ESD-6700.MANUAL.qx 10/23/98 3:54 PM Page 1







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

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1. What You'll Need To Install The ESD-6700:

NOTE: Detailed instructions on opposite side

2. Installing The ESD-6700:



ESD-6700

ON WINDSHIELD

ATTACH CUPS TO BRACKET

ATTACH BRACKET TO WINDSHIELD

ATTACH DETECTOR TO BRACKET

PLUG POWER CORD INTO CIGARETTE LIGHTER



Windshield Bracket

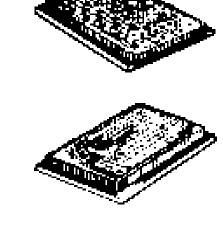
ON DASH

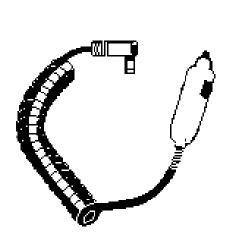
PEEL PROTECTIVE PAPER OFF ONE SIDE OF HOOK AND LOOP

PEEL TOP PAPER OFF

POWER CORD INTO DETECTOR

PLUG POWER CORD INTO CIGARETTE LIGHTER





Hook and Loop Material (For on-dash mounting) **Power Cord**

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 am - 3:00 pm,

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

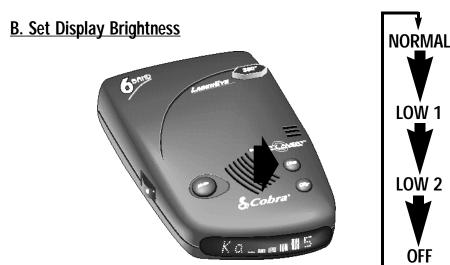
3. Operating The ESD-6700:

A. Turn On and Adjust Volume

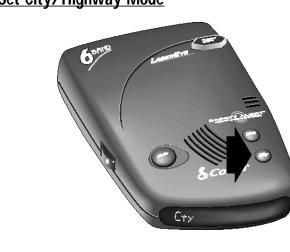


Display is briefly illuminated in the Test mode at Power ON.

NOTE: For your convenience, Display Dim, City/Highway, and Muting mode settings are retained in memory.



C. Set City/Highway Mode



<u>CITY</u> For urban driving-reduces number of X-Band audible

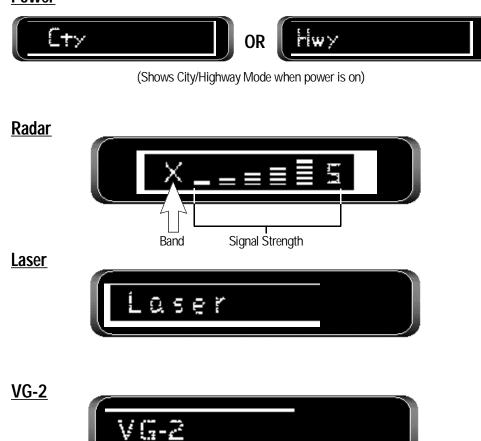
For all other driving.



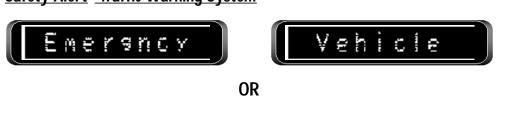
Auto Muting
Automatically reduces
volume of alert in progress after 3 seconds. Manual Muting

Press to reduce volume of alert in progress. To Switch Between Modes
Press the Mute Button when no signal is being received. In Auto mode, the display will show an "M" on the far right.

E. Indicators and Visual Alerts



Safety Alert® Traffic Warning System









Manual Mode when Mute Button is pressed Mute

ESD-6700.MANUAL.qx 10/23/98 3:55 PM Page 2

Federal Law Governing Use of Radar Detectors

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™-6700 works and how radar and (LĬDAR) laser are used. Enjoy your Cobra ESD-6700 Radar/Laser Detector and DRIVE SAFELY.

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 range of 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/VG-2/Laser Alerts

Type of Audible Signal	Interpretation and Response
Your COBRAESD-6700 starts to signal slowly, then increases in rate very rapidly.	Most likely police radar. FULLALERT.
Your COBRAESD-6700 signals just once.	Most likely a false source, or could be pulsed radar. EXERCISE CAUTION .
Very fast signal rate instantly.	Radar or VG-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-6700 double "braps" 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-6700 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 Alerts will become more common.

II. Installation

Selecting the proper location to mount the Cobra ESD-6700 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-6700 lenses 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

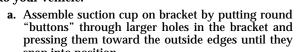
your detector in the middle of the front windshield. Examples of metal in the windshield area that can block or weaken incoming radar/laser

- 1. Windshield wiper blades. Mount your Cobra ESD-6700 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-6700 by acting as an impenetrable barrier
- 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



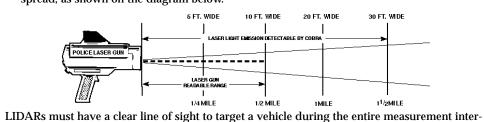
b. Install bracket to detector: align bracket with slot on rear of detector and slide bracket into opening. To remove bracket from detector, simply pull bracket out of slot.

Radar Frequencies There are now three frequencies that have been approved by the FCC (Federal

Communications Commission) for use in speed monitoring equipment. They are: X Band (10.525 GHz), K Band (24.150 GHz), Ka Band (33.400—36.000 GHz) Your Cobra ESD-6700 can detect signals in all three bands including photo radar and STALKER radar which use the Ka band, Cobra Safety Alert signals on the K band, VG-2 and laser.

D. Facts About LIDAR (Laser)

- What is LIDAR? LIDAR stands for Light Detection And Ranging. While everyone refers to it as LASER the
- correct name is LIDAR. How does LIDAR work?
- LIDAR operates a lot like RADAR. Like RADAR, it spreads out. Not as quickly, but it does spread, as shown on the diagram below.



val. Intervening objects such as signposts, utility poles, tree branches, etc., will prevent a valid speed reading. Does weather have any effect on LIDAR?

- Yes, rain, snow, smoke, fog, and airborne dust particles will all reduce the effective range, and if sufficiently dense, may prevent its operation.
- Can LIDAR operate through glass?
- No, LIDAR guns cannot obtain readings through any glass. But the laser pulse can be received through glass to easily and quickly trigger a laser detector's alarm.
- Can LIDAR operate while moving?
- No, since LIDAR is line of sight, an officer cannot drive, aim, and shoot while driving. • Is a LIDAR DETECTOR legal to use?
- Yes, it is legal in all 50 states.

c. Mounting on Windshield To install the Cobra ESD-6700 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. 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-6700 AS A LEVER. To remove the Cobra ESD-6700 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-6700 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-6700 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-6700 has a level, clear view of the road before you

V. Maintenance

attach the hook and loop material.

Your COBRAESD-6700 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. If your COBRALASER DETECTOR ESD-6700 isn't operating, we suggest you make the follow-

ing 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

City, Highway Mode

A. Band Detection This detector is designed to detect X, K, Superwide Ka Band Radar, Laser, VG-2, and

B. LED Text Display The ESD-6700's state-of-the-art LED dot matrix display presents clear text messages even

in sunlight. A four position Dim mode is provided for dusk or night driving (please see "I. Dim Button" for details). The display shows the band (X, K or Ka) signal strength in

X_=≡≣**5** bar form, and a numerical indication of signal strength. Laser signal strength.

Safety Alert® Traffic Warning System Emerancy Vehicle Road Hazard

Mute

Auto Mode Automatically reduces Pressing the Mute button during an alert will cause the display volume of alert in progress to show "Mute" for three seconds, after which the display will revert to the previous visual message.

C. Audible Alarm Indicator A different alert tone will sound for X, K, Ka, Laser, VG-2 and Safety signals (Emergency Vehicle,

Road Hazard and Train). Displays and announces "Testing...System Ready." The ESD-6700

will announce the reception of speed monitoring and Safety Alert signals as follows: "Be Careful..." Voice Alert Message:
"X Alert "K Alert" "Ka Alert" "Laser Alert" "VG-2 Alert" Safety Alert Warnings: "Emergency Vehicle Approaching" "Road Hazard Ahead" "Train Approaching"

The message "Be Careful..." and the Voice Alert Message will sound at the start of the alert. The Voice Alert Message will be followed by the corresponding Tone Alerts. See Section G for turning off the Voice Mode.

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 repro-
- duction 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, 6700 W. Cortland St., Chicago, IL60707. Cobra
- 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.

is not responsible for units not received if package has not been properly insured.

D. Instant-on Detection The Cobra ESD-6700 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-6700 power adapter cord into POWER connector. Insert other end into cigarette lighter of the vehicle. The POWER/VOLUME CONTROLon the left side of the Cobra ESD-6700 controls power and regulates the audible alert volume. To turn on, turn the thumbwheel away from you.

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-6700 detects the VG-2's radiation before the VG-2 can detect the ESD-6700. The ESD-6700 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-6700 is not able to receive radar or Safety Alert signals (laser reception is not affected). Once past the VG-2, the ESD-6700 returns to normal operation.

G. Muting Mode The ESD-6700 offers two Mute modes-Auto and Manual. To switch between them, press the Mute button when no signal is being received. In Auto mode (an "M" is shown in the display) the alarm will be reduced in volume after three seconds. In Manual mode, press the Mute but ton to reduce volume. Will also announce "Mute" or "Auto Mute." In either mode, the next alarm will begin with normal volume. The ESD-6700 will retain the chosen mode while Off.

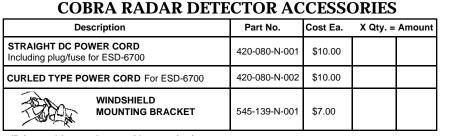
Switching from Tone/Voice+Tone: When no signal is present, pressing the button for more than 2 seconds will switch the unit between Tone and Voice+Tone Mode. A "Voice Alert" will confirm Voice+Tone has been selected and a single beep will confirm that Tone Only Mode has been selected.

H. 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. To reactivate the Highway Mode simply press down on the Highway/Čity button again. Adouble beep confirms Highway Mode. Will also announce Highway" or "City" in Voice Mode. The ESD-6700 will retain the chosen mode while Off. In the Highway Mode, your Cobra ESD-6700 operates at full sensitivity on all three radar bands plus laser.

In the City Mode, the X-band audio alert threshold is lowered to reduce false alerts. In or near cities, there are many sources of false radar signals such as microwave relay towers.

retain the chosen mode while Off.

I. Dim Button You may select from four levels of brightness for your Cobra ESD-6700 display: Normal, Low 1, Low 2 and Dark. Pressing once on the Dim Button reduces the display brightness to Low 1; pressing a second time reduces it to Low 2; pressing a third time turns the display off; pressing it a fourth time returns the display to Normal. Adouble beep confirms Normal brightness. Will also announce "Bright", "Dim", "Dimmer", and "Dark." The ESD-6700 will



(Prices subject to change without notice.) ** Illinois residents add 7%

** Cook County, ILresidents additional .75% (7.75% total)

** Chicago, ILresidents additional 1% (8.75% total) (Tax if applicable^{★★}) ★★ Indiana residents add 5% Shipping/handling \$3.75 ★★ Michigan residents add 6 % ★★ Ohio residents add 6% ★★ 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.

