Cobra®

14 BAND

Operating Instructions

The Cobra line of quality products includes:

CB Radios

microTALK® Radios

Radar/Laser Detectors

Safety Alert® Traffic Warning Systems

Truck-Specific Navigation Systems

HighGear® Accessories

CobraMarine VHF Radios

Power Inverters

LED Lights

Jumpstarters

Accessories

For more information or to
order any of our products,
please visit our website:
www.cobra.com

**14 BAND™
HIGH-PERFORMANCE
DIGITAL RADAR/LASER
DETECTOR WITH XTREME RANGE
SUPERHETERODYNE® TECHNOLOGY AND
RED LIGHT / SPEED CAMERA GPS LOCATOR**

XRS 9550G

Nothing Comes Close to a Cobra®

Important Information and Customer Assistance

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. Do not attempt to change settings of the unit while in motion.

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 5:30 p.m. Central Time
Mon. through Fri. (except holidays) 773-889-3087 (phone).

Questions English and Spanish. Faxes can be received at 773-622-2269 (fax).

Technical Assistance English only. www.cobra.com (on-line: Frequently Asked Questions).
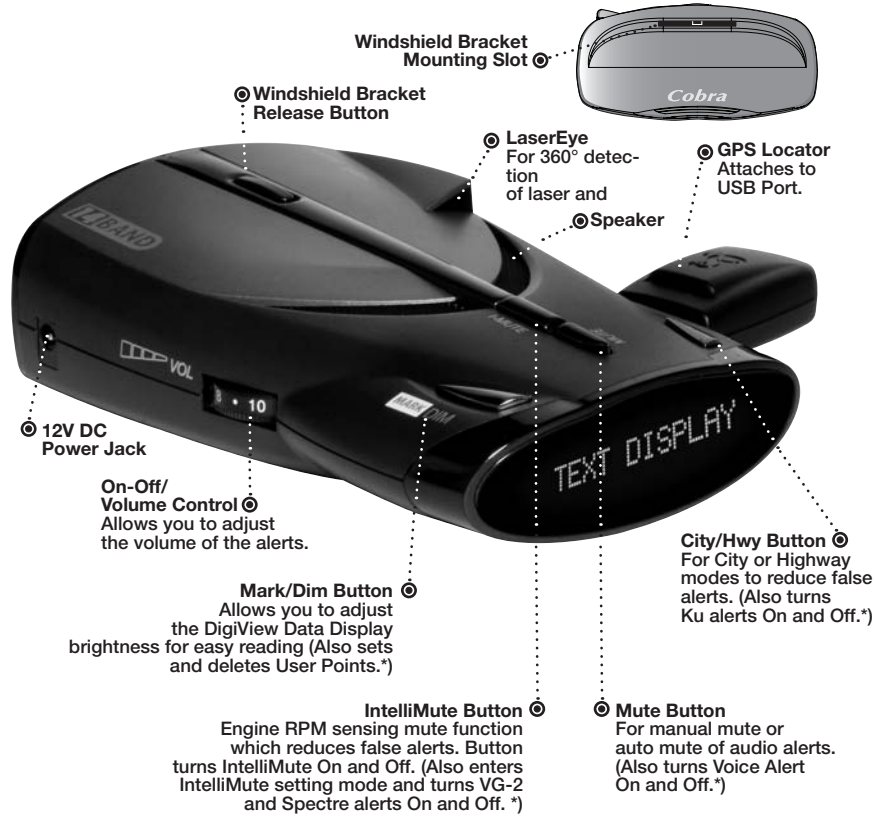English and Spanish. product info@cobra.com (e-mail).

For Assistance Outside the U.S.A.
Contact Your Local Dealer

A1   **English**

Controls, Indicators and Connections

Windshield Bracket
Mounting Slot

Windshield Bracket
Release Button

LaserEye
For 360° detec-
tion
of laser and

GPS Locator
Attaches to
USB Port.

Speaker

12V DC
Power Jack

On-Off/
Volume Control
Allows you to adjust
the volume of the alerts.

City/Hwy Button
For City or Highway
modes to reduce false
alerts. (Also turns
Ku alerts On and Off.*)

Mark/Dim Button
Allows you to adjust
the DigiView Data Display
brightness for easy reading (Also sets
and deletes User Points.*)

IntelliMute Button
Engine RPM sensing mute function
which reduces false alerts. Button
turns IntelliMute On and Off. (Also enters
IntelliMute setting mode and turns VG-2
and Spectre alerts On and Off. *)

Mute Button
For manual mute or
auto mute of audio alerts.
(Also turns Voice Alert
On and Off.*)

* See page 6 for
accessing multiple
button functions.

FCC NOTICE This device complies with part 15 of FCC rules: Operation is
subject to the following two conditions: (1) This device may not cause harmful
interference, and (2) This device must accept any interference received
including interference that may cause undesired operation.

Display

h
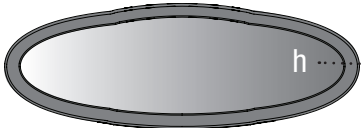
Alpha/Numeric Dot Matrix Text Display
See pages 6 – 17 for more information
about display features.

Product Features

**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:
Radar signals (X, K, Ka and Ku bands, with
signal strength indicated), Laser signals,
Safety Alert signals, Spectre I & IV signals, VG-2
signals

LaserEye
For 360° detection of laser signals

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

Pop Detection
Detects the latest super-fast instant-on
single pulse radar guns

Tone Alert or Voice Alert
With adjustable volume

City or Highway
Modes to reduce false alerts

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

Manual Mute or Auto Mute
A mute function of audio alerts

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

IntelliMute Pro
Prevents detection by radar detector detectors
(RDDs) when traveling at
slower speeds

Mounting
Mounts easily on windshield or dashboard

GPS Ready
The GPS Locator unit adds: Photo Enforced,
Caution, Speed Trap and User Location Alerts;
and a GPS Compass

IntelliScope
Uses GPS Locator to show direction of Location-
Based Alerts relative to your moving vehicle

Lifetime Updates
The GPS Locator includes free lifetime updates
of its Cobra-exclusive AURA database of
location-based alerts

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 5:30 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

Item #	Description
RDA GPSL66	Plug-in GPS Locator Unit
420-030-N-001	Straight 12V Power Cord
420-030-N-001	Coiled 12V Power Cord
545-159-N-001	Windshield Mounting Bracket
CLP-2B	Dual-Port Power Adapter

Trademark Acknowledgement

Cobra®, DigiView®, EasySet®, Extra Sensory Detection®, IntelliMute®, IntelliMute® Pro, IntelliShield®,
LaserEye®, Nothing Comes Close to a Cobra®, Safety Alert® Traffic Warning System, Strobe Alert®, VG-2
Alert®, Xtreme Range Superheterodyne® and the snake design are registered trademarks of Cobra
Electronics Corporation, USA.

Cobra Electronics Corporation™, 14 Band™, 15 Band™, AURA™, Extreme Bright DataGrafix™,
IntelliLink™, IntelliScope™, IntelliView™, Revolution™ Series, SmartPower™, Spectre Alert™, Super-
Xtreme Range Superheterodyne™, S-XRS™, UltraBright™, and Voice Alert™ are trademarks of Cobra
Electronics Corporation, USA.

Opticom™ is a trademark of 3M Corporation. Instaclear® for Ford is a registered trademark of Ford
Motor Company, Inc. Electriclear® for GM is a registered trademark of General Motors Corporation. LTI
Laser™ and LTI 20-20™ are trademarks of Laser Technology, Inc. Kustom Laser™, Kustom Laser
340™ and ProLaser II™ are trademarks of Kustom Signals, Inc. SpeedLaser™ is a trademark of Laser
Atlanta. Bee III™ and Pop™ are a trademarks of MPH Industries. Stalker™ LIDAR is a trademark of
Applied Concepts, Inc. Spectre I™ and Spectre IV™ are trademarks of Stealth Micro Systems Pty. Ltd.
Interceptor VG-2™ is a trademark of TechniSonic Industries LTD. Tomar® is a registered trademark of
TOMAR Electronics, Inc.

Introduction

Your Detector

Global Position System Locator (GPS Locator)

Customer Information and Warranty

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. You can also mount it directly on the dashboard.

Windshield Mounting	Dashboard Mounting

The unit's lens must not be blocked and the LaserEye should have a clear view out the back window to allow 360° detection. If the GPS Locator unit is installed, it must have a clear view of the sky to receive GPS signals.

The LaserEye Should Have a Clear View
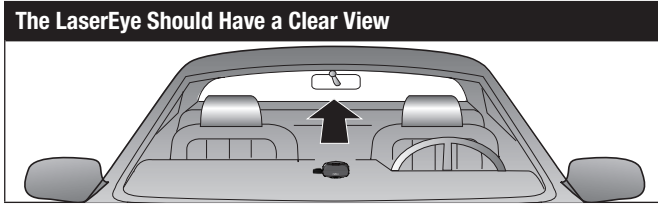
Radar, laser and GPS signals pass through glass but not through other materials and objects. Objects that can block or weaken incoming signals include:

- 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 that the unit is parallel to the road's surface.**	
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 depressing 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 **and is parallel to the road's surface**. The angle CANNOT be adjusted after mounting
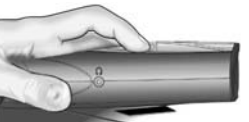
2. Remove the paper backing from one side of the hook-and-loop fastener.

3. Attach the pad to the dash-board 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.

Standby Screens

Power On

Testing

System Ready
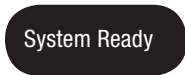
On-Off/
Volume Control
Rotate clockwise
(away from you)

To Turn On the Unit and Adjust the Audio Volume

Rotate the **On-Off/Volume** control clockwise (away from you).	Tone	Voice	Visual Display
	Three beeps	**Testing**, then three beeps **System Ready**	The display will sequentially show the settings for any user modes you have changed from the factory defaults. If the GPS Locator is connected, the sequence will continue with the database version, whether the GPS is locked on a signal and the speed units in effect.

Start-Up Complete

h

Start-up is complete when the display continuously shows the letters indicating the current user settings (**c** = **City** mode, **h** = **Highway** mode, **i** = **IntelliMute** On)

NOTE
In some vehicles, power is supplied to the cigarette lighter even while the ignition is Off. If this is the case with your vehicle, you should turn Off or unplug your detector when parking for lengthy periods.

Settings

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

■ Buttons can have multiple functions.
  – **Press** means press and release (less than two seconds).
  – **Hold 2** means press and hold for two or three seconds before releasing.
  – **Hold 4** means press and hold for four seconds or more before releasing.
■ 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.

City/Highway 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 on the next page, 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.

City/Highway Mode (continued)

Highway Mode

h

City Mode

c

City/Hwy
Button
Press and
release

To Change From Highway Mode to City Mode

Press and release the **City/Hwy** button.	Tone	Voice	Visual Display
	One beep	**City**	**City X** blinks, then **c** appears in the display*

To Change From City Mode Back to Highway Mode

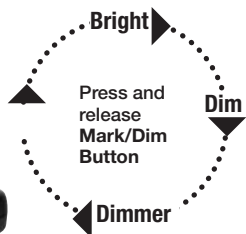| Press and release the **City/Hwy** button again.	Tone	Voice	Visual Display
	Two beeps	**Highway**	**Highway** blinks, then **h** appears in the display*

NOTE
If the GPS Locator is connected, "c" or "h" will show
for two seconds, then be replaced by the GPS symbol.
See page 24 for GPS features.

Settings

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 **Mark/Dim** button. The factory setting is Bright.

Bright

Press and release Mark/Dim Button

Dim

Dimmer

Mark/Dim Button
Press and
release

Dark Indicator

TEXT DISPLAY

To Change the Brightness to Dim (50% of full brightness)

Press and release the **Mark/Dim** button once.	Tone	Voice	Visual Display
	One beep	**Dim**	**Dim** blinks, then display dims

To Change the Brightness to Dark (Off)

Press and release the **Mark/Dim** button a third time.	Tone	Voice	Visual Display
	One beep	**Dark**	**Dark** blinks, then display goes dark (no visual alerts will be seen)

To Change the Brightness to Bright (Full Brightness)

Press and release the **Mark/Dim** button a fourth time.	Tone	Voice	Visual Display
	Two beeps	**Bright**	Bright blinks, then display turns to full brightness

---

Muting an Alert

Your detector allows you to quickly turn Off an audio **Alert** by 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.

Mute Button
Press and
release

To Turn Auto Mute Off

Press and release the **Mute** button while no alert is occurring.	Tone	Voice	Visual Display
	One beep	**Auto Mute Off**	**Auto Mute Off** blinks in the display

To Turn Auto Mute On

Press and release the **Mute** button again while no alert is occurring.	Tone	Voice	Visual Display
	Two beeps	**Auto Mute On**	**Auto Mute On** blinks in the display

IntelliMute

IntelliMute is a unique 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.

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 On

i h

**IntelliMute Button
Press and release**

To Turn IntelliMute On

Press and release the **IntelliMute** button.	Tone	Voice	Visual Display
	Two beeps	IntelliMute On	**IntelliMute On** blinks, then **i** appears in the display

To Turn IntelliMute Off

Press and release the **IntelliMute** button again.	Tone	Voice	Visual Display
	One beep	IntelliMute Off	**IntelliMute Off** blinks in the display

What to Remember While Using IntelliMute

IntelliMute works with both City and Auto Mute modes. Whenever engine revs are below the activation point, an arrow pointing down will appear in the display. Above the activation point, an arrow pointing up will appear.

Below Activation Point

If, for any reason, the unit stops sensing your engine's revs, IntelliMute will indicate an error and automatically turn Off. The rev point you set will be stored in the unit's memory when power is turned Off and recalled each time the power is turned On.

NOTE
The rev point must be reset if you use your detector in a different vehicle.

NOTE
When initially choosing your IntelliMute activation point, a setting of approximately 300 to 600 RPMs above idle is recommended. You can reset the activation point at any time to fit your individual preferences and driving style.

Setting the IntelliMute Activation Point

Your detector must be installed in your vehicle.

CAUTION
Do not attempt to set the rev point while driving. Your vehicle should be parked and idling.

IntelliMute must be turned On 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 the next page.

Hold 2 IntelliMute Button

Rev Level Set

	Intelli
button ag...	Mute
desired RPMs	
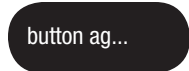
◉ **IntelliMute Button**
Press and release

To Set the IntelliMute Activation Point

Press and hold the **IntelliMute** button for two seconds.	Tone	Voice	Visual Display
	Two beeps	**Set Engine Revs**	**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.	None	None	**None**
At the desired rev level, press and release the **IntelliMute** button.	Three beeps	**IntelliMute Set**	**IntelliMute Set!**

IntelliMute Not Set

IntelliMu...

Intelli...

Off
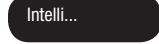
NOTE If the unit is unable to sense usable pulses within three seconds or if you do not set a rev point within 20 seconds of beginning these steps, IntelliMute will indicate an error and automatically turn Off.

Tone	Voice	Visual Display
Four beeps	**IntelliMute Not Set, Please Try Again** followed by	**IntelliMute not set**
		Please try again
One Beep	**IntelliMute Off**	**IntelliMute Off**

IntelliMute Pro

IntelliMute Pro prevents detection by radar detector detectors (RDDs) such as VG-2, Spectre I and Spectre IV when traveling at slower speeds. It is intended for use by experienced users only.

When IntelliMute Pro is turned On, and engine RPMs are below the IntelliMute activation point, your detector's radar detection circuits are turned Off to prevent detection by RDDs.

Before IntelliMute Pro can be turned On, you must have turned On and Set the IntelliMute activation point. (See pages 11 through 12.)

⚠️ **CAUTION**
When IntelliMute Pro is On, **NO** radar signals will be detected and **NO** alerts will be given at RPMs **below** the IntelliMute activation point.

◉ **IntelliMute Button**
City/Hwy Button
Press and Hold 4 both buttons simultaneously

IntelliMute Pro On

NOTE
The arrow up or down will continue to show that engine RPMs are above or below the user-set value.

To Turn IntelliMute Pro On

While no signal is being detected, press and hold both the **IntelliMute** and **City/Hwy** buttons for four seconds.	Tone	Voice	Visual Display
	Two beeps	**IntelliMute Pro On**	**i** blinks continuously in the display after **IntelliMute Pro On** blinks

To Turn IntelliMute Pro Off

Press and hold both the **IntelliMute** and **City/Hwy** buttons for four seconds.	Tone	Voice	Visual Display
	One beep	**IntelliMute Pro Off**	**IntelliMute Pro Off** blinks in the display

Settings

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 2

To Change From Voice Alert to Tone Alert			
While no signal is being detected, press and hold the **Mute** button for two seconds.	**Tone**	**Voice**	**Visual Display**
	One beep	**Tone Alert**	**Tone Alert** blinks in the display

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.	**Tone**	**Voice**	**Visual Display**
	None	**Voice Alert**	**Voice Alert** blinks in the display

VG-2 and Spectre I & IV Alert Settings

Police use radar detector detectors (RDDs) to spot users of radar detectors. Your detector is able to identify signals from **VG-2**, **Spectre I** and **Spectre IV** RDDs and can provide alerts when any of these or similar devices are in use near your vehicle.

Your detector **can** be spotted by Spectre IV RDDs, but is invisible to VG-2 and Spectre I RDDs. You can choose whether you want to be alerted to VG-2 and Spectre I & IV RDD signals. The factory setting for VG-2 and Spectre I & IV alerts is Off.

Spectre I & IV and VG-2 On

&VG2

On

Spectre I & IV and VG-2 Off

Spectre

&VG2

Off

IntelliMute & Dim Button
Simultaneously press and hold IntelliMute and Dim buttons for four seconds

To Turn VG-2 and Spectre I & IV Alerts On and Off			
While no signal is being detected, press and hold the **IntelliMute** button for four seconds.	**Tone**	**Voice**	**Visual Display**
	On = Two beeps	**Spectre VG-2 On**	**Spectre I/VI** & **VG2 On** blinks in the display
	Off = One beep	**Spectre VG-2 Off**	**Spectre I/VI** & **VG2 Off** blinks in the display

Radar Alert Settings
XKKaKu

To Turn X Band On and Off

While no signal is being detected, press and hold both the **Mark/Dim** and **Mute** buttons for four seconds.	Tone	Voice	Visual Display
	X On = Two beeps	**X Band On**	**X On** blinks in the display
	X Off = One beep	**X Band Off**	**X Off** blinks in the display

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.	Tone	Voice	Visual Display
	K On = Two beeps	**K Band On**	**K On** blinks in the display
	K Off = One beep	**K Band Off**	**K Off** blinks in the display

To Turn Ka Band On and Off

With unit power Off, press and hold the **Mute** button. Then turn the power On and continue to hold the **Mute** button for two seconds.	Tone	Voice	Visual Display
	Ka On = Two beeps	**Ka Band On**	**Ka On** blinks in the display
	Ka Off = One beep	**Ka Band Off**	**Ka Off** blinks in the display

To Turn Ku Band On and Off

While no signal is being detected, press and hold the **City/Hwy** button for four seconds.	Tone	Voice	Visual Display
	Ku On = Two beeps	**Ku Band On**	**Ku On** blinks in the display
	Ku Off = One beep	**Ku Band Off**	**Ku Off** blinks in the display

Pop Alert

The Pop Mode Radar Gun is a single-pulse Doppler radar that is a feature of a K and Ka (Bee III Ka radar gun) band Instant-On radar gun. It uses a single, short-time pulse to measure the target vehicle's speed.

The Pop mode receiver senses Pop signals beyond the effective range of Pop radar guns. As the Pop mode receiver is so sensitive, you should limit the use of Pop Detect mode to highway and rural driving.

Pop Alert will alert you to Pop radar signals. During the alert, the unit continues to detect other signals. The factory setting is Pop Detect Off.

To Turn Pop Alert On and Off

While no signal is being detected, press and hold both the **Mark/Dim** and **City/Hwy** buttons for four seconds.	Tone	Voice	Visual Display
	Pop On = Two beeps	**Pop Alert On**	**Pop Alert On** blinks in the display
	Pop Off = One beep	**Pop Alert Off**	**Pop Alert Off** blinks in the display

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.
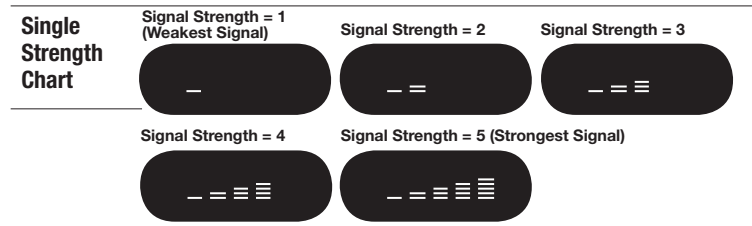
Audio Alerts

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 21.)
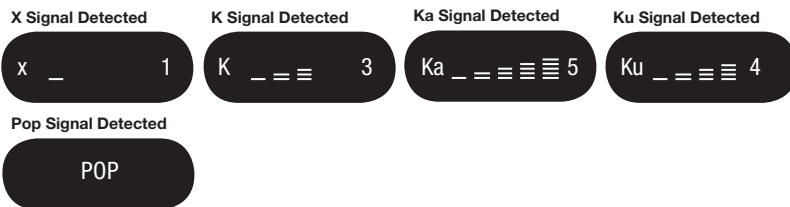
Visual Display

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.

Single Strength Chart

Signal Strength = 1 (Weakest Signal)

Signal Strength = 2

Signal Strength = 3

Signal Strength = 4

Signal Strength = 5 (Strongest Signal)

Radar Signals, Voice and Visual Displays

Type of Signal	Voice	Visual Display
X Band Radar	**X Alert**	X and Signal Strength
K Band Radar	**K Alert**	K and Signal Strength
Ka Band Radar	**Ka Alert**	Ka and Signal Strength
Ku Band Radar	**Ku Alert**	Ku and Signal Strength
Pop Radar	**Pop Alert**	POP

Visual Display (continued)

X Signal Detected

x _   1

K Signal Detected

K _ = ≡   3

Ka Signal Detected

Ka _ = ≡ ≣ ≣ 5

Ku Signal Detected

Ku _ = ≡ ≣ 4

Pop Signal Detected

POP

Laser Signals, Voice and Visual Displays

Type of Signal	Voice	Visual Display
LTI 20-20*	**Laser**	Laser 20/20
LTI Laser*	**Laser**	LTI Laser
Kustom Signals Laser 340*	**Laser**	Kustom Laser 340
Kustom Signals Laser*	**Laser**	Kustom Laser
Stalker LIDAR*	**Laser**	Stalker LIDAR
Laser Atlanta SpeedLaser/Kustom Signals-ProLaser II*	**Laser**	SpeedLaser/ProLaser II

* Your detector provides 360° detection of these signals.

LTI 20-20

Laser
2 0 / 2 0

LTI Laser

LTI
Laser

Kustom Signals Laser 340

Kustom
Laser 340

Kustom Signals Laser

Kustom
Laser

Stalker LIDAR

Stalker
Lidar

Laser Atlanta – Speedlaser Kustom Signals-ProLaser II

Speedlaser
ProLaser II
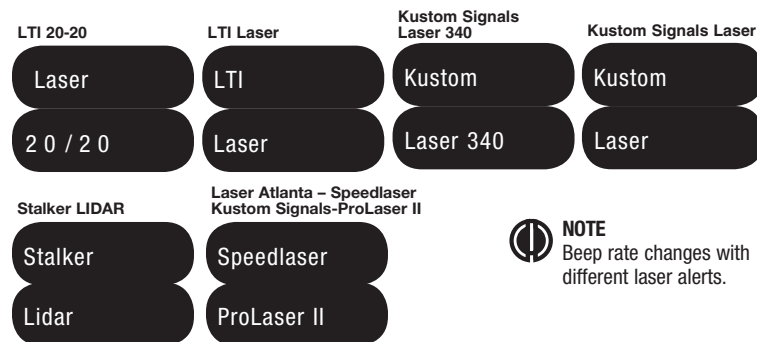
NOTE
Beep rate changes with different laser alerts.

Visual Display (continued)

Safety Alert Signals, Voice and Visual Displays

Type of Signal	Voice	Visual Display
Emergency Vehicles	**Emergency Vehicle Approaching**	Emergency Vehicles
Road Hazards	**Road Hazard Ahead**	Road Hazard
Trains	**Train Approaching**	Train

* Your detector provides 360° detection of these signals.

Emergency Alert Signal Detected

Emergency...

Road Hazard Alert Signal Detected

Road

Hazard

Train Alert Signal Detected

Train

NOTE
There are different tones for each Safety Alert.

Spectre I & IV+ Alert Signal, Voice and Visual Display

Type of Signal	Voice	Visual Display
Spectre I	**Spectre Alert**	Spectre1
Spectre IV	**Spectre Alert**	Spectre4

Spectre I Alert Signal Detected

Spectre1

Spectre IV Alert Signal Detected

Spectre4

VG-2 Alert Signal, Voice and Visual Display

Type of Signal	Voice	Visual Display
Interceptor VG-2	**VG-2 Alert**	VG-2

VG-2 Alert Signal Detected

VG-2

NOTE
There are different tones for each for each radar detector detector alert.

Detection and Responding to Alerts

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

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, Spectre I or IV or VG-2 nearby.	Exercise caution
Tone instantly begins repeating rapidly.	Radar, Spectre I or IV, 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

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.

VG-2 and Spectre I & IV

VG-2 and **Spectre I** & **IV** are radar detector detectors (RDDs) that work by detecting low-level signals emitted by most radar detectors. Your detector does not emit signals that can be spotted by VG-2 and Spectre I RDDs. However, your detector **can** be spotted by Spectre IV RDDs. Your unit detects signals from these or similar devices and will alert you when such a device is in use near your vehicle.

Safety Alert Traffic Warning System ꜱᴀꜰᴇᴛʏ ᴀʟᴇʀᴛ

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.

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 it legal for police to use LIDAR?**
  Yes, LIDAR is allowed to be used in all 50 States by police. Your detector detects LIDAR (laser).

Global Position System Locator (GPS Locator)

Overview

The **GPS Locator** unit monitors vehicle location using the GPS satellite system to add features to your detector. Whenever it is installed and GPS signals are available, it:

■ Provides alerts as you approach photo-enforced intersections and locations with fixed red light or speed cameras, as well as known speed traps and areas where increased caution should be exercised (such as a high-accident intersection). The built-in location database can be updated at Cobra's website to stay current with photo-enforced locations, known speed traps and caution areas. See **www.cobra.com/AURA** for details.

■ Allows you to identify and store up to 1,000 User Alert Locations in addition to those in the database.

■ Provides speed and direction of travel information (compass).

Registration   ⚠ **IMPORTANT**

The database built into your GPS Locator is populated with the latest data available during production. However, due to the time elapsed between production and your purchase, the database may not be 100% up-to-date. Therefore it is highly recommended that you register and update your product before you first use it. Then, periodically perform AURA database updates to ensure that your GPS Locator works as effectively as possible.

Registering your GPS Locator will immediately activate your lifetime database update subscription to the AURA™ Camera and Driving Hazard Database. *(Lifetime includes life of product – cannot be transferred to other products.)*

Minimum system requirements:

Windows® XP or Vista Operating System; Internet access; 64 MB System RAM; USB (1.1 or above); 20 MB of available on hard drive.

Registration and initial update:
1. Go online to the official AURA website – **http://aura.cobra.com**.
2. Select your detector model.
3. Complete the registration form and click "Register."
4. Click on "Update My Data" and follow the online instructions.
5. Once installed, launch the updater and follow on screen instructions.
6. When update is complete, remove the GPS Locator from the PC. It is ready to plug into your detector.

⚠ **IMPORTANT** Do not plug the GPS Locator into your PC's USB port until the GPS data updater is installed and you are prompted to plug in the GPS Locator.

Subsequent updates:
1. Access the internet on your PC.
2. Plug your GPS Locator into your PC's USB port for automatic update of new data.

Connecting to your Detector

Simply plug the GPS Locator into the USB socket on right side of the detector. No external power connection is needed for the GPS Locator; it is powered from the detector unit.

GPS Locator ◉

Initial Satellite Lock

When the GPS Locator is first used (or after a prolonged period of nonuse), the GPS Locator needs more time to detect the Global Position System satellites.
1. After installation of the GPS Locator, turn the detector unit On with the vehicle in an area clear of obstructions to the sky.
2. Keep the detector turned On for at least 15 minutes to allow fast satellite acquisition in subsequent power-ups. The vehicle can be moving as long as it is in an area where the GPS Locator can "see the sky."

GPS Locator Status

The status of the GPS Locator is shown at start-up with **Locked** or **No Lock** flashing on the screen during that sequence (see page 5). When the GPS Locator is connected, the standby screen shows your vehicle's compass heading (eight point), speed and the City or Highway symbol.

GPS Lock

NW 55   h

Headed northwest at 55 miles per hour with GPS signal locked.

GPS No Lock

----- -----   ----- -----   h

If GPS Lock is lost, the Compass heading and speed will change to dashes.

User Locations

The GPS Locator database is populated with all the Photo Enforcement, Caution Area and Known Speed Trap locations known at the time of its last update.

You can add **User Locations** of your own to alert you to places other than those in the Photo Enforcement, Caution Area, and Known Speed Trap categories. Whenever your vehicle approaches a user set location, the alarm chime will sound and the screen will show **User Location**.

- ■ **To set a User Location:**
  With the GPS Locator unit connected to the detector, press and hold the **Mark/Dim** button for two seconds when your vehicle is at a Location you want to set.
- ■ **To delete a specific User Location:**
  While a User Location Alert is sounding at a Location you have set, press and hold the **Mark/Dim** button for two seconds.

GPS Settings

All of the **settings** associated with the GPS Locator except Known Speed Trap Locations and IntelliScope are always On and cannot be selectively turned Off. If you do not want to hear or see alerts for Photo Enforcement, Caution Area and User Locations, simply remove the GPS Locator from the unit. This will also remove the Compass and Speed information.

All radar and laser alerts will continue to function even when the GPS Locator is removed.

Photo Enforcement Areas

These are fixed red light and speed cameras.

Caution Areas

These are high-accident intersections and other dangerous locations.

Known Speed Traps

These are areas where it is known that mobile enforcement units are frequently deployed. If you do not want to receive Speed Trap alerts while the GPS Locator is connected, you can turn them Off. The factory default is Speed Traps On.

To Turn Off and On Speed Trap Alerts

	Tone	Voice	Visual Display
With the GPS Locator connected and unit power Off, press and hold the **Mark/Dim** button. Then turn the power On and continue to hold the **Mark/Dim** button for two seconds.	Speed Trap Alerts Off = One beep	**Speed Trap Alerts Off**	**Speed Trap Alerts Off** blinks in the display
	Speed Trap Alerts On = Two beeps	**Speed Trap Alerts On**	**Speed Trap Alerts On** blinks in the display

Speed Units

Speed units can be selected as miles per hour (mph) or kilometers per hour (km/h). The factory default is mph.

To Toggle Between mph and km/h

	Tone	Voice	Visual Display
With the GPS Locator connected and unit power Off, press and hold the **City/Hwy** button. Then turn the power On and continue to hold the **City/Hwy** button for two seconds.	None	**Miles per hour**	**mph**
	None	**Kilometers per hour**	**km/h**

GPS Alerts

When a Location-Based Alert other than a Known Speed Trap is activated, the screen will show the distance between your vehicle and the Location as Zones 1, 2, and 3 with Zone 1 being the furthest from the location.

Location Distance Chart	Zone 1	Zone 2	
	◆	◆◆	◆◆◆

Visual Display

In addition to distance from the Location, the screen will show the type of alert.

Photo Enforced Areas   **Caution Areas**   **User Location**

PE ◆ ⸕   CA ◆◆ ⸕   UL ◆◆◆ ⸕   SPEED TR

IntelliScope

IntelliScope adds direction information to the distance and type of Location-Based Alert (other than Known Speed Trap Locations) by showing an arrow at the right of the screen.

In zones 1 and 2 the arrow will point in the approximate direction of the Location. In zone 3, the location is in front of you. The factory setting is IntelliScope On.

IntelliScope Alert Signal For a Location Directly Ahead

Display while approaching a Photo Enforcement Location on your route and directly ahead.

Zone 1   **Zone 2**   **Zone 3**

PE ◆ ⸕ PE ◆ ↗   PE ◆◆ ⸕ PE ◆◆ ⸕   PE ◆◆◆ ⸕

NOTE The arrow disappears in Zone 3 when you are close to the Location.

IntelliScope Alert Signal Sequence When You Turn Toward the Location

Display while approaching a Photo Enforcement Location involving a turn onto a cross street where it is located.

Zone 1   Vehicle Turns Right   **Zone 3**

PE ◆ ⸕ PE ◆◆ ↗ PE ◆◆ ⸕   PE ◆◆ ⸕ PE ◆◆◆ ⸕

NOTE The arrow changes to straight ahead after turning onto the cross street where the Location is.

IntelliScope (continued)

IntelliScope Alert Signal Sequence When Location Is Off Your Route

Display while approaching and passing a Caution Area that is some distance away to the right of your route.

Zone 1

CA ◆ ⸕ CA ◆ ↗ CA ◆◆ ↗ CA ◆◆ ↗ CA ◆◆ ⸕

NOTE The signal never enters zone 3 since you never get close to the Location.

When IntelliScope is turned Off, Location-Based Alerts will be sounded only when the Location is ahead of you and in the direction of your vehicle's travel. No arrow will be shown on the screen.

For example, if a particular red light camera operates only for vehicles going north and your vehicle is going south, you will not receive an alert with IntelliScope turned Off. With IntelliScope turned On, you will receive an alert at that Location even though the camera does not operate in your direction.

To Turn IntelliScope Off and On			
With the GPS Locator connected and unit power Off, press and hold the **IntelliMute** button. Then turn the power On and continue to hold the **IntelliMute** button for two seconds.	**Tone**	**Voice**	**Visual Display**
	IntelliScope Off = One beep	**IntelliScope Off**	**Intelliscope Off** blinks in the display
	IntelliScope On = Two beeps	**IntelliScope On**	**Intelliscope On** blinks in the display

NOTE IntelliScope does not indicate the direction of Known Speed Traps. Whenever you approach Known Speed Trap Locations, the warning will scroll across the display.

Maintenance

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 you have added the GPS Locator unit to your detector, you can update the database of Photo Enforced locations. Go to Cobra's website (**www.cobra.com**) and follow the online instructions.

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

Band	Frequencies		
X Band	10.525	± 0.050	GHz
K Band	24.125	± 0.125	GHz
Ka Band	34.700	± 1.300	GHz
Ku Band	13.435	± 0.035	GHz
VG-2	11.500	± 0.250	GHz
Laser	910 ± 50nm	100	PPS
	910 ± 50nm	125	PPS
	910 ± 50nm	130	PPS
	910 ± 50nm	200	PPS
	910 ± 50nm	238	PPS
	910 ± 50nm	340	PPS
Spectre I	13.300	± 0.200	GHz
Spectre IV/IV+	Not Disclosed		
Safety Alert	24.070	± 0.010	GHz
Traffic Warning	24.110	± 0.010	GHz
System	24.190	± 0.010	GHz
	24.230	± 0.010	GHz

Specifications (continued)

⚠ **WARNING** Modifications or parts substitutions not approved by Cobra Electronics Corporation may violate FCC Rules and void your authority to operate this equipment.

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; 6,621,447. 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 Radar/Laser Detectors, and the component parts thereof, will be free of defects in workmanship and materials for a 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 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

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 before sending the product. This will ensure the fastest turn-around 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. For Warranty Repair include some form of proof-of-purchase, such as a mechanical reproduction or carbon of a sales receipt. Make sure the date of purchase and product model number are clearly readable. If the originals are sent, they cannot be returned;

2. Send the entire product;

3. Enclose a description of what is happening with the product. Include a typed or clearly printed name and address of where the product is to be returned, with phone number (required for shipment);

4. Pack product securely to prevent damage in transit. If possible, use the original packing material;

5. Ship prepaid and insured by way of a traceable carrier such as United Parcel Service (UPS) or Priority Mail to avoid loss in transit to: Cobra Factory Service, Cobra Electronics Corporation, 6500 West Cortland Street, Chicago, Illinois 60707 U.S.A.;

6. If the product is in warranty, upon receipt of the product it will either be repaired or exchanged depending on the model. Please allow approximately 3 – 4 weeks before contacting Cobra for status. If the product is out of warranty, a letter will automatically be sent with information as to the repair charge or replacement charge.

For any questions, please call 773-889-3087 for assistance.

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 order info on page 33.

Plug-in GPS Locator Unit	**Straight 12V DC Power Cord**	**Windshield Mounting Bracket**	**Coiled 12V DC Power Cord**	**Dual Port Power Adapter**
Item #RDA GPSL66	Includes plug and fuse	Includes suction cups	Includes plug and fuse	Includes adjustable plug (up to 90˚) & fuse
	Item #420-030-N-001	Item #545-159-N-001	Item #420-026-N-001	Item #CLP-2B