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

Nothing Comes Close to a Cobra®

Cobra® 14 BAND™

Operating Instructions

14 BAND™
ULTRA-HIGH PERFORMANCE
DIGITAL RADAR/LASER DETECTOR

SPX 5300

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.

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.

Controls, Indicators and Connections

Controls, Indicators and Connections

* Press and hold for four seconds to access these functions.

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

Display and Product Features

Display

Radar, VG-2, Spectre I & IV+ and Safety Indicators

Signal Strength, Pop, Laser, City/Highway and IntelliMute Pro Mode Indicators

IntelliMute Indicator

Signal Strength: 1 (weakest) to 5 (strongest)

NOTE: In This Manual

When steady, the display will be shown:

When blinking, the display will be shown:

X & K will light simultaneously when indicating Ku detection:

Product Features

Congratulations! You've made a smart choice by purchasing a ultra-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, 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, VG-2 signals, Spectre I & IV+ 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 Alerts
With adjustable volume

UltraBright™ Data Display
Easy-to-read with adjustable brightness

City or Highway
Modes to reduce false alerts

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 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

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.

Accessories Order Info and Trademark Acknowledgement

Item #	Description
420-030-N-001	Straight 12V Power Cord
420-026-N-001	Coiled 12V Power Cord
545-159-N-001	Windshield Mounting Bracket
CLP-2B	Dual Port Power Adapter

Trademark Acknowledgement

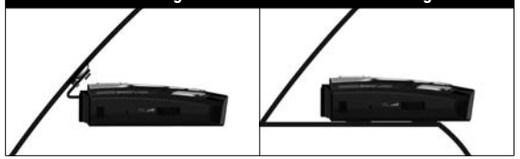
Contents

Installation

Where to Mount Your Unit

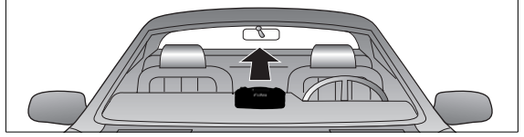
You will get optimum performance from your detector if you **Mount** it at a point approximately in the center of the vehicle, as low as possible on the front windshield without obstructing the unit's view of the road either to the front or rear. Make sure unit is level with the road. You can also mount 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.

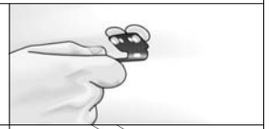
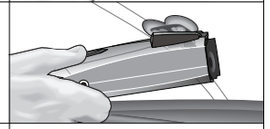
The LaserEye Should Have a Clear View



Radar and laser signals pass through glass but not through other materials and objects. Objects that can block or weaken incoming signals include:

- Windshield wiper blades
- Mirrored sun screens
- Dark tinting at the top of the windshield
- Heated windshields currently available on some vehicles (Instaclear for Ford, Electriclear for GM.) Consult your dealer to see if you have this option.

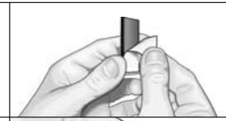
Windshield Mounting

1. Attach the rubber cups to the bracket.	
2. Make sure the rubber cups and your windshield are clean.	
3. Push the bracket firmly onto the windshield.	
4. Attach the detector to the bracket. Check the angle of the unit.	
5. To adjust the angle if necessary, gently push or pull on the bracket to bend it. DO NOT use the detector to bend the bracket.	
6. Plug the power cord into the detector.	
7. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.	
8. You can temporarily remove the detector whenever you wish by pressing the bracket release button and sliding it off the bracket.	

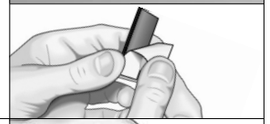
Dashboard Mounting

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

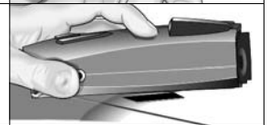
2. Remove the paper backing from one side of the hook-and-loop fastener.



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



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



6. Plug the power cord into the detector.

7. Plug the cigarette lighter adapter on the power cord into your vehicle's cigarette lighter.

Getting Started

Power On

X K Ka V S

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

To Turn On the Unit and Adjust the Audio Volume

	Tone	Visual Display
Rotate the **On-Off/ Volume** control clockwise (away from you).	Three beeps	appears in the display indicating that the power is On

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

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.)

Auxiliary Audio Jack

Settings

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

- Buttons can have multiple functions.
- 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.

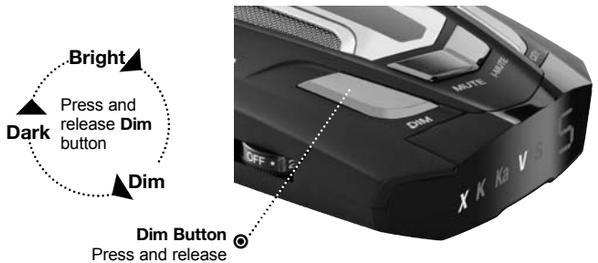
To change settings, follow the procedure listed below, which indicates what you will see and hear as you complete each step. The factory setting is **Highway** mode.

To Change From Highway Mode to City Mode		
Press and release the **City** button.	**Tone**	**Visual Display**
	One beep	C appears in the display

To Change From City Mode Back to Highway Mode		
Press and release the **City** button again.	**Tone**	**Visual Display**
	Two beeps	H appears in the display

UltraBright Data Display Brightness

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



To Change the Brightness to Dim		
Press and release the **Dim** button once.	**Tone**	**Visual Display**
	One beep	Display dims

To Change the Brightness to Dark		
Press and release the **Dim** button again.	**Tone**	**Visual Display**
	One beep	Display remains dim (no visual alerts will be seen)

To Change the Brightness to Bright		
Press and release the **Dim** button a third time.	**Tone**	**Visual Display**
	Two beeps	Display returns to full brightness

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 for Auto Mute is on.

To Turn Auto Mute On		
Press and release the **Mute** button again while no alert is occurring.	**Tone**	**Visual Display**
	Two beeps	None

To Turn Auto Mute Off		
Press and release the **Mute** button while no alert is occurring.	**Tone**	**Visual Display**
	One beep	None

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 audio radar alerts.

Before IntelliMute will work, you must set an activation point for your engine's revs (see page 10). 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.

To Turn IntelliMute On		
Press and release the **IntelliMute** button.	**Tone**	**Visual Display**
	Two beeps	Dot appears next to the large character on the right

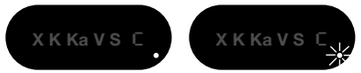
To Turn IntelliMute Off		
Press and release the **IntelliMute** button again.	**Tone**	**Visual Display**
	One beep	None

What to Remember While Using IntelliMute

IntelliMute works with both City and Auto Mute modes.

Whenever your engine revs are below the activation point, the dot next to the large character on the right side of the display will remain lit. Above the activation point, the dot will blink twice every two seconds.

Below Activation Point **Above 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.

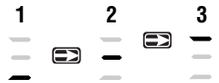
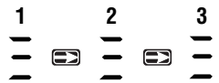
Setting the IntelliMute Activation Point

Your detector must be installed in your vehicle.

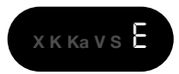
CAUTION
Do not attempt to set the rev point while driving. Your vehicle should be parked and idling.

IntelliMute must be turned on before setting the activation point. You will hear a series of beeps as you follow the steps on the next page.

To Set the IntelliMute Activation Point

	Tone	Visual Display
Press and hold the **IntelliMute** button for two seconds.	Two beeps	None
Rev your engine to the level you wish to set (recommend slightly above idle) and hold revs steady for two seconds.	None	Three bars will flash in succession 
At the desired rev level, press and release the **IntelliMute** button.	Three beeps	All three bars flash three times 

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	Visual Display
Four beeps	**E** appears 

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 9 through 11.)

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 Button
Press and hold both buttons simultaneously

IntelliMute Pro On

To Turn IntelliMute Pro On		
While no signal is being detected, press and hold **both** the **IntelliMute** and **City** buttons for four seconds.	**Tone**	**Visual Display**
	Two beeps	c or h will blink

To Turn IntelliMute Pro Off		
Press and hold **both** the **IntelliMute** and **City** buttons for four seconds.	**Tone**	**Visual Display**
	One beep	c or h will show steady

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.

On/Off Indicator

Dim Button
Press and hold 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 **Dim** button for four seconds.	**Tone**	**Visual Display**
	On = Two beeps	**V** will blink twice in the display
	Off = One beep	**V** will blink once 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 singles 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 **Dim** and **City** buttons for four seconds.	**Tone**	**Visual Display**
	Pop On = Two beeps	**P** will blink twice in the display
	Pop Off = One beep	**P** will blink once in the display

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.

To Turn X Band On and Off

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

Tone	Visual Display
X On = Two beeps	**X** will blink twice in the display
X Off = One beep	**X** will blink once 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	Visual Display
K On = Two beeps	**K** will blink twice in the display
K Off = One beep	**K** will blink once in the display

To Turn Ku Band On and Off

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

Tone	Visual Display
Ku On = Two beeps	**X** and **K** will blink twice in the display
Ku Off = One beep	**X** and **K** will blink once 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 visual alerts it provides for each of them.

Audio Alerts

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 18.)

Visual Display

An indication of the type of signal detected will appear in the UltraBright data **Display**. During X, K, Ka and Ku alerts, a number will also appear, indicating the strength of the signal detected. (1 = weakest, 5 = strongest)

X Signal Detected

K Signal Detected

Ka Signal Detected

Ku Signal Detected

During pop alerts, the letter **P** will appear; and during laser alerts, the letter **L** will appear, instead of the signal strength indication.

POP Signal Detected

Laser Signal Detected

During VG-2 or Spectre I or IV+ alerts, the letter **V** will appear. It will be steady during VG-2 and blink during Spectre I or IV+.

VG-2 Alert Signal Detected

Spectre I or IV+ Alert Signal Detected

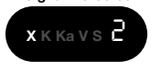
During Safety Alert the letter **S** will appear.

Safety Alert Signal Detected

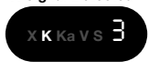
Radar Signals and Visual Displays

Type of Signal	Visual Display
X Band Radar	**X** and Signal Strength
K Band Radar	**K** and Signal Strength
Ka Band Radar	**Ka** and Signal Strength
Ku Band Radar	**X K** and Signal Strength
Pop Radar	**P** is Steady

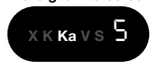
X Signal Detected



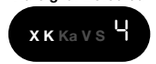
K Signal Detected



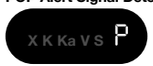
Ka Signal Detected



Ku Signal Detected



POP Alert Signal Detected



Laser Signals and Visual Displays

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

* Your detector provides 360° detection of these signals.

Laser Signal Detected

NOTE
Beep rate changes with different laser alerts.

Safety Alert Signals and Visual Displays

Type of Signal	Visual Display
Emergency Vehicles	**S** is Steady
Road Hazards	**S** is Steady
Trains	**S** is Steady

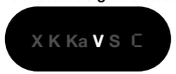
Safety Alert Signal Detected

NOTE
There are different tones for each Safety Alert.

VG-2 and Spectre I or IV+ Alert Signals and Visual Displays

Type of Signal	Visual Display
Interceptor VG-2	**V** is Steady
Spectre I or IV+	**V** Blinks

VG-2 Alert Signal Detected



Spectre I or IV+ Alert Signal Detected

NOTE
There are different tones for each alert.

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

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 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

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

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.

Warranty

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.

Optional Accessories

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.

Straight 12V DC Power Cord

Includes plug and fuse

Item # 420-030-N-001

Windshield Mounting Bracket

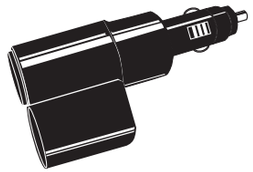
Includes suction cups

Item # 545-159-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