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South
RADAR/LASER

1. Function Features

1. Power On : Press the Power button for one second and the system starts with sounds "Welcome activating radar early warning system . X-BAND, KU-BAND, K-BAND, KA- BAND, LASER, VG-2". Any changed setup will be stored after power off.
2. Dim Mode : Default is bright mode, User can adjust the brightness to bright mode, dim mode or dark mode.
3. Mute Mode: there are special auto mute features. Traditionally, there is micro tower or auto door spreading out microwave, all radar detectors will fail to show signal. Avoiding the noise from auto door or micro tower, your speeding is under speed limit selected in downtown. Radar signal sounds are muted on or muted off by speed setting. Mini speed alarm activates when you are under your personal speed limit, it will mute on automatically. However, when you are approaching radar camera (which spreads out microwave) and exceed your personal speed limit, it will mute off automatically which is spreading out sounds.
4. Default is Highway Mode, whose sensitivity is higher and can detect any band and laser. Press the button, it will be changed as City Mode, which helps the driver not interfered by auto-door or others.
5. Self- test function: Press DIM and CITY at the same time. X band, Ku band, K band, Ka band, VG2 are displayed for user to self-test.
6. Frequency Selection: Press Mute button for 3~5 seconds. X, Ku, K, Ka bands shows at the same time and then X twinkles. When X twinkles, user can press Mute button to cancel X detection and LED shows X. City button can let user select Ku further and K or Ka. If user doesn't want to receive X and Ku, press Mute button for 3~5 seconds, select twinkling X and then press City button to Ku. And Press Mute button for confirmation.
7. Language selection: Press City button for 3~5 seconds to become English and Chinese Mode. In English Mode, operation sounds and radar warning sounds will show in English.
8. Volume Level Adjustment
 - Press Volume ▲ up button to increase volume level.
 - Press Volume ▼ down button to decrease volume level.

Radar Detector Guide

2. Controls and Features

A. Left Side

- a. DC 12V Power Input Jack

B. Top Side

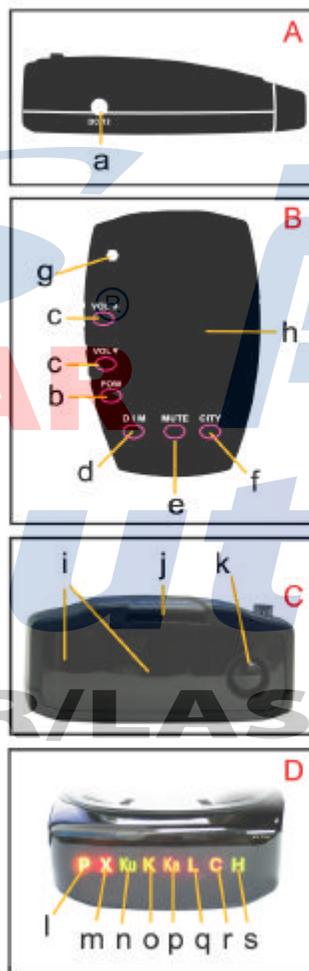
- b. Power On/Off switch Button
 c. Volume up and down button
 d. Dim Button
 e. Mute Button
 f. City Button
 g. Rear Laser Detection Lens :
 Receives Incoming Laser Signals
 From Rear
 h. Speaker

C. Rear Side

- i. Radar Antenna
 j. Bracket Input Jack
 k. Front Laser Detection Lens :
 Receives Incoming Laser Signals
 From Front

D. Front Side

- l. Power-On Indicator
 m. X-Band Indicator
 n. Ku Band Indicator
 o. K Band Indicator
 p. Ka Band Indicator
 q. Laser Indicator
 r. City Indicator
 s. Highway Indicator



3. Installation

1) Mounting Guidelines

For the best performance, select the proper location for the unit where it has a direct view of the road. The radar antenna is located behind the rear panel of the unit and the laser detection lenses are located behind the rear panel of the unit and the front window. The antenna and sensors should not be obstructed by metal or metallic surfaces and should be pointed at the horizon for accurate long range detection.

- Choose a location that does not block the driver's vision.
- Mount the detector in a level position.
- Do not mount the detector behind metal surfaces, windshield antenna, wiper blades, ornaments, or mirrored glass.
- Heated windshields, currently available as an option on some Ford (Instaclear) or GM (electriclear) vehicles act as an impenetrable barrier to radar signals.
- Do not mount the detector where the driver or passenger might collide in the case of an abrupt halt.

Note : Whichever mounting method you choose, remember to place the radar detector out of view when you leave your vehicle. This keeps the detector out of sight from thieves and prevents exposure to extremely high temperatures.

Note : If necessary, you may adjust the bracket to the proper angle by bending it. To remove your detector, pull up the detector from the front pulling it towards you.

Caution : On some newer model cars, a plastic safety coating has been applied to the windshield. The suction cups may leave permanent marks on the windshield once they are removed. Check your vehicle owner's manual to see if your car has the plastic safety coating.

Radar Detector Guide

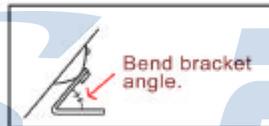
3. Installation

2) Mounting Types On Windshield

a. Attach bracket to windshield.



b. Bend bracket for correct detection angle.



c. Plug Power cable into detector.



d. Attach bracket to detector.



e. Plug Power cable into cigarette lighter.



3) Power Connection

The coiled Power cable provided with the unit has a cigarette lighter socket plug at one end and a small connector on the other.

1. Insert the small connector into the jack on the side of the unit.
2. Insert the other end into the cigarette lighter socket of your vehicle.

If the detector does not operate when you turn it on, remove the adapter from the cigarette lighter socket and carefully check the socket for debris. Also, check the fuse in the adapter and your vehicle fuse box.

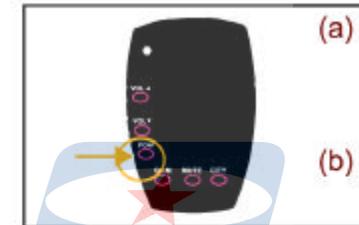
4) Replacing Fuse

- a. To replace the fuse, unscrew the top of the plug.
- b. Remove and check the fuse to see if it has blown, if it has, replace it.

4. Operation

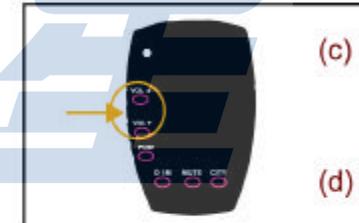
1) Power On and Self - Test

- Press the Power button.
- The super radar detector goes through an automatic self-test sequence.



2) Volume Level Adjustment

- Press Volume up button to increase volume level.
- Press Volume down button to decrease volume level.



3) Dim Mode

- Press Dim Button.

Dim Mode reduces the illumination of the display. You may select from four levels of brightness for your super radar detector display.



A voice sound will alert you that Dim mode has been activated. Each time you press Dim button, display intensity will change Dim, Dimmer, Dark, Bright.

(Note : The super radar detector cannot activate Mute and Dark at same time. If the MUTE is engaged, the DARK cannot activate.)

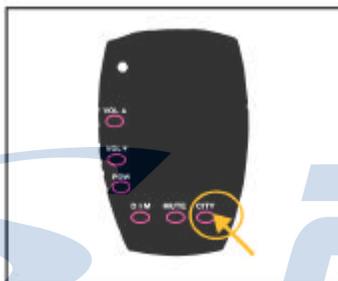
Hold down Dim Button for three(3) seconds to select "Voice On" or "Voice Off".

Radar Detector Guide

4.Operation

4) City / Highway Mode

- Press City Button.
- "City" LED turns on for "City" Mode. In Voice Mode, you will hear "City". In Tone Mode, you will hear 2 beeps.
- Pressing City Button again engages "Highway" Mode.
- Factory default is "Highway" Mode.
- In "City" Mode, all bands (K/Ka band) sensitivity are lowered.



5) Mute Mode

- Press Mute Button.
- Mute On → Silences the tone sound.

Note : Press Mute button again to restore tone sound.



6) Select Frequency

- Hold down Mute for three seconds
- This super radar detector will change frequency.



4.Operation

7) Indicator and Visual

- a. Power On
"P" LED turns on.
- b. X Band
 - b-1. X Band Detection : "K" LED turns on with voice sound.
 - b-2. X Band canceling : "X" LED stays bright all the time.
- c. Ku Band
 - c-1. Ku Band Detection : "Ku" LED turns on with voice sound.
 - c-2. Ku Band canceling : "Ku" LED stays bright all the time.
- d. K band
 - d-1. K Band Detection : "K" LED turns on with voice sound.
 - d-2. K Band canceling : "K" LED stays bright all the time.
- e. Ka band
 - e-1. Ka Band Detection : "Ka" LED turns on with voice sound.
 - e-2. Ka Band canceling : "Ka" LED stays bright all the time.
- f. Laser Alarm
 - f-1. Laser Detection : "Laser" LED turns on with voice sound.
 - f-2. Laser canceling : "Laser" LED stays bright all the time.



8) Language Selection(English and Chinese Modes)

- Hold down the "City" button for three(3) seconds to select either English or Chinese mode for your voice alert system
- Factory default is "Chinese Mode".

9) Feature Memory

The super radar detector will automatically "Remember" your settings when the unit is turned off or removed from the power. All features selected are retained in memory.

- Bright → Dim → Dark → Bright
- Highway - City
- Mute On or Mute Off
- Voice On or Voice Off
- English or Chinese
- Volume level

Radar Detector Guide

4. Operation

10) Voice ON/OFF Select

- Hold down the Dim Button for three seconds to select Voice On or Voice Off Mode.
- Factory default is "Voice On" Mode.
- When you drive with Voice Off mode, you will not be alerted by Voice message.

11) Tutorial Mode

The super radar detector has a tutorial mode intended to familiarize you with the various visual display and distinct audible alerts the unit performs.

- Hold down Dim and City buttons for three seconds to engage Tutorial Mode.
- Press any button to exit the All-LEDs-On status, that is the end of tutorial mode.

5. Care and Maintenance

Super radar detector is an example of superior design and craftsmanship. The following suggestions will help you care for your detector so you can enjoy it for years.

- Never leave your detector on the windshield or dashboard when your vehicle is left parked. The temperature in the vehicle during the summer can reach levels above what is considered to be safe for this detector.
- To make you less susceptible to break-in and theft, remove the detector from your windshield or dashboard when leaving your vehicle.
- Do not expose the detector to moisture, rain, dew, road splash, or other liquids that can damage the internal components and reduce the sensitivity of the detector.

If the detector does not turn on:

- Check the Power cable. Be sure all power connectors are properly installed.
- Check the fuse that controls the power to the cigarette lighter socket. (See your vehicle's owner's manual for reference)

6. Troubleshooting

- The cigarette lighter socket might be dirty. Clean it with a fine emery cloth to ensure a good, clean connection.
- There might be a problem with the vehicle's electricity.

Caution : Do not place any metal objects other than the cigarette lighter or a cigarette lighter plug in the cigarette lighter socket. Doing so could blow a fuse in your vehicle or cause the metal object to become very hot.

If the detector gives a false alert when the vehicle hits bumps:

- Check the vehicle's electrical system, including main battery cable and alternator connections.
- Install a filter capacitor (470 μ F, 35volts) on the back of the cigarette lighter socket, across the power connection.

If the receiving signal is weak:

- Check the angle of the detector.
- Radar antenna/laser sensor is obstructed. (Relocate the detector clear of any obstruction outside the windshield, such as a wiper blade.)
- Relocate the detector clear of the window tint.

7. Specification

RADAR

Receiver Type : Triple conversion Superheterodyne

Antenna Type : Linear polarized, Self-Contained Antenna

Detector Type : Scanning Frequency Discriminator

Frequency of Operation :

- 10.525GHz / \pm 50MHz(X-Band)
- 24.150GHz / \pm 100MHz(K-Band)
- 34.300GHz / \pm 100MHz(Ka band)
- 34.700GHz / \pm 1300MHz(Ka Super Wideband)
- 35.100GHz / \pm 100MHz(Ka band)

LASER

Receiver Type : Pulsed Laser Signal Receiver

Detector Type : Digital Signal Processor Pulse Width Discriminator

Radar Detector Guide

7.Specification

Opto Sensor : Dual Convex Condenser Lens and High Speed Photo Diode
 Detector Spectral Response : 800 ~ 1,100nm

GENERAL

Temperature Range : -4 to 158°F (-20 to 70°C)
 Power Requirements : 12~15V DC, 150mA nominal (Negative Ground)
 Dimensions(HWD) : 3.3 cm X 7.7 cm X 12.1cm
 Specifications are typical : individual units might vary.
 Specifications are subject to change without notice.

What frequencies are used for radar

There are so many fixed cameras in some countries which are used a special loop line system on the ground. It will calculate the real speeding when the car's tire is run over the first line and departure the last line. So there have no radar detector which can detect it. We are strong recommended that you can install GPS location or transmitter receiver to fight these systems.

- 1-1. Fixed camera with loop system
 Speed Locked Range: 10m~35m
 Radar Detector Detect Distances Range: 0m



(1-1)

- 1-2. Fixed camera with infrared photography system
 Speed Locked Range: 10m~35m
 Radar Detector Detect Distances Range: 0m

What frequencies are used for radar



(1-2)

- 1-3. Fixed camera with K band (24.125GHz ± 100MHz)
 Speed Locked Range: 10m~35m
 Radar Detector Detect Distances Range: 150m~800m



(1-3)

- 1-4. Fixed camera with Ku band (13.450GHz)
 Speed Locked Range: 10m~30m
 There have no Ku band detector function, if possible, we can make it to support any demand, please contact us.



(1-4)

Radar Detector Guide

What frequencies are used for radar

- 1-5. Fixed camera with Ka band (34.3GHz)
 Locked Speed Range: 10m~35m
 Radar Detector Detect Distances Range: 150m~500m



(1-5)

- 1-6 Moving Radar X band (10.525 GHz)
 Locked Speed Range: 300m~450m
 Radar Detector Detect Distances Range:300m~2500m



(1-6)

- 1-7 Moving Photo Radar Ku band (13.450 GHz) Locked Speed Range: 10m~30m
 There have no Ku band detector function, if possible, we can make it to support any demand, please contact us.



(1-7)

What frequencies are used for radar

- 1-8 Moving Photo Radar K band (24.125 GHz)
 Locked Speed Range: 10m~30m
 Radar Detector Detect Distances Range: 250m~1500m



(1-8)

- 1-9 Moving Photo Radar K band (24.150 GHz)
 Locked Speed Range: 10m~30m
 Radar Detector Detect Distances Range: 250m~1500m



(1-9)

The available bandwidth allocated to Ka Band traffic radar is 2.6 GHz operating between 33.4GHz-36GHz. Most Ka traffic radar have a frequency tolerance of $\pm 100\text{Mhz}$ (200MHz band width) The traffic radar in the Ka band with a frequency tolerance of $\pm 100\text{MHz}$ may have more channels, but some or all the channels will overlaps. Some models transmit on a single frequency only.

Radar Detector Guide

What frequencies are used for radar

- 1-10 Moving Photo Radar Ka band (34.3 GHz)
 Locked Speed Range: 10m~30m
 Radar Detector Detect Distances Range: 200m~800m



(1-10)

- 1-11 Moving Photo Radar Ka band (35.1GHz)
 Locked Speed Range: 10m~30m
 Radar Detector Detect Distances Range: 250m~1500m



(1-11)

- 1-12 Radar Detector Detect Distances Range: 100m~1500m

What frequency do laser speed guns transmit on?
 Laser transmits an invisible light beam at a wavelength of 904 nanometers. Noted the laser gun detect speeding within 0.3 seconds, there have no time slow down, we are strong recommended that you can install M18 laser jammer to fight the laser beams.

What frequencies are used for radar

1. Pro Laser III 2. Stalker LZ-1 3. UltraLyte 20-20



3. Lasercam 20-20



5. LaserPartol 6. Riegl-LR90-235 7. Laser Atlanta



8. Manmark 20-20 9. LaserCam 10. TraffiPatrol XR



(1-12)

Radar Detector Guide

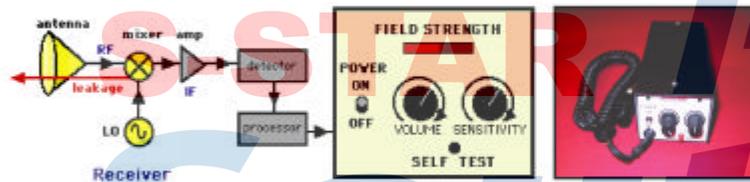
What frequencies are used for radar

Radar detector detectors:

Some low price radar detectors has no undetectable functions which is illegal used in some countries, it will be detect by police radar detector detectors.

1-1. VG-2 interceptor

VG-2 has been used by US traffic law enforcement agents for years. An officer using a VG-2 typically parks next to a busy freeway and aims the device at a 45 degree angle across the traffic stream. By observing the traffic and watching how the VG-2 responds, the officer can make an educated guess as to which vehicle is using a radar detector. Some detectors are detected by the VG-2 from as far away as 4,000 feet.



1-2. Spectre interceptor

Spectre has been used since 2002 by some police officers in a couple of Canadian provinces (not as yet in the US). The purpose of these devices is to discover illegal use or possession of radar detectors.



CONSUMER WARRANTY

1. This warranty covers all defects in materials and workmanship. This warranty does not apply if the unit has been subject to physical abuse, improper installation, modification, or if the housing or serial number of the unit has been removed.
2. The enforceability of this warranty is limited to the original consumer purchaser and is not transferable to, or enforceable by, any subsequent owner.
3. In the event of a defect, malfunction or other failure to conform to this warranty, Radar Detector will, at its sole discretion, repair or replace the unit at no charge. You are responsible for all shipping costs in connection with warranty service pursuant to this warranty.
4. This warranty commences on the date of retail purchase and shall be effective for a period of one year.
5. There are no express warranties covering the unit other than those set forth in this warranty. All implied warranties are limited to the period of this warranty and no warranties, expressed or implied, extend beyond this period. Some countries or states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.
6. Radar Detector will in no event be liable for any consequential, incidental, indirect or special damages (including, but not limited to, lost profits) arising out of or in connection with the use, misuse, or function of the unit. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
7. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.
8. You must provide a copy of a dated sales receipt for your unit in order to receive service under warranty.