## UNIDEN LONG RANGE RADAR/ LASER DETECTOR

### LRD450



DISCLAIMER: Radar detectors are illegal in some states.

Some states prohibit mounting any object on your windshield. Check applicable law in your state and any state in which you use the product I to verify that using and mounting a radar detector is legal.

Uniden radar detectors are not manufactured and/or sold with the intent to be used for illegal purposes. Drive safely and exercise caution while using this product. Do not change settings of the product while driving. Uniden expects consumer's use of these products to be in compliance with all local, state and federal law. Uniden expressly disclaims any liability arising out of or related to your use of this product.

### **FEATURES**

- . X. K. and Ka band alarms
- POP and Laser alert alarms
- Highway/City/City 1 modes
- Invisible to VG-2 and Spector I and IV radar detectors
- Mute alarm audio
- Memory feature saves user's last settings (except MUTE) when the unit is powered down/disconnected from power.

## WHAT'S IN THE BOX

- · LRD450 radar detector
- Straight 12V DC Power Cord
- Windshield Mounting Bracket
- Hook and loop fastener tape
- · Spare fuse for DC Power Cord

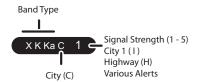
# LRD450 HARDWARE



NO.	NAME	WHAT IT DOES
1	Eagle Eye	360° Laser detection
2	Power Jack	Plugs into power source.
3	Eject	Releases LRD450 from mounting hardware.
4	DIM	Dims the display brightness.
5	MUTE	Turns off the sound.
6	CITY	Sets the unit to CITY, CITY I, or HIGHWAY mode.
7	Power/ Volume Dial	Turns unit on and adjusts volume.
8	Mounting Bracket Slot	The mounting bracket fits into this slot.

#### LED DISPLAY

When a signal is detected, the display will show the band type, City/Highway setting, and signal strength. If the LRD450 detects a laser, the display shows L.



## INSTALLATION AND TURN UP

Install the LRD450 on the front windshield or on the dashboard. For best performance, position the detector as low as possible in the center of the front windshield. Be sure the unit's view of the road, either to the front or the back, is clear.

#### INSTALLATION

#### WINDSHIELD

1. Clean the windshield and the rubber cups of the

- mounting bracket. Attach the rubber cups to the bracket
- 2. Push the bracket firmly onto the windshield.
- 3. Slide the unit onto the bracket.
- 4. Gently adjust the bracket angle if needed.

### Do not use the detector to adjust the bracket angle.

- 5. Plug the power cord into the detector.
- Plug the cigarette lighter adapter into the vehicle's cigarette lighter.

You can remove the detector by pressing the  $\emph{\it Eject}$  button.

#### Dashboard

 Place the unit on the dashboard so that it has a clear, level view of the road.

#### The unit cannot be readjusted after final installation.

- Remove the backing from one side of the hook and loop fastener tape.
- 3. Place that fastener tape on the dashboard where you want the unit.
- Attach the other piece of the fastener tape to the bottom of the unit and attach the unit to the dashboard fastener tape.

#### You can remove the unit as needed.

- 5. Plug the power cord into the detector.
- Plug the cigarette lighter adapter into the vehicle's cigarette lighter.

#### **TURN UP**

Once the detector is installed and the car is turned on, turn the volume dial away from you until it clicks. The unit is now turned on.

The LED cycles through the display in this order: X - K - Ka - Laser, then signal strength except for Laser (L).

Once the cycle is complete, the detector turns to standby mode.

STANDBY MODE					
Highway	Х	K	Ka	С	Н
City	Х	K	Ka	С	
City 1	Х	K	Ka	С	1

### DETECTION

The LRD450 detects emissions from radar guns and sounds an audio alert for the driver. The detector determines which band range the signal is from and displays that frequency type on the display (X, K, Ka, or L). The frequency strength (1 through 5) also displays as applicable. If there is a specific alert code, that is also displayed.

False signals can come from other devices such as the automatic doors at a supermarket or even another car's cruise control; these devices operate in the same frequency ranges as radar guns.

#### **BANDS**

The LRD450 recognizes:

- X Band: This band was the first frequency band assigned to police radar. It operated on a lower frequency (10.525GHz) with a higher power output.
- K Band: This band is the most common frequency used in radar detectors (24.150). Its relatively small wavelength gives it a clocking distance of about 1/4 mile although, depending on the environment, it can detect up to 2 miles. Turn on the K band filter (press and hold CITY) to filter out weaker K band frequencies and reduce false readings.
- Ka Band: Over the years, the Ka band incorporated the Ka-Band, the Ka Wide-Band, and the Ka Super Wide-Band. Most photo radars (also known as stop light cameras) use this band.

POP™ is a single-pulse Doppler radar feature on some K and Ka band radar guns. This type of radar gun is a very sensitive receiver; limit POP detect mode to highway and rural driving.

 Laser: Police use the laser's narrower light pulses for speed detection as it is more accurate and faster. Laser beams are more detectable after they have bounced off their target and begin to disperse on the return trip.

#### **MODES**

The LRD450 operates in three modes:

- Highway. Provides audio and visual alerts any time all bands and laser are detected. Recommended for highway or rural driving. (X, K, Ka Laser)
- City. Provides audio and visual alerts any time all bands and laser are detected. Provides a stronger signal for the X band so it can pick up weaker signals. (X, K, Ka, Laser)
- City I. Similar to City mode, but no X band is detected. (K, Ka, Laser)

	HIGHWAY			GHWAY CITY/CITY I					
Х	K	Ка	С	1	Х	K	Ka	С	1
Х	К	Ка	С	1	Х	K	Ka	С	1
Х	К	Ка	С	1	Х	К	Ка	С	1
Х	K	Ка	С	L	Χ	К	Ka	С	L

## **OPERATION**

#### SETUP

After installing your radar detector, you can set it to your own specifications.

- Mute/Auto Mute. When an audio alert sounds, pressing
   MUTE lets you turn off the audio alarm. Press and hold
   MUTE to set Auto Mute to ON to reduce the audio
   alarm by 50% automatically after 3 seconds during an
   alert.
- Dim. Change the brightness of the display. (Default -Bright)
- · Set City, City I, or Highway

- City mode delays all X band audio alerts until the signal is at level 3.
- City I mode does not recognize X band transmissions.
- Highway mode recognizes all bands and is recommended for highway driving. (Default)

The following table provides an overview of key operations.

KEY	PRESS TO	PRESS AND HOLD TO
MUTE	Turn alert audio off (1 beep) during alert audio. Mute cancelled 10 seconds after alert ends.	Turn Auto Mute on (1 beeps) and off (2 beeps) during standby. (Fl displays)
DIM	Change brightness from: BRIGHT (3 beeps) to DIM (1 beeps) to DARK (2 beeps).	Turn POP alert on (1 beep) and off (2 beeps). P displays.
CITY	Change mode from: HIGHWAY (3 beeps) to CITY (1 beeps) to CITY I (2 beeps).	Turn K band filter on (LED dot turns on and 1 beep) and off (LED dot turns off and 2 beeps). F displays briefly.
DIM + CITY	NA	Return to factory settings:  Highway Bright Mute OFF K Filter ON POP OFF Auto Mute ON

## MONITORING SPFFD

A radar gun transmits radio waves at certain frequencies that bounce off objects and return to the radar gun's receivers. The radar gun then calculates the speed of the object. The LRD450 recognizes the following bands/ frequencies used by radar guns:

BAND FREQUENCY	
Х	10.525 GHz
K	24.150 GHz
Ka	33.400 - 36.000 GHz
Laser	800 nm - 1100 nm

# RADAR DETECTOR DETECTORS (RDDS)

Radar detectors are illegal in some states. Law enforcement officers use special equipment to detect signals radiated by radar detectors. If they are in a state where radar detectors are illegal and the officer detects a vehicle using a radar detector, the operator of that vehicle could lose the radar detector and be fined.

The LRD450 is designed to be invisible to signals from the

Spectre I, Spectre IV, and VG-2 RDDs.

## CARE AND MAINTENANCE

Use common sense and your LRD450 will provide troublefree service. Please keep the following tips in mind:

- Don't leave your unit on the dashboard during summer months. Interior heat may exceed safe operating levels.
- Do not spray cleaners or other liquids on the unit.
   Remove the unit when you are using these liquids.
- Do not use abrasive cleansers on the unit's exterior.

## TROUBLESHOOTING

IF	TRY THIS	
No display or audio.	Check the fuse in the plug. Replace if necessary.	
The unit alarms when the vehicle hits bumps.	Check the connections. Be sure they are all secure.	
The unit alarms briefly in the same location but no radar source was in view.	There may be a motion sensor or house alarm in use within range.	
The detector did not alert when a police car was in view.	The officer may not have radar/ laser units turned on.	

## **SPECIFICATIONS**

Receiver Type:	
Radar	Double Conversion Superheterodyne Self-Contained Antenna
Laser	Pulsed Laser Signal Receiver
Frequency:	
Х	10.525 GHz
К	24.150 GHz
Ka	33.400 - 36.000 GHz
Laser	800 nm - 1100 nm
Detector Type:	
Radar	Scanning Frequency Discriminator
Laser	Pulse Width Discriminator
Alarm Type	Beep (Detected Band and Signal strength)
Antenna Type:	
Radar	Linear Polarized E-vector Vertical
Laser Front	Convex Condenser Lens
Laser Back	Concave Condenser Lens

Dimensions	110.00 mm (D) x 69.00 mm (W) x 29.50 mm (H)
Weight	4.1 oz (115g)
Operating Temp.	-4° to +185° F (Radar/Laser) -20° to +85° C (Radar/Laser)
Storage Temp.	-22° to +203° F (Radar/Laser) -30° to +95° C (Radar/Laser)
Operating Power Soure	DC 11.0 to 16.0 V

## **FCC/Industry Canada Information**

FCC: AMW-LRD450

ICC: 513C-LRD450

This device complies with part 15 of the 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.

Unauthorized changes or modifications to this equipment may void compliance with the FCC Rules. Any change or modification must be approved in writing by Uniden. Changes or modifications not approved by Uniden could void the user's authority to operate the equipment.

L'appareil est conforme aux normes d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) Ce dispositif ne doit pas causer d'interférences et (2), il doit pouvoir accepter les interférences, incluant celles pouvant nuire à son fonctionnement normal.

Tous les changements apportés à cet appareil, s'ils ne sont pas expressément approuvés par Uniden ou toute utilisation de celui-ci d'une autre manière que celle décrite dans ce guide peut annuler votre autorisation de le faire fonctionner.

# **One Year Limited Warranty**

Keep your receipt! Proof of purchase is required for warranty service.

# WARRANTOR: UNIDEN AMERICA CORP. ("Uniden")

ELEMENTS OF WARRANTY: Uniden warrants, for one year, to the original retail owner, this Uniden Product to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original user shall terminate and be of no further effect 12 months after the date of original retail sale. The warranty is invalid if the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by Uniden, (C) improperly installed, (D) serviced or repaired by someone other than an authorized Uniden service center for a defect or malfunction covered by this warranty, (E) used in any conjunction with equipment or parts or as part of any system not manu-

factured by Uniden, or (F) installed or programmed by anyone other than as detailed by the Operating Guide for this product.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this war-ranty is in effect, warrantor will repair the defect and return it to you without charge for parts, service, or any other cost (except shipping and handling) incurred by warrantor or its representatives in connection with the performance of this warranty. THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND **EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE** WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW. INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty is void outside the United States of America.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: If, after following the instructions in this Operating Guide, you are certain that the Product is defective, pack the Product carefully (preferably in its original packaging). Include evidence of original purchase and a note describing the defect that has caused you to return it. The Product should be shipped freight prepaid, by traceable means, or delivered, to warrantor at:

Uniden America Corporation C/O Saddle Creek 743 Henrietta Creek Rd., Suite 100 Roanoke, TX 76262

(800) 297-1023, 8 a.m. to 4:30 p.m., Central, Monday through Friday

POP Mode is a trademark of MPH Industries, Inc.