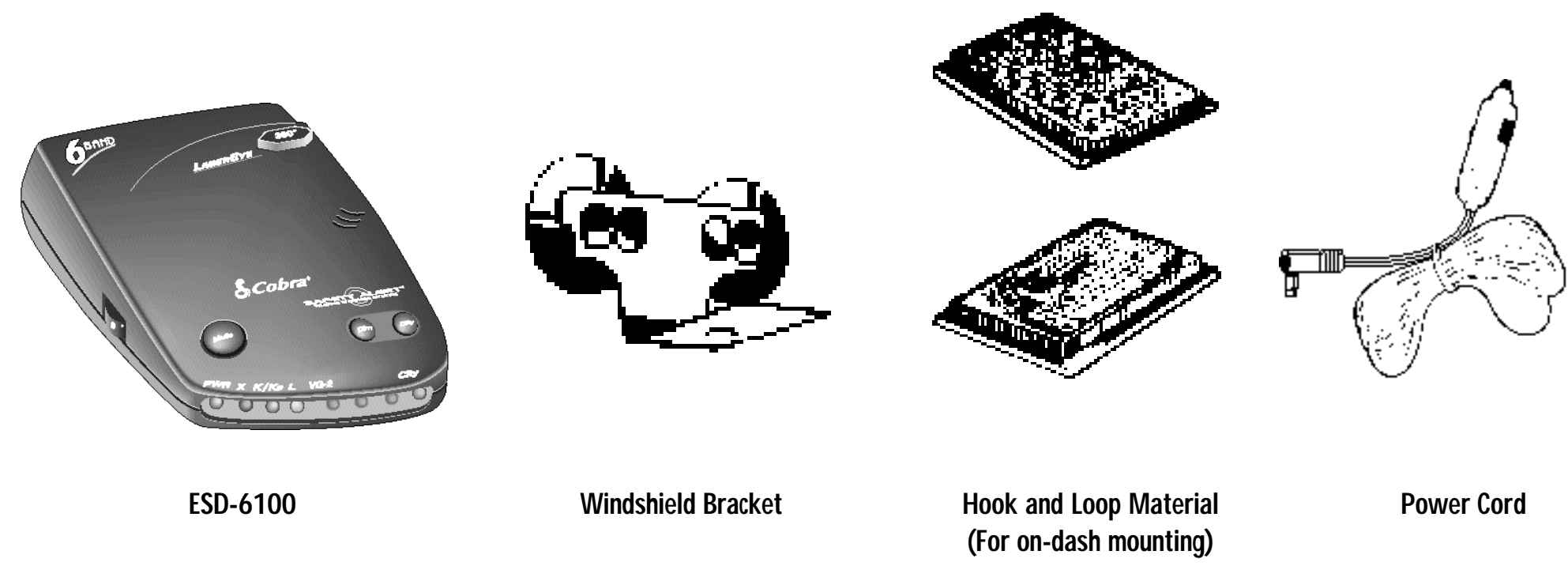


U.S. Patent No. 5,497,148

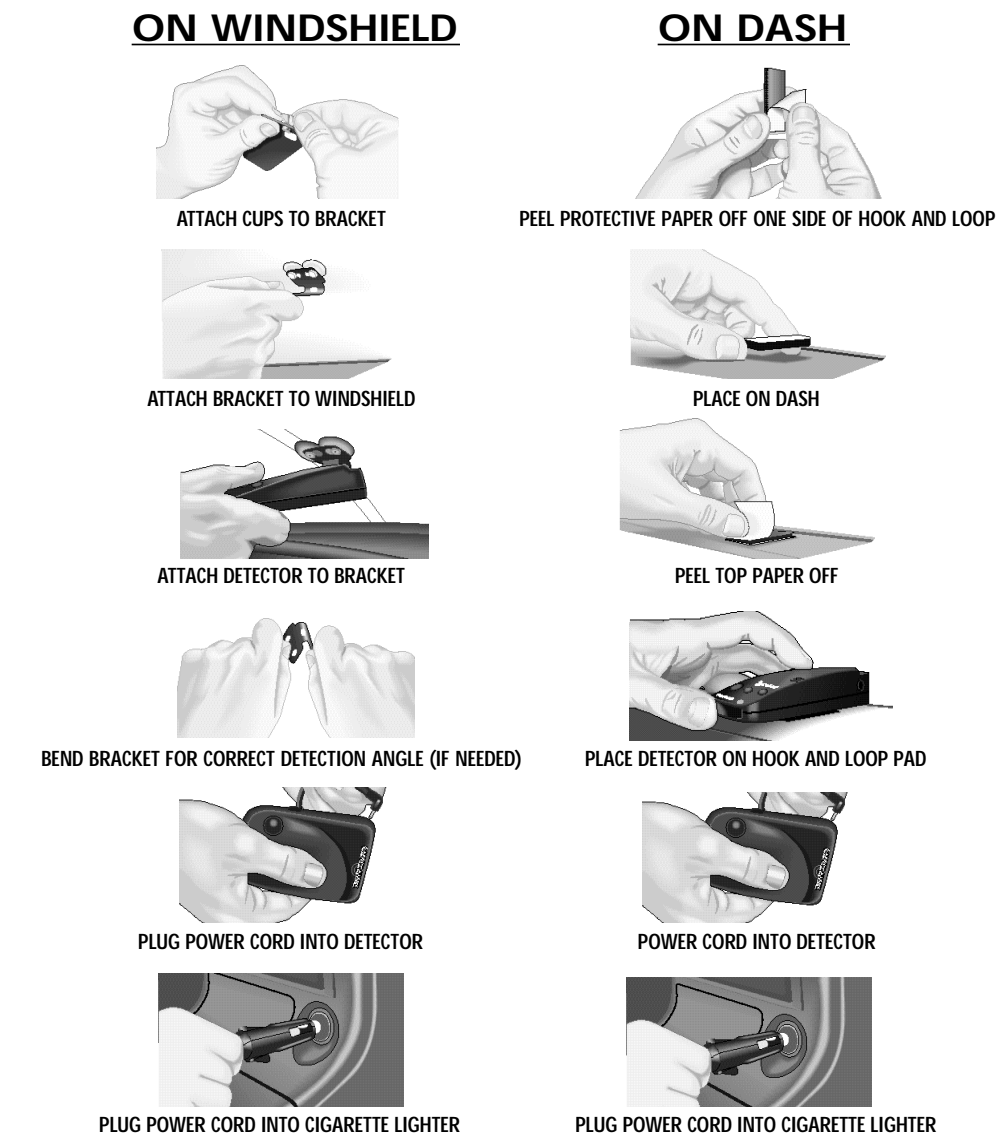
Cobra®
 Cobra Electronics Corporation
 6500 West Cortland Street,
 Chicago, Illinois 60707

1. What You'll Need To Install The ESD-6100:

NOTE: Detailed instructions on opposite side



2. Installing The ESD-6100:



NEED HELP?

Customer Assistance

If you have any questions about operating or installing your new Cobra product, or if you are missing parts...

Please Call Cobra First!

DO NOT RETURN THIS PRODUCT TO THE STORE

Call our Automated Help Desk at (773) 889-3087

24 hours a day, 7 days a week

A Consumer Service Representative can be reached through this same number

8:00 a.m. - 8:00 p.m.,

CST Monday through Friday (Except holidays)
 Technical assistance is also available on-line in the Frequently Asked Question (FAQ) section at www.cobraelec.com or by e-mail to productinfo@cobraelec.com

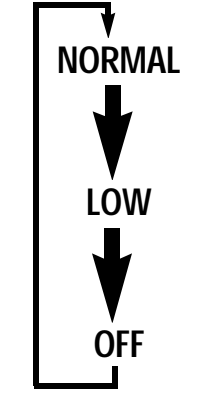
3. Operating The ESD-6100:

A. Turn On and Adjust Volume



LEDs are briefly illuminated at Power ON

B. Set Display Brightness



C. Set City/Highway Mode



CITY: For urban driving-reduces number of X-Band false audible alerts.

HIGHWAY: For all other driving.

D. Mute



Press to reduce volume of audible alert in progress.

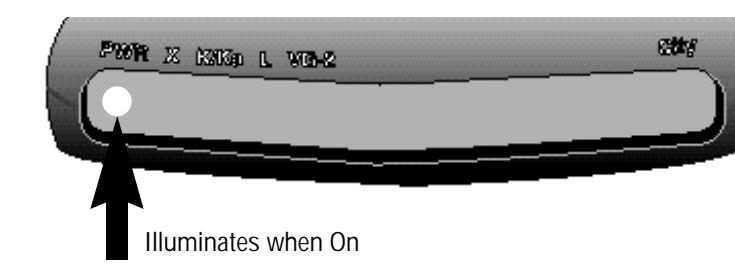
E. LaserEye



360° Laser Detection

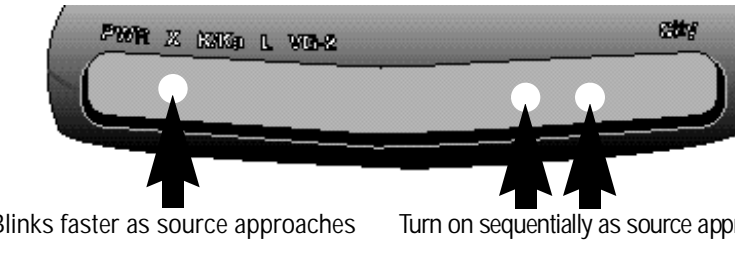
F. Indicators and Visual Alerts

Power



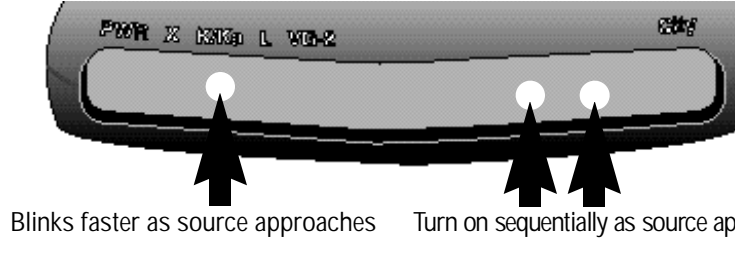
Illuminates when On

X Band Radar



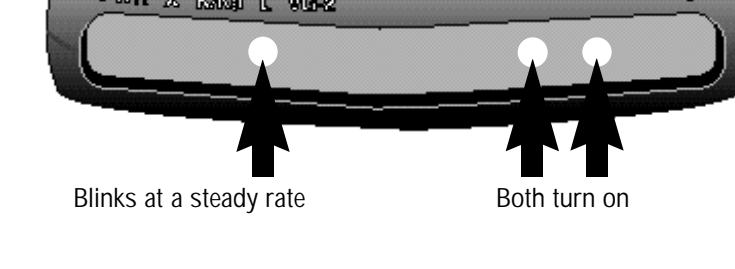
Blinks faster as source approaches Turn on sequentially as source approaches

K and Ka Band Radar



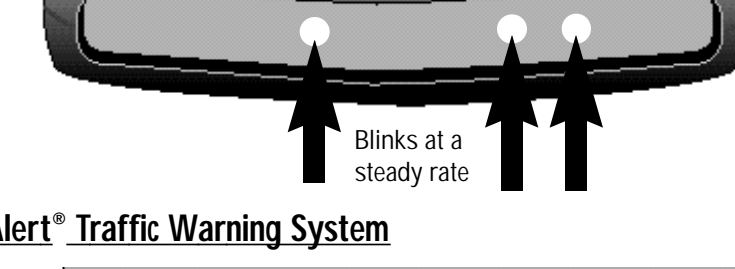
Blinks faster as source approaches Turn on sequentially as source approaches

Laser



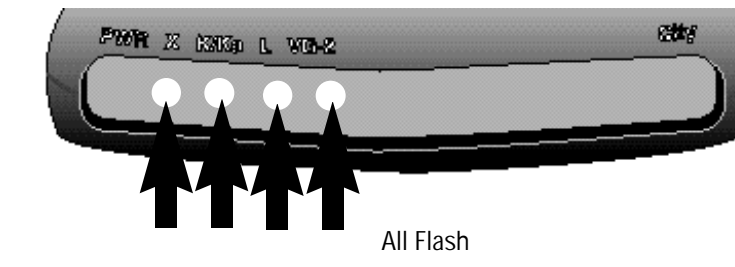
Blinks at a steady rate Both turn on

VG-2



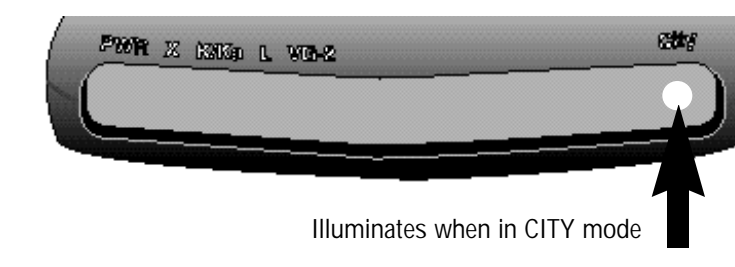
Blinks at a steady rate

Safety Alert® Traffic Warning System



All Flash

City/Highway Mode



Illuminates when in CITY mode

I. Introduction

Congratulations!

You have just purchased the most sophisticated RADAR/LASER DETECTOR available today. This booklet contains instructions and information designed so that you will be able to understand how the Cobra ESD-6100 works and how radar and (LIDAR) laser are used. Enjoy your Cobra ESD-6100 Radar/Laser Detector and DRIVE SAFELY.

Federal Law Governing Use of Radar Detectors

It is not against Federal Law to receive radar transmissions on your COBRA Radar Detector. The Communications Act of 1934 guarantees your right to receive radio transmissions on any frequency. Local laws that contravene the Communications Act of 1934, while illegal, may be enforced by your local law enforcement officials until and unless they are prohibited from doing so by Federal Court action.

WARNING: Before leaving your car, make sure that you conceal your radar detector. This will reduce the possibility of break-in and theft of your unit.



Use of this product is not intended to, and does not, ensure that the motorist and any passenger will not be involved in a traffic accident. It is only intended to alert the motorist that an emergency or service vehicle equipped with a CODE 3 or Cobra Safety Alert Transmitter is in the area as defined by the product. Motorists are expected to exercise all due caution while using this product, and to observe and follow all applicable traffic laws. Operators of emergency or service vehicles are also expected to exercise all due caution while using this product, and to observe and follow all applicable traffic laws.

IV. Detection Alert

A. Radar/VC-2/Laser Alerts

Type of Audible Signal	Interpretation and Response
Your COBRAESD-6100 starts to signal slowly, then increases in rate very rapidly.	Most likely police radar. FULLALERT.
Your COBRAESD-6100 signals just once.	Most likely a false source, or could be pulsed radar. EXERCISE CAUTION.
Very fast signal rate instantly.	Radar or VC-2 close by has been suddenly switched on. FULLALERT.
Slow signal rate as you approach hill or bridge. Sharp increase in signal rate as you reach hill or bridge.	Most likely police radar on other side of hill or bridge. FULLALERT.
Short term, weak signaling; series of such signals.	Most likely a false radar source. EXERCISE CAUTION.
Laser "chirps."	Take FULLCAUTION. There are no false laser signals.
All Band Indicators illuminate.ESD-6100 double "traps" rapidly.	An emergency vehicle is in the vicinity you are in the vicinity of a railroad crossing, or you are approaching a road hazard (construction site, accident scene, etc.).

B. Facts About the Safety Alert™Traffic Warning System
FCC-approved Safety Alert™ Transmitters emit microwave radar signals to indicate the presence of a safety-related concern. Depending on the frequency of these signals, as set on the transmitter, the outgoing signal can indicate whether the transmitter is on a speeding emergency vehicle or train, or at a stationary road hazard location. These microwave signals are located in the K-band and as a result, any radar detector which detects K-band radar will detect these Safety signals as standard K-band radar alerts. However, unlike a standard radar detector, your Cobra ESD-6100 is designed to differentiate between a standard K-band alert and a Safety Alert. Since Safety technology is relatively new and the number of transmitters in operation is not yet widespread, you may not receive Safety alerts on a daily basis and should not be surprised to encounter some emergency vehicles, road hazards and trains that are not yet equipped with these transmitters and therefore fail to provide a signal. As Safety transmitters become more prevalent (the number of operating transmitters is growing every day), these safety warnings will become more common.

II. Installation

A. Location

Selecting the proper location to mount the Cobra ESD-6100 is very important for optimum performance. Both radar and laser transmissions pass through glass but not through other objects. For this reason the Cobra ESD-6100 lens must not be blocked, and it should have a view of the rear window to take advantage of LaserEye 360° detection. It is best to locate your detector in the middle of the front windshield.

Examples of metal in the windshield area that can block or weaken incoming radar/laser signals:

1. Windshield wiper blades. Mount your Cobra ESD-6100 so that it will NOT be behind the blades when they are at rest.
2. Mirrored sun screens. It is recommended that sun screens be removed, or they may impair the performance of your Cobra ESD-6100 by acting as an impenetrable barrier to radar/laser signals.
3. Regular tinted glass does not affect radar reception, although the darker tint at the top of the tinted windshield prevents laser light from penetrating.
4. Heated windshields, currently available as an option for some Ford® (Instaclear) and GM® (Electriclear) vehicles act as an impenetrable barrier to radar signals. (If in doubt, check with your dealer to see if this applies to your vehicle).

B. Mounting

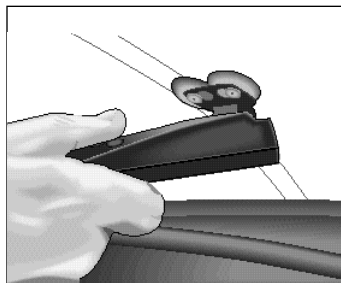
1. Windshield Mounting

The WINDSHIELD MOUNTING BRACKET offers convenient mounting to windshields and provides for easy movement of detector between vehicles.

Note: Some new vehicles have a soft plastic coating on the inside surface of the windshield. Suction cups can permanently mark this "anti-lacerative" coating. Check with your owner's manual to see if this applies to your vehicle.

- a. Assemble suction cup on bracket by putting round "buttons" through larger holes in the bracket and pressing them toward the outside edges until they snap into position.

- b. Install bracket to detector; align bracket with slot on rear of detector and slide bracket into opening. To remove bracket from detector, simply pull bracket out of slot.



c. Mounting on Windshield

To install the Cobra ESD-6100 onto the windshield, simply press it firmly on to the glass. Sometimes the suction cups adhere better if they are slightly moistened. In cold weather, you may need to warm the suction cups before application.

d. Adjustment

If necessary to achieve correct angle,remove the detector from the bracket and the bracket from the windshield. Adjust the bracket by bending it. **DO NOT BEND THE BRACKET USING THE ESD-6100 AS A LEVER.**

e. Removal

To remove the Cobra ESD-6100 from your windshield, release each suction cup by lifting one edge with your finger, or by pulling on tab.

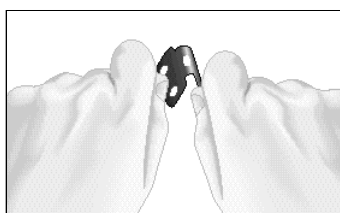
2. Dashboard Mounting

Mounting your ESD-6100 to the dashboard of your vehicle requires a clear, level unobstructed view of the road for the detector, without blocking the driver's vision. Select a mounting position that allows the detector to have a clear view of the road ahead. Using the hook and loop material provided, proceed as follows: (See illustration on reverse side)

- a. Remove backing from one side and apply to dash.
- b. Clean dashboard with common rubbing alcohol to remove dirt and grease. Remove backing from other side and place detector on top. Let adhesive set.

Note: With this hook and loop material dashboard mounting, it's easy for you to remove and reinstall your Cobra ESD-6100 detector at any time.

Remember: Without means to adjust the angle of the detector (when mounted as above), be sure you that your Cobra ESD-6100 has a level, clear view of the road before you attach the hook and loop material.



V. Maintenance

Your COBRAESD-6100 RADAR/LASER DETECTOR will give you years of trouble-free service with minimum maintenance.

Replacing Power Cord Fuse

Unscrew cap of cigarette lighter adapter and remove fuse. Replace with 1-ampere fuse only.

Troubleshooting

If your COBRALASER DETECTOR ESD-6100 isn't operating, we suggest you make the following checks:

1. Is the power cord properly connected?
2. Is the fuse OK?
3. Is the cigarette lighter socket clean and free from corrosion?

Limited One Year Warranty

COBRA ELECTRONICS CORPORATION warrants that its COBRARadar detectors, and the component parts thereof, will be free of defects in workmanship and materials for a 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 radar 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. For further details concerning procedures for obtaining service, see the "If You Think You Need Service" section of the Owner's Manual.

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.

COBRA ELECTRONICS CORPORATION
6500 W. Cortland Street, Chicago, Illinois 60707

III. Operation

A. Band Detection

This detector is designed to detect X, K, Superwide Ka Band Radar, Laser, VG-2, and Safety Alert signals.

B. Signal Strength Meter

The Signal Strength Meter on your detector indicates relative range. The meter is made up of the Visual Alarm Indicators (see section I) for low level radar/laser signals and the Signal Strength LEDs for stronger signals.

C. Audible Alarm Indicator

A different alert tone will sound for X, K, Ka, Laser, VG-2 and Safety signals. These sounds are demonstrated during the power-on sequence each time you turn your Cobra ESD-6100 on.

D. Instant-on Detection

The Cobra ESD-6100 is also designed to detect Instant-on speed monitoring signals. **Immediate action is required when warning is given.**

E. Power/Volume Control

Plug the Cobra ESD-6100 power adapter cord into POWER connector. Insert other end into cigarette lighter of the vehicle. The POWER/VOLUME CONTROL on the left side of the Cobra ESD-6100 controls power and regulates the audible alert volume. To turn on, turn the thumbwheel away from you. Each time the unit is turned on, an automatic test pattern takes place:

- This pattern consists of the Alarm Indicators and SIGNAL STRENGTH METER illuminating in unison with the audio alarm for two seconds.
- The green POWER LED remains illuminated after the test sequence is completed.

F. VG-2 Undetectable

Some states or municipalities use devices referred to as "VG-2". The VG-2 device detects low level energy radiated by the internal oscillators of radar detectors. The VG-2 device also radiates a similar type of energy. The ESD-6100 detects the VG-2's radiation before the VG-2 can detect the ESD-6100. The ESD-6100 then briefly turns off its internal oscillator, rendering it invisible to the VG-2, and alerts you to VG-2's presence. During these short intervals, the ESD-6100 is not able to receive radar or Safety Alert signals (laser reception is not affected). Once past the VG-2, the ESD-6100 returns to normal operation.

For technical assistance, please call our Automated Help Desk which can assist you by answering the most frequently asked questions about Cobra products.

(773) 889-3087

24 hours a day, 7 days a week.

A Consumer Service Representative can be reached through this same number 8:00 am - 8:00 pm, Monday through Friday, CST.

Technical assistance is also available on-line in the Frequently Asked Question (FAQ) section at www.cobraelec.com or by e-mail to productinfo@cobraelec.com

If You Think You Need Service, Call 773-889-3087

If your product should require factory service please call Cobra first before sending your unit in. This will ensure the fastest turnaround time on your repair.

You may be asked to send your unit to the Cobra factory. It will be necessary to furnish the following, in order to have the product serviced and returned.

1. For Warranty Repair, include some form of proof-of-purchase, such as a mechanical reproduction or carbon or sales receipt. If you send the original receipt it cannot be returned.
2. Send the entire product. For example—must include detector, bracket with suction cups, and cord.
3. Enclose a description of what is happening with the unit. Include a typed or clearly printed name and address of where the unit is to be returned.
4. Pack unit securely to prevent damage in transit. If possible, use the original packing material.
5. Ship prepaid and insured by way of a traceable carrier (to avoid loss in transit) such as United Parcel Service (UPS), Roadway Parcel Service (RPS), or First Class Insured Mail to Cobra Factory Service, Cobra Electronics Corporation, 6500 W. Cortland St., Chicago, IL 60707. Cobra is not responsible for units not received if package has not been properly insured.
6. If the unit is in warranty, upon receipt of your unit it will either be repaired or exchanged depending on the model. Please allow approximately 3 to 4 weeks before contacting us for status. If the unit is out of warranty a letter will automatically be sent informing you of the repair charge or replacement charge. If you have any questions, please call 773-889-3087 for assistance.

C. Band Alarm Indicators

When the Cobra ESD-6100 detects an X-band radar signal, the red "X" Visual Alarm Indicator (LED) will flash in unison with the X-Band audio tone. When the ESD-6100 detects either a K-band or a Ka-band radar signal, the amber "K/Ka" Visual Alarm Indicator will flash in unison with the K or Ka Band audio tone. When the ESD-6100 detects pulses of laser light, the yellow "L" LED will flash in unison with the Laser tone. When VG-2 is detected, the amber "VG-2" LED will flash with an audio tone. When a Safety Alert signal is detected, all LEDs except POWER will flash.

H. Mute Button

The mute function is controlled by a momentary button. Pressing MUTE will eliminate the audio during the alert in progress. The detector will automatically reset to normal operation after the alert has passed. It will also reset to normal any time the detector is turned off.

I. City/Highway

The Highway/City function is controlled by a 2 step momentary button. The Highway mode is automatically engaged when the unit is powered up. To engage City Mode, press down on the Highway/City button. A green LED will light to indicate that the detector is in City Mode. To reactivate the Highway Mode simply press down on the Highway/City button again. The green LED will go dark to indicate that the detector is in Highway Mode. The ESD-6100 will retain the chosen mode while off. In the Highway Mode, your Cobra ESD-6100 operates at full sensitivity on all three radar bands plus laser.

In the City Mode, the X-band audio alert sensitivity is lowered to reduce false alerts. In or near cities, there are many sources of false radar signals. Microwave relay towers for telephone and TV signaling, anti-shoplifting systems and bank alarms—all are examples of false X-band sources.

J. Dim Button

The Highway/City function is controlled by three levels of brightness for your Cobra ESD-6100 display: Normal, Low, and Dark. Each time you turn your ESD-6100 on, the display is automatically set to full brightness. Pressing once on the Dim Button reduces the display brightness to Low; pressing a second time turns the display off; pressing a third time returns the display to Normal.

COBRA RADAR DETECTOR ACCESSORIES

Description	Part No.	Cost Ea.	X Qty. = Amount
STRAIGHT DC POWER CORD Including plug/fuse for ESD-6100	420-015-N-001	\$10.00	
CURLED TYPE POWER CORD For ESD-6100	420-028-N-001	\$10.00	
WINDSHIELD MOUNTING BRACKET	545-135-N-001	\$10.00	

(Prices subject to change without notice.)

** Illinois residents add 7%	Amount	_____
** Cook County, IL residents additional .75% (7.75% total)	(Tax if applicable **)	_____
** Chicago, IL residents additional 1% (8.75% total)		_____
** Indiana residents add 5%	Shipping/handling	\$3.75
** Michigan residents add 6.6%		_____
** Ohio residents add 6%	Total*	_____
** Wisconsin residents add appropriate %		_____

Make check or money order (no stamps) payable to Cobra Electronics and mail with this order form to:

Cobra Accessories Dept.

6500 W. Cortland St., Chicago, IL 60707

Call 773-889-3087, or fax 773-622-2269 for credit card orders

Allow 4 to 6 weeks for delivery. Offer valid in Continental U.S. only.

Please print clearly:			
Name _____			
Address (Not P. O. Box) _____			
City _____		State _____ Zip _____	
Telephone No. (____) _____			
Credit Card No. _____		Exp. Date _____	
Customer Signature _____			
Circle One: <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard <input type="checkbox"/> Discover			

Allow 4 to 6 weeks delivery. Offer valid in Continental U.S. only.