radenso XP

user manual

contents.

foreward.

Congratulations on your new investment! The Radenso XP was designed to deliver class-leading radar detection performance on all radar bands, coupled with the best false alert filtering in the industry.

The built-in GPS feature allows you to lockout known false alerts or you can mark your own Points of Interest (POI) for future alerts. The world-class, directional GPS database includes all known Red-Light Cameras (RLC) and Speed Cameras in North America.

Features

- LNA-equipped antenna board for highest possible sensitivity on all bands
- GPS enabled
- RJ11 power connector
- OLED display
- Ka Band segmentation (10 segments)
- Selectable X, K and Ka radar bands
- Selectable K Wide/Narrow
- Selectable Ka band POP (On/Off)
- Selectable driving modes (Highway, City and Auto City)
- Low power/Low frequency K band detection
- Blind Spot Monitoring (BSM) and Collision Avoidance System (CAS) filter
- Separate Traffic Sensor Rejection (TSR) filter
- 3-digit frequency display
- Multiple threat display
- Auto Mute with selectable Mute volume
- Low Speed Mute Mode for X and K bands
- Mute Mode to manually mute X and K bands until manually unmuted
- Auto City Mode with selectable speed increments and filter levels for each band
- Fully directional, world-class RLC/Speed Camera database with free updates
- Free firmware and database updates for life
- Voice alerts with over 260 different messages
- Frequency voice alert announcement
- GPS lockouts
- Test Mode (full sensitivity, no filtering and no signal lag)
- 6 selectable display modes
- VG2 undetectable
- Undetectable by Spectre IV/Elite (< 14 ft)
- 1 year manufacturer's warranty

what's inside.

A. Radenso XP
- Small, easily mountable radar detector
- Intuitive OLED display

B. Mute Power Adapter
- Provides power to the XP through the car's 12V power outlet
- Allows you to easily mute and create GPS lockouts without having to reach up at your XP
- USB port allows additional power and charging for other devices

C. Windshield Mount
- Attaches easily to the XP
- Strong suction cups attaches securely to the windshield

D. Travel Case
- The travel case fits your detector and cords for compact travel

E. USB Cord
- Mini USB cord connects your XP and computer to allows firmware updates

additional accessories.

Direct Wire Kit (optional)

- Allows you to hardwire your unit directly to your vehicle
- Frees up your car's power adapter
- Compatible with the Radenso XP / SP

Visor Mount (optional)

- The visor mount allows you to clamp your XP to your visor rather than your windshield
- Compatible with the Radenso XP / SP

installation guide.

Quick Start Up Guide
To start using your Radenso XP radar detector, follow these easy steps:

1. Slide the windshield mounting bracket into the QuickMount slot at the front of the radar detector.
2. Insert the RJ11 connector of the power cord into the power jack of the Radenso XP, located on the left side. Insert the 12V plug into the power socket of your vehicle.
3. Once connected to a 12V power source, the radar detector starts up with a very brief startup sequence.
4. Adjust the volume setting by pressing and holding the VOL-/CITY or VOL+/MARK button for 2 seconds.

Firmware and Database Update

1. Connect the radar detector to a Windows-based PC via the included mini-USB cable and use the Firmware Update Manager program which will update both the firmware and the red light/speed camera database on your Radenso XP.
2. The Firmware Update Manager program can be found on the Radenso website at http://radenso.com/support, or by clicking **Support** from the Radenso homepage.

XP user interface.

The Radenso XP has an easy to use inter-face. The unit has four buttons on top to make changing settings simple and quick.

A. Power/Menu Button
Short Press: Power on/off
Long Press: Enters menu mode
When in menu mode: Toggle setting option, or long press to exit menu mode

B. Vol -/City Button
Short Press: Change the driving mode (Highway, City, or AutoCity)
Long Press: Decrease volume (0-9)
When in menu mode: Move backwards through the menu

C. Mute button
Short Press: Toggle mute mode on/off (Mute mode will mute all X and K band signals)
Long Press: Add or delete a GPS lockout location
When in menu mode: Toggle setting option

D. Vol +/Mark Button
Short Press: Add or delete a POI.
Long Press: Increase volume (0-9)
When in menu mode: Move forwards through the menu

E. Release Button
Press the button and slide the windshield mount until it is locked. Press the button to unlock the mount for removal.

beginner settings.

Brightness
Recommended settings: Bright
Options: Bright, dim, dimmer, dark, smart dark
Description: OLED screen display brightness

Smart Dark
Recommended settings: Bright
Options: Bright, dim, dimmer
Description: Changes Smart Dark display brightness. Smart Dark keeps the display off, other than a single pixel to let you know the unit is on, unless there is an alert

User Mode
Recommended settings: Expert
Options: Beginner, expert
Description: Toggle which settings mode the detector is in. Expert mode offers a more complex setting customization

X Band
Recommended settings: On
Options: Off, on
Description: X band radar detection enabled or disabled

K Band
Recommended settings: Narrow
Options: Off, narrow, wide
Description: K band radar detection enabled or disabled

Ka WIDE Band
Recommended settings: On
Options: Off, on
Description: Ka band radar detection enabled or disabled

Laser
Recommended settings: On
Options: Off, on
Description: Enables or disables laser detection

BSM Filter Mode
Recommended settings: On
Options: Off, on
Description: Enable or disable Blind Spot Monitoring filter to reduce false alerts produced by BSM systems in vehicles around you

TSR Filter Mode
Recommended settings: On
Options: Off, on
Description: Enable or disable Traffic Sensor Rejection filter to redice false alerts caused by traffic sensors

Display Mode
Recommended settings: Speed/compass
Options: Speed/compass, speed/time, speed/voltage, voltage, time, speed
Description: Controls what information is shown on the display during regular driving

Unit Mode
Recommended settings: English
Options: English, metric
Description: Controls what units the XP displays in. English will display miles per hour (mph) or feet, and metric will display kilometers per hour (km/h) or meters

GMT Setting
Options: -12hr to -05hr to +12hr
Description: Change the time zone on the detector

beginner settings.

Low Speed Mute
Recommended settings: 15mph
Options: Off, 0-55mph / 10-90 km/h
Description: Mutes all radar below the set speed

Auto Power
Recommended settings: off
Options: Off, 60 min, 30 min
Description: Automatically will power off the unit if your vehicle speed is 0mph for 30 or 60 minutes. Specifically for vehicles where the power source is not disabled when the vehicle is turned off

Delete All User Points
Options: Press mute button for yes
Description: Deletes all user points that you have previously entered

Delete All Lockouts
Options: Press mute button for yes
Description: Deletes all GPS lockouts that you have previously entered

Factory Reset
Options: Press mute button for yes
Description: Changes all settings to Radenso recommended USA settings. Stored GPS lockouts and user points are not deleted

expert settings.

Once you activate "Expert" as the user mode, these options will be available to customize.

Brightness
Recommended settings: Bright
Options: Bright, dim, dimmer, dark, smart dark
Description: OLED screen display brightness

Smart Dark
Recommended settings: Bright
Options: Bright, dim, dimmer
Description: Changes Smart Dark display brightness. Smart Dark keeps the display off, other than a single pixel to let you know the unit is on, unless there is an alert

User Mode
Recommended settings: Expert
Options: Beginner, expert
Description: Toggle which settings mode the detector is in. Expert mode offers a more complex setting customization

X Band
Recommended settings: On
Options: Off, on
Description: X band radar detection enabled or disabled

K Band
Recommended settings: Narrow
Options: Off, narrow, wide
Description: K band radar detection enabled or disabled

Ka WIDE Band
Recommended settings: On
Options: Off, on
Description: Ka band radar detection enabled or disabled

Ka 1 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 33.392-33.704 GHz

Ka 2 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 33.704-33.896 GHz

Ka 3 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 33.886-34.198 GHz

Ka 4 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 34.184-34.592 GHz

Ka 5 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 34.592-34.808 GHz

Ka 6 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 34.806-35.166 GHz

Ka 7 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 35.143-35.383GHz

expert settings.

Ka 8 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 35.378-35.618 GHz

Ka 9 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 35.595-35.835GHz

Ka 10 Band
Recommended settings: On
Options: Off, on
Description: Detection for Ka band frequency 35.830-35.998 GHz

Laser
Recommended settings: On
Options: Off, on
Description: Enables or disables laser detection

POP Mode
Recommended settings: Off
Options: Off, on
Description: Enhances Ka band POP detection

BSM Filter Mode
Recommended settings: On
Options: Off, on
Description: Enables or disables Blind Spot Monitoring filter to reduce false alerts produced by BSM systems in vehicles around you

TSR Filter Mode
Recommended settings: On
Options: Off, on
Description: Enable or disable Traffic Filter Rejection filter to reduce false alerts caused by traffic sensors

Auto Mute
Recommended settings: 40%
Options: 0-80%, in increments of 20%
Description: Percent of full volume to mute alerts 8 seconds after an alert begins. 0% turns Auto Mute off

Unit Mode
Recommended settings: English
Options: English, metric
Description: Controls what unit the XP displays in. English will display in miles per hour (mph) or feet, and metric will display kilometers per hour (km/h) or meters

City Mode Filter
Recommended settings: X 4, K 2, Ka 0
Options: 0-9 for each band
Description: Allows the user to individually control sensitivity to each radar band while the detector is in City or Auto City mode. The numbers represent the amount of signal attenuation; 0 is no attenuation, 9 is maximum attenuation

City Mode Speed
Recommended settings: 20mph, 40mph
Options: 0-35mph for Low Speed Mute, 40-60mph City Mode Speed
Description: Low Speed Mute will mute the detector if you're moving under the set speed. City Mode Speed is the maximum speed at which the detector remains in City Mode

Display Mode
Recommended settings: Standard
Options: Standard, threat, frequency
Description: Controls what information is shown on the display during an alert

expert settings.

Driving Display Mode
Recommended settings: Speed/compass
Options: Speed/compass, speed/time, speed/voltage, voltage, time, speed
Description: Controls what information is shown on the display during regular driving

GMT Setting
Options: -12hr to -05hr to +12hr
Description: Change the time zone on the detector

RLC (Red Light Camera)
Recommended settings: On
Options: Off, on
Description: Turns on or off alerts by nearby red light cameras that the GPS detects

Speed Cam (Speed Camera)
Recommended settings: On
Options: Off, on
Description: Turns on or off alerts by nearby speed cameras that the GPS detects

RLC & SPD Cam (Red Light Camera and Speed Camera)
Recommended settings: On
Options: Off, on
Description: Turns on or off alerts by nearby speed and red light cameras that the GPS detects

User Point
Recommended settings: On
Options: Off, on
Description: Turns on or off option set user points (points of interest)

GPS Warning Distance
Recommended settings: Normal
Options: Short, normal, farther, farthest
Description: Changes the distance of red light and speed camera, and user point alerts. Short is 400 feet away, Normal is 800 feet away, Farther is 1200 feet away, Farthest is 1650 feet away

Voice Mode
Recommended settings: On
Options: Off, on
Description: Enables or disables voice alerts

GPS Connected Announcement
Recommended settings: User preference
Options: Off, on
Description: Turns on or off the voice announcement when the XP has connected to GPS after start up

Auto Power
Recommended settings: off
Options: Off, 60 min, 30 min
Description: Automatically will power off the unit if your vehicle speed is 0mph for 30 or 60 minutes. Specifically for vehicles where the power source is not disabled when the vehicle is turned off

Test Mode
Recommended settings: Off
Options: Off, on
Description: Turns all band sensitivities to 100% for testing purposes

Delete All User Points
Options: Press mute button for yes
Description: Deletes all user points that you have previously entered

expert settings.

Delete All Lockouts
Options: Press mute button for yes
Description: Deletes all GPS lockouts that you have previously entered

Factory Reset
Options: Press mute button for yes
Description: Changes all settings to Radenso recommended USA settings. Stored GPS lockouts and user points are not deleted

settings.

Setting AutoCity Speed
1. Select AutoCity Mode by pressing the VOL-/CITY button.
2. AutoCity Mode operates as follows:
   - All radar alerts on X and K bands are completely muted and only displayed if the vehicle's speed is lower than the left speed setting (Low Speed Mute). It does NOT mute Ka band and Laser alerts.
   - Radar detector operates in City mode with reduced sensitivity as set in City Mode Filter if vehicle's speed is between left speed setting (Low Speed Mute) and right speed setting (City Mode Speed).
   - Maximum detector sensitivity will be achieved above right speed setting (City Mode Speed). Radar detector operated with maximum sensitivity on all bands if vehicle's speed is over the right speed setting.
3. City Filter and City Mode Speed settings are always default in Beginner Mode.
4. City Filter and City Mode Speed settings can be changed in expert mode only.

GPS Connected
1. A GPS Connected message displays along with a voice announcement when a GPS signal is acquired after start-up.
2. You can disable the voice announcement in the Menu (must be in Expert Mode).

GPS Error Message
1. A GPS Error message displays if the radar does not receive a GPS signal for 30 seconds.

GPS Lockouts
1. Mute audio alerts (voice/tone) for radar within a 1,500 ft radius of the lockout location.
2. Lockout display: When entering a lockout location, "LOCKOUT" is shown in the right hand corner of the display
3. POI alert operates only when GPS is connected
4. Press and hold the mute button for 2 seconds to store or delete a lockout location.
5. Select "Del ALL lockout?" in the menu to delete all lockout locations in memory.

Mute Mode
1. Pressing the MUTE button during an alert will temporarily mute the detected signal and will automatically unmute 20 seconds after the signal has passed, or if a new or different signal has been detected.
2. Pressing the MUTE button without an alert will permanently mute the radar detector on X and K bands until manually unmuted or after a new startup cycle. Ka band and laser alerts will NOT be muted in this mode.

settings.

Mute Mode: Auto
1. Auto Mute Mode is selectable and reduces the alert vlume by 0%, 20%, 40%, 60%, or 80%. The default is 40%.
2. Radar bands (X, K, and Ka) and POI limit speed: current volume level stays for the first 3 seconds after the alert begins, afterwards, it's reduced to the selected Auto Mute level. Auto Mute is not applicable to laser alerts.
3. Auto Mute ends 10 seconds after the alert ends. If the same radar frequency is detected or begins within 10 seconds, the radar detector keeps Auto Mute active.
4. If a different radar band is detected or begins while Auto Mute is active, Auto Mute will be disabled and will revert back to the current volume level.

Mute Mode: Low Speed Mute
1. All radar alerts on X and K bands are completely muted and only displayed if vehicle's speed is below the Low Speed Mute setting. Radar detector does NOT mute Ka band and Laser alerts.
2. Low Speed Mute settings:
   • English (MPH): Off, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 (Default: 20)
   • Metric (KM/H): Off, 10, 20, 30, 40, 50, 60, 70, 80, 90 (Default: 30)

Notifications
When a radar signal is detected, the driver will be alerted by a visual text warning and a voice/tone alert that will indicate the detected radar band, frequency and signal strength. The display will blink for 3 seconds and a beeping, warning tone will increase its intensity with increasing signal strength. The signal strength has 9 levels. The GPS alerts are reported by voice and text.

Point of Interest
1. Press the VOL+/MARK button to register a POI
2. Pressing the VOL+/MARK button during a POI alert will delete the POI
3. You can register up to 100 POIs

POI: Alert
1. POI alert announces when a database POI or user POI is detected.
2. POI alerts display the POI icon, distance to POI, and current speed
3. Display of POI "PASS" message with a voice announcement when passing a POI.
4. No audio/visual alert when exiting from POI area without passing by POI
5. POI warning distances:
   • Short: 400 ft / 135 m
   • Normal: 800 ft / 250 m
   • Farther: 1,250 ft / 400 m
   • Farthest: 1,650 ft / 500 m
6. POI direction type:
   • Database POI: all-, two-, and single-direction
   • User POI: single-direction
7. POI alert operates only when GPS is connected.

Limit Speed Alarm
1. Speed Camera alert operates when driving speed is over the speed limit near a speed camera.
2. Speed Camera alert message displays "OVER SPEED" along with voice announcement or tone.
3. The current driving speed blinks along with alert sounds until driving speed is under Speed Camera speed limit.

settings.

tech specs.

POI: Deleting all POIs
1. You can select "Del ALL User POI?" in the Menu to delete all POIs registered in memory

Threat Display
1. If the radar detector detects more than one signal, the additional received signal/s will also be displayed when display setting is set to "THREAT."
2. The display will show the three strongest signals in the following priority (highest to lowest)

User Setting Memory
1. All features selected and configured are stored in the radar detector's memory.
2. If "MUTE ON" is enabled, it will revert back to "MUTE OFF" (default) after the radar detector restarts

Detector Type
- Dual conversion super-heterodyne receiver
- Linear polarized self-contained antenna
- Scanning frequency discriminator

Operating Frequency
- X band: 10.475 - 10.575 GHz
- K band wide: 23.950 - 24.250 GHz
- K band narrow: 24.080 - 24.200 GHz
- Ka band wide: 33.400 - 36.000 GHz

Technical Parameters
- Operating temperature:
    -30° to +185° F
- Power requirement:
    11V-16V DC
    200mA Negative ground
- Dimensions:
    72(W) x 116(L) x 34(H) mm
    2.83(W) x 4.75(L) x 1.34(H) in
- Weight:
    8.2 oz (200g)

troubleshooting.

The dectector will not turn on.
- Check if the power cable is connected.
- Turn on ignition.

The display will not turn on.
- Power cable is disconnected or switch has not been turned on.
- Display is set to "Dark" or "Smart Dark" mode.

The detector alerts visually but there are no voice or audio alerts.
- The alert volume is turned down. Increase the volume.

The windshield mount does not adhere to the windshield.
- Clean the suction cups and the windshield.

The detector alerts to a signal but no police radar trap can be located.
- The detector could have received a false alert signal from a motion sensor. Lockout the known false alert location.

The unit suddenly alerts at high intensity while driving on the Interstate although there is no police in sight.
- Radar operated traffic sensors are placed along your road; turn on Traffic Sensor Rejection (TSR) filter in the menu.

The detector starts alerting with low intensity following another vehicle.
- The vehicle in front of you is equipped with Blind Spot Mirror (BSM) or Lane Assist feature. Turn on the BSM filter in the menu.

The detector did not alert to approaching police vehicle.
- The officer is not operating radar equipment.
- One or more radar bands have been deactivated. Check in the menu if all radar bands used in your area are turned on.
- You may have activated a speed limit in the menu and you were traveling below the set speed limit.

Radenso XP never alerts to radar or alarm turns on after passing the radar source.
- Your vehicle might be equipped with a metal coated windshield that prevents the reception of radio waves. **Check with your local dealer.**
- The speed limit setting in the menu has been set above normal traveling speed. Turn off speed limit setting or set to a lower speed.

The unit did not alert to a red light or speed camera.
- Red light and/or speed cameras have been turned off in the menu.
- The location is not yet stored in the database. Check **radenso.com/support** for an update.

The detector alerts to a speed camera or red light camera but no camera can be found.
- The location used to have a speed or red light camera but it was disassembled.
- The camera is located on the other side of the road in the opposite travel direction.
- The camera is not a speed or red light camera.

warranty.

One (1) Year Limited Warranty

RADENSO warrants, for one year, to the original retail owner, this RADENSO 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, is valid for 12 months after the date of the original retail sale.

SCOPE OF WARRANTY:
From the date of original consumer purchase and for the respective periods specified above, RADENSO agrees to repair or replace, at its sole expense, all RADENSO brand products purchased directly from RADENSO or from an Authorized RADENSO Dealer, which are defective in material and/or workmanship during ordinary consumer use. Repairs may be completed using new or refurbished parts that meet or exceed RADENSO specifications for new parts. RADENSO, at its sole discretion, may replace a product, with a refurbished or reconditioned unit having comparable features and a limited consumer warranty.

EXCLUSIONS:
IF YOU PURCHASE A RADENSO PRODUCT FROM AN UNAUTHORIZED DEALER, YOUR RADENSO WARRANTY WILL NOT BE VALID.

This Warranty does **not** apply with respect to the following:

1. Defects or damage cause by accident, fire/smoke, flood/water damage, power surge (or related electrical abnormalities), lightning or other acts of nature.
2. Defects or damage caused by abuse, misuse, negligence, accident, unauthorized product modification or service, or failure to observe the instructions.
3. Deterioration/failure due to corrosive atmosphere, including but not limited to; smoke, high humidity, or extreme temperature.
4. Damage caused during shipment or handling.
5. Products purchased from anyone other than RADENSO or an Independent RADENSO Authorized Dealer. If you are uncertain as to whether a dealer is authorized, please contact RADENSO's Customer Service.
6. Products that have had their serial numbers altered or removed.
7. Products purchased in "AS IS" condition or noted as "DEMO", "DISPLAY", "OPEN BOX", or "CLEARANCE".
8. Products that have been altered or repaired by anyone other than RADENSO or a RADENSO authorized service station in a manner that has affected their performance, stability, or reliability.
9. Any product attached to or used with the RADENSO product.

10. Packing materials or cosmetic items.
11. Installation and removal of RADENSO products from the vehicle.
12. Maintenance, cleaning or periodic check-ups.

OBTAINING OF WARRANTY SERVICE:
If, after contacting Radenso Customer Service, you are certain that the product is defective, pack the product carefully (preferably in its original packaging) and include evidence of original purchase and a note describing the defect. The product should be shipped freight prepaid, by traceable means, or delivered, to warrantor at:

RADENSO,
222 East 14th St.
Cincinnati OH 45202

1-888-RADENSO (1-888-723-3676)
9 a.m. to 5 p.m., Eastern Time
Monday through Friday

support and contact.

Contact Information

Thank you for purchasing the most advanced radar and laser defense in the world. Here at Radenso, we take your support very seriously; if you need support in any capacity, please contact us immediately.

Address
Radenso
222 East 14th St.
Cincinnati, OH 45202

Phone
1-888-RADENSO
(1-888-723-3676)

Email
support@radenso.com

Hours
9AM-5PM EST, Monday - Friday

We hope you enjoy your product for many years!

Regards,

The Radenso Team