**Important Information**

**Federal Laws Governing the Use of Radar Detectors**

It is not against federal law to receive radar transmissions with your Cobra radar/laser 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 Assistance**

Should you encounter any problems with this product, or not understand its many features, please refer to this owner’s manual. If you require further assistance after reading this manual, Cobra Electronics offers the following customer assistance services:

**For Assistance in the U.S.A.**

- **Automated Help Desk** English only. 24 hours a day, 7 days a week 773-889-3087 (phone).
- **Customer Assistance Operators** English and Spanish. 8:00 a.m. to 6:00 p.m. Central Time Mon. through Fri. (except holidays) 773-889-3087 (phone).
- **Questions** English and Spanish. Faxes can be received at 773-822-2269 (fax).
- **Technical Assistance** English only. www.cobra.com (on-line: Frequently Asked Questions), English and Spanish. productinfo@cobra.com (e-mail).

**For Assistance Outside the U.S.A.**

Contact Your Local Dealer

© 2008 Cobra Electronics Corporation
6500 West Cortland Street
Chicago, Illinois 60707 USA
www.cobra.com
Congratulations! You’ve made a smart choice by purchasing a high performance radar/laser detector from Cobra. Just look at some of the sophisticated features and capabilities your new unit includes:

**Xtreme Range**
Superheterodyne Technology
With super-fast sweep circuitry, XRS provides extra detection range and the best possible advance warning to even the fastest radar guns

**Detection and Separate Alerts For:**
- Radarsignals (X, K, Ka and Ku bands, with signal strength indicated),
- Laser signals,
- Safety Alert signals,
- Strobe Alert signals,
- Spectre 1 signals,
- VG-2 signals

**LaserEye**
For 360° detection of laser and strobe signals

**Instant-On Ready**
Detects radar guns with “instant-on” (very fast) speed monitoring capabilities

**DigiView Data Display**
With easy-to-read alpha/numeric dot matrix text readout

**Alert Programming**
Easy setting of radar bands to be monitored

**Safety Alert**
Traffic warning system distinguishes important safety alerts from other K band signals

**Strobe Alert**
Emergency vehicle warning system

**Manual Mute or Auto Mute**
A mute function of audio alerts

**IntelliMute**
A mute function which automatically reduces false alerts by sensing engine RPMs

**Mounting**
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.

**Customer Assistance**
Accessories Order Info

Nothing Comes Close to a Cobra®

**Ordering From U.S.A.**
Call 773-889-3087 for pricing or visit www.cobra.com.

For Credit Card Orders
Call 773-889-3087 (Press one from the main menu) 8:00 a.m. to 6:00 p.m. Central Time, Monday through Friday.

Make Check or Money Order Payable To
Cobra Electronics, Attn: Accessories Dept.,
6500 West Cortland Street, Chicago, IL 60707 U.S.A.

To Order Online
Please visit our website: www.cobra.com

---

**Product Features**

**Display and Product Features**

- **Alpha/Numeric Dot Matrix Text Display**
  See pages 6 – 16 for more information about display features.

- **City or Highway**
  Modes to reduce false alerts

- **LaserEye**
  For 360° detection of laser and strobe signals

- **Instant-On Ready**
  Detects radar guns with “instant-on” speed monitoring capabilities

- **DigiView Data Display**
  With easy-to-read alpha/numeric dot matrix text readout

- **Alert Programming**
  Easy setting of radar bands to be monitored

- **Safety Alert**
  Traffic warning system distinguishes important safety alerts from other K band signals

- **Strobe Alert**
  Emergency vehicle warning system

- **Manual Mute or Auto Mute**
  A mute function of audio alerts

- **IntelliMute**
  A mute function which automatically reduces false alerts by sensing engine RPMs

- **Mounting**
  Mounts easily on windshield or dashboard

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A mute function of audio alerts

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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.
# Contents

## Introduction
- Important Information ........................................ A1
- Customer Assistance ........................................... A1
- Controls, Indicators and Connections ..................... A2
- Display .................................................... A3
- Product Features ............................................ A3

## Your Detector
- Installation .................................................. 2
- Setting Started ............................................... 5
- Auxiliary Audio Jack ........................................ 5
- Settings ..................................................... 5
- Highway/City Mode ......................................... 6
- DigiView Data Display Brightness ........................... 7
- Muting an Alert ............................................. 8
- Auto Mute Mode ............................................ 8
- IntelliMute ................................................ 9
- Voice/Tone Setting .......................................... 12
- Spectre 1 and VG-2 Alert Settings ......................... 13
- Radar Alert Settings ....................................... 12
- Detection .................................................... 14
- Signals Detected ........................................... 14
- Audio Alerts ............................................... 14
- Visual Display ............................................. 14
- Instant-On Detection ...................................... 17
- Responding to Alerts ..................................... 17
- Understanding Radar and Laser ............................ 18
- Maintenance ................................................ 20
- Specifications .............................................. 21

## Warranty
- Limited 1-Year Warranty ..................................... 22

## Customer Assistance
- Product Service ............................................. 23
- Trademark Acknowledgement ............................... 23
- Optional Accessories ...................................... 24
- Accessories Order Info .................................... 25
Installation

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. Make sure the unit is level with the road. You can also mount it directly on the dashboard.

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

Windshield Mounting
- 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.

Dashboard 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 pressing the bracket release button and sliding it off the bracket.
Installation

Dashboard Mounting

1. Place the detector on the dashboard to find a location where the unit has a clear, level view of the road. The angle can NOT be adjusted after mounting.

2. Remove the paper backing from one side of the hook-and-loop fastener.

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

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

5. Plug the power cord into the detector.

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

Getting Started

1. Placethedetectoron the dashboard tofinda location where theunit has a clear, levelview of the road. Theanglecan NOT be adjusted after mounting.

Auxiliary Audio Jack

The Auxiliary Audio Jack can be used to connect external speakers in environments with high ambient noise levels. The internal speaker will be disconnected. (This uses a mini stereo audio connector.)
Settings

When changing the **Settings** on your detector, please keep in mind:

- Buttons can have multiple functions.
- Depending on your choice of **Voice Alert** or **Tone Alert** mode, you will hear either voice messages or tones confirming changes in settings.
- All settings will be stored in memory when the power is turned off and recalled when the power is turned back on.

Highway/City Mode

Setting your detector to **City** mode delays 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.

To change settings, follow the procedure listed below, which indicates what you will see and hear (either in **Voice Alert** or **Tone Alert** mode) as you complete each step. The factory setting is Highway mode.

### To Change From Highway Mode to City Mode

1. Press and release the **City** button.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>City</td>
<td></td>
</tr>
</tbody>
</table>

### To Change From City Mode Back to Highway Mode

1. Press and release the **City** button again.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two beeps</td>
<td>Highway</td>
<td>1/4 appears in the display</td>
</tr>
</tbody>
</table>

DigiView Data Display Brightness

You can choose from four (4) settings for **Brightness** of the display. You can cycle through the settings by repeatedly pushing the **Dim** button. The factory setting is Bright.

<table>
<thead>
<tr>
<th>Brightness</th>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dim</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimmer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dark</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Dim

Press and release the **Dim** button once.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>Dim</td>
<td>Display dims</td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Dimmer

Press and release the **Dim** button again.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Dimmer</td>
<td>Display dims further</td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Dark

Press and release the **Dim** button a third time.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>Dark</td>
<td>Display remains dim (no visual alerts will be seen)</td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Bright

Press and release the **Dim** button a fourth time.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two beeps</td>
<td>Bright</td>
<td>Display returns to full brightness</td>
</tr>
</tbody>
</table>

When changing the **Settings** on your detector, please keep in mind:

- Buttons can have multiple functions.
- Depending on your choice of **Voice Alert** or **Tone Alert** mode, you will hear either voice messages or tones confirming changes in settings.
- All settings will be stored in memory when the power is turned off and recalled when the power is turned back on.

Highway/City Mode

Setting your detector to **City** mode delays 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.

To change settings, follow the procedure listed below, which indicates what you will see and hear (either in **Voice Alert** or **Tone Alert** mode) as you complete each step. The factory setting is Highway mode.

### To Change From Highway Mode to City Mode

1. Press and release the **City** button.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>City</td>
<td></td>
</tr>
</tbody>
</table>

### To Change From City Mode Back to Highway Mode

1. Press and release the **City** button again.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two beeps</td>
<td>Highway</td>
<td>1/4 appears in the display</td>
</tr>
</tbody>
</table>

DigiView Data Display Brightness

You can choose from four (4) settings for **Brightness** of the display. You can cycle through the settings by repeatedly pushing the **Dim** button. The factory setting is Bright.

<table>
<thead>
<tr>
<th>Brightness</th>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dim</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimmer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dark</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Dim

Press and release the **Dim** button once.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>Dim</td>
<td>Display dims</td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Dimmer

Press and release the **Dim** button again.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Dimmer</td>
<td>Display dims further</td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Dark

Press and release the **Dim** button a third time.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>Dark</td>
<td>Display remains dim (no visual alerts will be seen)</td>
</tr>
</tbody>
</table>

#### To Change the Brightness to Bright

Press and release the **Dim** button a fourth time.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two beeps</td>
<td>Bright</td>
<td>Display returns to full brightness</td>
</tr>
</tbody>
</table>

When changing the **Settings** on your detector, please keep in mind:

- Buttons can have multiple functions.
- Depending on your choice of **Voice Alert** or **Tone Alert** mode, you will hear either voice messages or tones confirming changes in settings.
- All settings will be stored in memory when the power is turned off and recalled when the power is turned back on.
Muting an Alert
Your detector 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 four seconds for as long as the signal is detected. The factory setting is Auto Mute on.

IntelliMute is a unique new feature 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 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 11). Whenever the revs are below that point, IntelliMute will begin muting. The activation point will be stored in memory and recalled each time the power is turned on. 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 mode when appropriate.

### IntelliMute Button
Press and release the IntelliMute button.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two beeps</td>
<td>IntelliMute On</td>
<td>None</td>
</tr>
</tbody>
</table>

### To Turn IntelliMute On
Press and release the IntelliMute button again.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>IntelliMute Off</td>
<td>None</td>
</tr>
</tbody>
</table>
To Set the IntelliMute Activation Point

Press and hold the IntelliMute button for two seconds.

- **Tone:** Two beeps
- **Voice:** Set Engine Revs
- **Visual Display:** Press IntelliMute button again at desired RPMs

Rev your engine to the level you wish to set (recommend slightly above idle) and hold revs steady for two seconds.

- **Tone:** None
- **Voice:** None
- **Visual Display:** None

At the desired rev level, press and release the IntelliMute button.

- **Tone:** Three beeps
- **Voice:** IntelliMute Set
- **Visual Display:** IntelliMute Set!

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 before setting the activation point. Depending on whether the unit is in Tone Alert or Voice Alert mode, you will hear a series of beeps or voice messages as you follow the steps on page 11.
Voice/Tone Setting

You can set your detector to sound alerts with either a Voice or a Tone. You can change settings by using the Mute button. In Voice Alert mode, you will first hear several tones, then a voice message announcing the type of signal detected, followed by more tones. In Tone Alert mode, you will hear the tones only. The factory setting is Voice Alert mode.

Mute Button

Press and hold for two seconds

To Change From Voice Alert to Tone Alert

While no signal is being detected, press and hold the Mute button for two seconds.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>One beep</td>
<td>Tone Alert</td>
<td>None</td>
</tr>
</tbody>
</table>

To Change From Tone Alert Back to Voice Alert

While no signal is being detected, press and hold the Mute button for two seconds again.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Voice Alert</td>
<td>None</td>
</tr>
</tbody>
</table>

VG-2, Spectre 1 Alert Settings, K & Ku Band Detection

The detector is undetectable by police VG-2 and Spectre 1 radar detector detectors 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 and Spectre 1 alerts. The factory setting is VG-2 and Spectre 1 alert Off. (See table on the next page.)

Radar Alert Settings

The detector allows you to choose whether it will show alerts on the X, K, and Ku bands. The factory settings are: X Band and K Band On; Ku Band Off.

Mute Button

Press and hold for two seconds

To Turn VG-2 and Spectre 1 Alerts On and Off

While no signal is being detected, press and hold the Dim button for four seconds.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>On = Two beeps</td>
<td>Spectre VG-2 On</td>
<td>V will blink twice in the display</td>
</tr>
<tr>
<td>Off = One beep</td>
<td>Spectre VG-2 Off</td>
<td>V will blink once in the display</td>
</tr>
</tbody>
</table>

To Turn X Band On and Off

While no signal is being detected, press and hold both the Mute and City buttons for four seconds.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>X On = Two beeps</td>
<td>X On</td>
<td>X will blink twice in the display</td>
</tr>
<tr>
<td>X Off = One beep</td>
<td>X Off</td>
<td>X will blink once in the display</td>
</tr>
</tbody>
</table>

To Turn K Band On and Off

While no signal is being detected, press and hold both the Mute and City buttons for four seconds.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>K On = Two beeps</td>
<td>K On</td>
<td>K will blink twice in the display</td>
</tr>
<tr>
<td>K Off = One beep</td>
<td>K Off</td>
<td>K will blink once in the display</td>
</tr>
</tbody>
</table>

To Turn Ku Band* On and Off

While no signal is being detected, press and hold the City button for four seconds.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ku On = Two beeps</td>
<td>Ku On</td>
<td>X and K will blink twice in the display</td>
</tr>
<tr>
<td>Ku Off = One beep</td>
<td>Ku Off</td>
<td>X and K will blink once in the display</td>
</tr>
</tbody>
</table>

Nothing Comes Close to a Cobra®
Detection

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 of them.

Audio Alerts

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

In both Voice Alert and Tone Alert modes, a distinctly different alert tone is used for each type of signal detected (including separate tones for each laser signal). For X, K, Ka and Ku 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 on page 17.)

Visual Display

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

Signal Strength Chart

<table>
<thead>
<tr>
<th>Signal Strength</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Weakest Signal)</td>
</tr>
<tr>
<td>2</td>
<td>(Next Weakest Signal)</td>
</tr>
<tr>
<td>3</td>
<td>(Next Strongest Signal)</td>
</tr>
<tr>
<td>4</td>
<td>(Strongest Signal)</td>
</tr>
</tbody>
</table>

Radar Signals, Voice and Visual Displays

<table>
<thead>
<tr>
<th>Type of Signal</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Band Radar</td>
<td>X Alert</td>
<td>X and Signal Strength</td>
</tr>
<tr>
<td>K Band Radar</td>
<td>K Alert</td>
<td>K and Signal Strength</td>
</tr>
<tr>
<td>Ka Band Radar</td>
<td>Ka Alert</td>
<td>Ka and Signal Strength</td>
</tr>
<tr>
<td>Ku Band Radar</td>
<td>Ku Alert</td>
<td>Ku and Signal Strength</td>
</tr>
</tbody>
</table>

Laser Signals, Voice and Visual Displays

<table>
<thead>
<tr>
<th>Type of Signal</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTI 20-20*</td>
<td>Laser Alert</td>
<td>Laser 20/20</td>
</tr>
<tr>
<td>LTI Ultra-Lyte*</td>
<td>Laser Alert</td>
<td>Laser Ultra-Lyte</td>
</tr>
<tr>
<td>Kustom Signals ProLaser*</td>
<td>Laser Alert</td>
<td>Laser Pro Laser</td>
</tr>
<tr>
<td>Kustom Signals ProLaser III*</td>
<td>Laser Alert</td>
<td>Laser Pro Laser 3</td>
</tr>
</tbody>
</table>

* Your detector provides 360° detection of these signals.

NOTE

Beep rate changes with different laser alerts.
**Detection**

**Strobe and Safety Alert Signals, Voice and Visual Displays**

<table>
<thead>
<tr>
<th>Type of Signal</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M Opticom or Tomar*</td>
<td>Emergency Vehicle</td>
<td>Emergency Vehicle</td>
</tr>
<tr>
<td>Emergency Vehicles</td>
<td>Emergency Vehicle</td>
<td>Emergency Vehicle</td>
</tr>
<tr>
<td>Road Hazards</td>
<td>Road Hazard Ahead</td>
<td>Road Hazard</td>
</tr>
<tr>
<td>Trains</td>
<td>Train Approaching</td>
<td>Train</td>
</tr>
</tbody>
</table>

* Your detector provides 360° detection of this signal.

**Strobe Alert Display**

- Emergency... (Flashing)

**Road Hazard Alert Signal Detected**

- Road

**Train Alert Signal Detected**

- Train

**Instant-On Detection**

Your detector is designed to detect Instant-On speed monitoring signals, which can suddenly appear at full strength.

**NOTE**

- You should take appropriate action immediately whenever an instant-on alert is given.

**Responding to Alerts**

<table>
<thead>
<tr>
<th>Description</th>
<th>Interpretation</th>
<th>Recommended Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone repeats slowly at first, then speeds up rapidly.</td>
<td>Probably police radar</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>Tone sounds one time only.</td>
<td>Probably a false alarm, but possibly pulsed radar, Spectre 1 or VG-2 nearby</td>
<td>Exercise caution</td>
</tr>
<tr>
<td>Tone instantly begins repeating rapidly.</td>
<td>Radar, Spectre 1 or VG-2 nearby has been activated suddenly</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>Tone repeats slowly as you approach a hill or bridge, then speeds up sharply as you reach it.</td>
<td>Probably police radar beyond the hill or bridge</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>Tone repeats slowly for a short period.</td>
<td>Probably a false alarm</td>
<td>Exercise caution</td>
</tr>
<tr>
<td>Any type of laser alert.</td>
<td>Laser alerts are never false alarms</td>
<td>FULL ALERT</td>
</tr>
<tr>
<td>Any Safety Alert or Strobe Alert.</td>
<td>You are nearing an emergency vehicle, railroad crossing, or road hazard (construction, accident, etc.)</td>
<td>Exercise caution</td>
</tr>
</tbody>
</table>

**NOTE**

- There are different tones for each Safety Alert.

**Detection**

**3M Opticom or Tomar**

**Emergency Vehicle Approaching**

**Emergency Vehicle**

**Emergency Vehicle Approaching**

**Emergency Vehicle**

**Road Hazard Ahead**

**Road Hazard**

**Train Approaching**

**Train**

**Spectre 1 Alert Signal, Voice and Visual Display**

<table>
<thead>
<tr>
<th>Type of Signal</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectre</td>
<td>Spectre Alert</td>
<td>Spectre</td>
</tr>
</tbody>
</table>

**Spectre 1 Alert Signal Detected**

**NOTE**

- There are different tones for each alert.

**VG-2 Alert Signal, Voice and Visual Display**

<table>
<thead>
<tr>
<th>Type of Signal</th>
<th>Voice</th>
<th>Visual Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interceptor VG-2</td>
<td>VG-2 Alert</td>
<td>VG2</td>
</tr>
</tbody>
</table>

**VG-2 Alert Signal Detected**

**NOTE**

- There are different tones for each alert.
Understanding Radar and Laser

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, plus Ku band (13.435 GHz), which is an approved frequency used in parts of Europe and Asia.

Spectre 1 and VG-2

Spectre 1 and VG-2 are “detector detectors” that work by detecting low-level signals emitted by most radardetectors. Your detector does not emit signals that can be detected by Spectre 1 or VG-2, but does detect Spectre 1 and VG-2 signals and will alert you when a device is in use near your vehicle, if you so choose.

Safety Alert Traffic Warning System

FCC-approved Safety Alert transmitters emit microwave radar signals that indicate the presence of a safety-related concern. Depending on the frequency of the signal emitted, it can indicate a speeding emergency vehicle or train, or a stationary road hazard.

Because these microwave signals are within the K band frequency, most conventional radar detectors will detect Safety Alert signals as standard K band radar. Your 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 widely. 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

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 2-amp fuse only.)

Specifications

Band and Frequencies

<table>
<thead>
<tr>
<th>Band</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Band</td>
<td>10.525 ± 0.050 GHz</td>
</tr>
<tr>
<td>X Band</td>
<td>24.125 ± 0.125 GHz</td>
</tr>
<tr>
<td>Safety Alert</td>
<td>24.070 ± 0.010 GHz</td>
</tr>
<tr>
<td>Traffic Warning System</td>
<td>24.110 ± 0.010 GHz</td>
</tr>
<tr>
<td>Spec 1</td>
<td>24.190 ± 0.010 GHz</td>
</tr>
<tr>
<td>Spec 2</td>
<td>24.230 ± 0.010 GHz</td>
</tr>
<tr>
<td>Ka Band</td>
<td>34.700 ± 1.300 GHz</td>
</tr>
<tr>
<td>Ku Band</td>
<td>13.435 ± 0.050 GHz</td>
</tr>
<tr>
<td>VG-2</td>
<td>11.500 ± 0.250 GHz</td>
</tr>
<tr>
<td>Spec 1</td>
<td>13.300 ± 0.200 GHz</td>
</tr>
<tr>
<td>Laser</td>
<td>890 ± 50 nm</td>
</tr>
<tr>
<td>Strobe</td>
<td>700 ± 300 nm</td>
</tr>
</tbody>
</table>

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.
Limited 1-Year Warranty

For Products Purchased in the U.S.A.

Cobra Electronics Corporation warrants that its Cobra 12 Band Radar/Laser Detectors, and the component parts thereof, will be free of defects in workmanship and materials for period of one 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 12 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.

Product Service and Trademark Acknowledgement

Product Service

For any questions about operating or installing this new Cobra product, or if parts are missing... PLEASE CALL COBRA FIRST... do not return this product to the store. See customer assistance on page A1.

If this product should require factory service, please call Cobra at 773-889-3087 BEFORE sending the product. This will ensure the fastest turnaround time on any repair.

If Cobra asks that the product be sent to its factory, the following must be furnished to have the product serviced and returned:
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 Priority mail with delivery confirmation.

Ship to: Cobra Factory Service, Cobra Electronics Corporation, 6500 West Cortland Street, Chicago, IL 60707 U.S.A.

If your unit is out of warranty, you will receive a letter informing you of the repair or replacement charge.

Trademark Acknowledgement

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Bee III™ and Pop™ are trademarks of MPH Industries. Spectre™ is a trademark of Technisonic Industries LTD. "Tomar" is a registered trademark of TOMAR Electronics, Inc.
Optional Accessories

You can find quality Cobra products and accessories at your local Cobra dealer, or in the U.S.A., you can order directly from Cobra. See ordering info on page 25.

- **Windshield Mounting Bracket**
  - Includes suction cups
  - Item # 545-159-N-001

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

- **Coiled 12V DC Power Cord**
  - Includes plug and fuse
  - Item # 420-026-N-001

- **Dual Port Power Adapter**
  - Includes adjustable plug (up to 90˚) and fuse
  - Item # CLP-2B