

ESCORT®

ESCORT®



GPS Powered for Speed and Location Intelligence



9500i
PASSPORT

Designed in the USA

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R A D A R • L A S E R • S A F E T Y • D E T E C T O R

Owner's Manual

Congratulations

You've just purchased the most intelligent radar and laser detector in the world—the PASSPORT 9500i.

The PASSPORT 9500i delivers extreme long-range warning on all radar bands including X, K, Superwide Ka, Ku and instant-on POP modes. Multiple front and rear laser sensors provide 360 degree laser protection, including the widest field of view. For the ultimate in laser protection, the PASSPORT 9500i is also ZR3 ready. Ask your retailer, or call us at 1-800-543-1608 for details.

The PASSPORT 9500i's GPS-powered intelligence provides permanent relief from false alarms including automatic door openers, motion sensors and other radar-based sensors.

In addition, the PASSPORT 9500i introduces the following state-of-the-art performance and features:

- New TrueLock feature permanently eliminates false alerts by location and frequency.
- New revolutionary AutoSensitivity mode provides real-time radar performance based on vehicle speed, plus Highway and City settings.
- New SpeedAlert feature provides an instant view of your vehicle's speed during an alert.
- New Mark Location feature allows you to instantly "mark" known speed traps, cameras and other places of interest.

- New easy to understand voice announcements provide instant audible feedback for controls and alerts.
- New AutoVolume feature automatically increases the alert volume in noisy conditions.
- Easy-to-use Preferences allows you to customize up to 9 features
- Ultra-bright alphanumeric display with 280 LEDs
- Exclusive ExpertMeter tracks and displays up to 8 radar signals simultaneously
- Exclusive SpecDisplay provides actual numeric frequency for any radar signal
- Selectable radar and laser bands (on/off) allow you to customize which bands are monitored.
- Includes exclusive SmartCord for easy access to Mute and TrueLock features.

If you've used a radar detector before, a review of the Quick Reference Guide on pages 4 and 5, and the Preferences information on pages 14-18 will briefly explain the new features.

If this is your first detector, please read the manual in detail to get the most out of your PASSPORT's revolutionary performance and innovative features.

Please drive safely.

Quick Reference Card

▼ Remove card along perforations ▼

PASSPORT 9500i Quick Reference Card

There are 9 user-selectable options so you can customize your 9500i for your own preferences.

The buttons labeled "MRK" and "BRT" are also used to enter the Preferences Mode, REVIEW your current Preferences settings, and to CHANGE any settings as desired. The words "PREF," "MRK" and "BRT" are located on the top of the detector.

How to use EZ-Preferences

1 To enter Preferences, press and hold the "MRK" and "BRT" buttons down for 2 seconds. The unit will beep twice, and will display the word **Prefs.**

2 Then press the "BRT" button to review the categories. You can either tap the button to change categories, or simply hold the button down to scroll through the categories.

3 Press the "MRK" button to change any setting. You can either tap the button to change from setting to setting, or hold the button down to scroll through all the options.

4 To exit Preferences, simply wait 8 seconds without pressing any button, or press the power button. The unit will display **Complete**, beep 4 times, and return to normal operation.

Restoring the Factory Default Settings

To restore your PASSPORT to its original factory settings, press and hold the "SEN" and "BRT" buttons while turning the power on. A **Reset** message will be displayed, accompanied by an audible alert, acknowledging the reset.

An example:

Here is how you would turn PASSPORT's AutoMute feature off:

1 Enter the Preferences Mode by holding both the "MRK" and "BRT" buttons down for 2 seconds. *PASSPORT will beep twice and display **Prefs.***

2 Then hold the "BRT" button down. *PASSPORT will scroll through the categories, starting with Pilot (**Pilot**), then SpeedAlert (**SAirt**), then Power-on sequence (**Pwr-On**), then Signal Strength meter (**Meter**), and then AutoMute (**aMute**).*

3 Release the "BRT" button when PASSPORT displays the AutoMute item. *Since the factory setting is for AutoMute to be on, PASSPORT will display **aMute ON**.*

(If you accidentally don't release the "MRK" button in time, and PASSPORT goes to the next category, simply hold the "MRK" button down again, PASSPORT will scroll through all of the categories. Once you're back to your desired category, release the "MRK" button.)

4 Press the MRK "BRT" button to change from **aMute ON** to **aMute OFF**.

5 To exit Preferences, simply wait 8 seconds without pressing any buttons, or press the power button. *PASSPORT will display **Complete**, beep 4 times, and return to normal operation.*

▶ Remove card along perforations ▶

Quick Reference Card



▼ Remove card along perforations ▼

PASSPORT 9500i Quick Reference Card

Press the **BRT** button to go from one category to the next

Press the **MRK** button to change your setting within a category


PILOT LIGHT (Power-on indication)	Pilot HWY Pilot H Pilot H.> Pilot V Pilot SPD	* Full word: Highway or Auto or City Letter: H or A or C Letter, with scanning dot Vehicle voltage Vehicle speed
SPEEDALERT	sAlrt ON sAlrt OFF	* Displays current speed during alert SpeedAlert feature off
POWER-ON SEQUENCE	PwrOn STD PwrOn FST	* Standard power-on sequence Fast power-on sequence
SIGNAL STRENGTH METER	Meter STD Meter EXP Meter SPC	* Standard signal strength meter ExpertMeter mode SpecDisplay mode
AUTOMUTE	aMute ON aMute OFF	* AutoMute on AutoMute off
AUTOVOLUME	aVol ON aVol OFF	* Audio alerts are controlled manually Audio alerts increased automatically
UNITS	Units ENG Units MET	* Speed/distance in English units Speed/distance in Metric units
VOICE	Voice ON Voice OFF	* Voice announcements on Voice announcements off
BANDS	Bands DFT Bands MOD	* Default settings Bands have been modified
	Turn bands on/off by pressing the mute button X ON or OFF (default is on) Ku ON or OFF (default is off) K ON or OFF (default is on) Ka ON or OFF (default is on) POP ON or OFF (default is off) SWS ON or OFF (default is off) LSR ON or OFF (default is on)	

▼ Remove card along perforations ▼

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To begin using your PASSPORT, just follow these simple steps

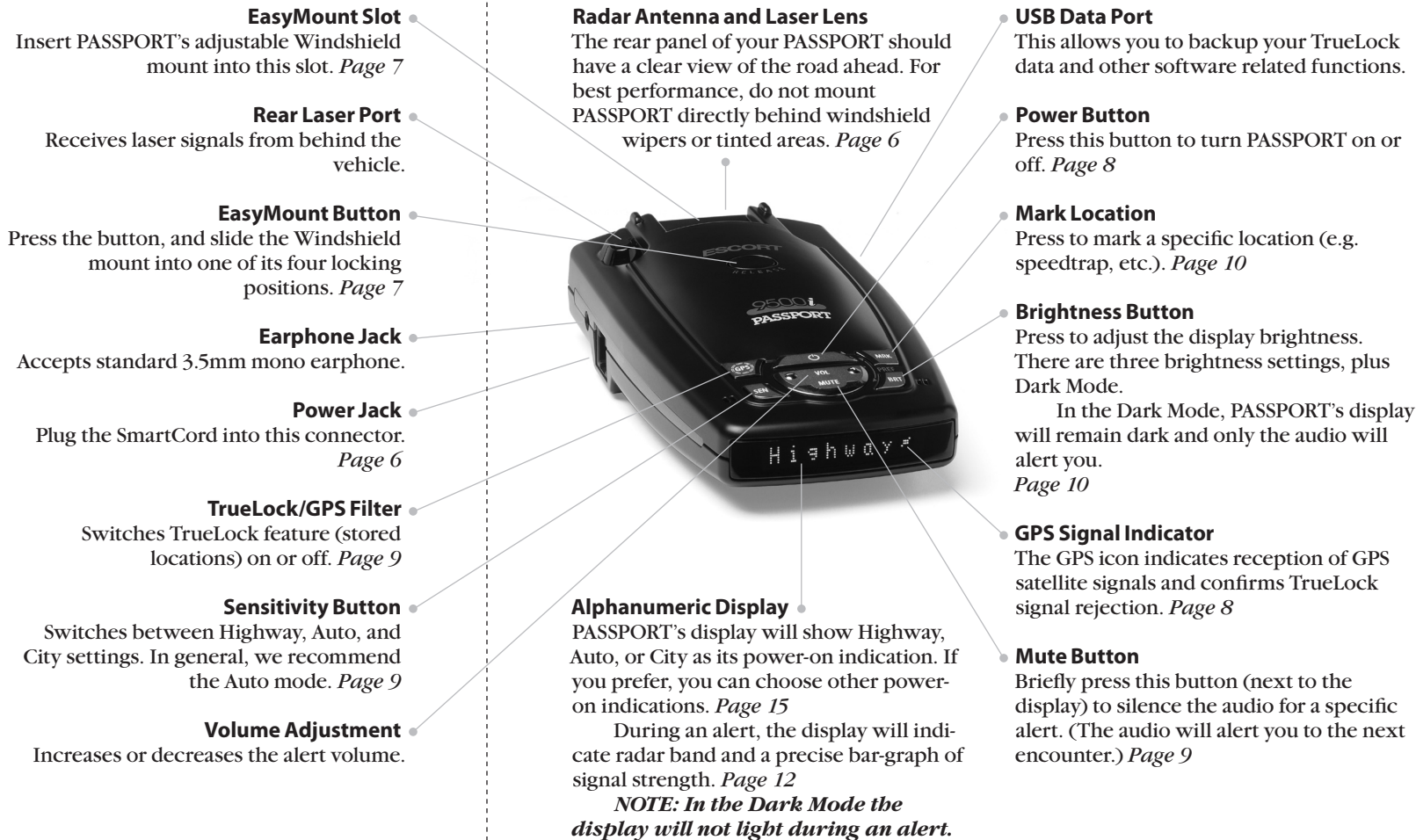
- 1 Plug the small end of the power cord into the side jack of the detector, and plug the large end of the power cord into your car's accessory socket.
- 2 Mount your PASSPORT on the windshield using the supplied windshield mount.
- 3 Press the power button,  located on the top case.

Adjust the volume level by pressing the "VOL" + or - buttons, also located on the top case.

Please read the manual to fully understand PASSPORT's operation and features.

Preferences

PASSPORT is ready to go, just plug it in and turn it on. But you can also easily change 9 features for your preferences. *Pages 14-18*



Installation

Power Connection

To power PASSPORT, plug the small end of the SmartCord, (telephone-type connector) into the modular jack on PASSPORT's left side, and plug the lighter plug adapter into your vehicle's lighter socket or accessory socket.

PASSPORT operates on 12 volts DC negative ground only. The lighter plug provided is a standard size and will work in most vehicles. However, some vehicles may require our optional sleeve to ensure a snug fit. If so, simply call or visit our website.

NOTE: depending on your vehicle, the lighter socket power may either be continuously on, or it may be switched on and off with your ignition switch.

Optional power cords

See the Accessories section for details on our optional Direct-wire SmartCord.

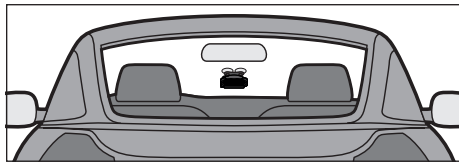
Mounting Location

WARNING: ESCORT cannot anticipate the many ways PASSPORT can be mounted. It is important that you mount PASSPORT where it will not impair your view nor present a hazard in case of an accident.

Where to mount PASSPORT

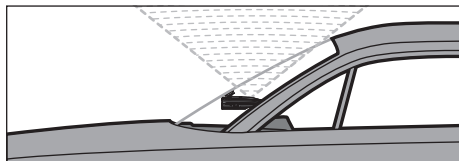
For optimum detection performance, we recommend the following:

- Using the supplied windshield mount, mount your PASSPORT level and high enough on your front windshield to provide a clear view of the road ahead. For optimum rear detection, center the detector between the driver and passenger.



- Mount PASSPORT away from windshield wipers, other solid objects, and heavily tinted areas that might obstruct the radar antenna or laser lens.

NOTE: In order for PASSPORT's GPS-powered features to work properly, the top case must have a clear view of the sky.

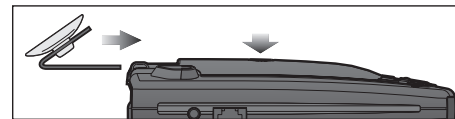


Windshield Mount

Windshield Mount

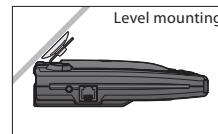
PASSPORT's EasyMount windshield bracket is designed for unobtrusive and hassle-free mounting.

- 1 Depress the adjustment button on the top of PASSPORT (by the word ESCORT) and slide the EasyMount bracket into the slot until it is locked into the position which best fits the angle of your windshield (there are four settings available). For extremely horizontal or extremely sloped windshields, the EasyMount bracket can be bent.

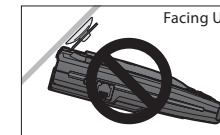
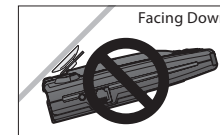


To ensure that the suction cups adhere to the windshield firmly, be sure to keep both your windshield and the suction cups clean.

- 2 To adjust PASSPORT on your windshield, use the EasyMount adjustment button located on the top of the PASSPORT, and slide PASSPORT forward or backward to obtain a level horizontal position.



When installed and adjusted properly, the back top edge of PASSPORT should rest solidly against your windshield.



User's Tip

You can leave the EasyMount bracket in place on your windshield, and easily remove PASSPORT by pressing the adjustment button and sliding PASSPORT off the mount. Again, be sure to position the bracket where it won't present a hazard in the event of an accident. Additional mounts are available.

CAUTION! A few vehicles (including some Porsches) have windshields with a soft anti-lacerative coating on the inside surface. Use of suction cups will permanently mar this coating. Consult your dealership or the vehicle owner's manual to determine if your windshield has this coating.

Power

To turn PASSPORT on or off, press the power button on PASSPORT's top case. When you turn PASSPORT on, it goes through a sequence of alerts.

If you prefer, you may change your PASSPORT for a shorter power-on sequence. See the Preferences section for details.

Volume Control (VOL)

To increase or decrease the audio volume, press and hold the (+) or (-) volume control buttons located on the top case. A sample alert tone will be generated, along with a corresponding bar-graph on the display. Once you have reached your desired volume level, simply release the button. This level will be stored in memory.

If you prefer, you can also select AutoVolume in Preferences. This feature will increase the audio alert level automatically when the ambient noise in the vehicle is high. See the Preferences section for details.

Power-on Indication

After PASSPORT's start-up sequence is complete the display will show the full word: Highway, Auto, or City to indicate which sensitivity mode is selected.

If you prefer, you can select alternate power-on indicators. See the Preferences section for details.

GPS Signal Indicator

The GPS signal indicator provides a visual indication that PASSPORT is receiving satellite data.

NOTE: Satellite reception is required to get the most out of your PASSPORT 9500i. To receive satellite data, the top of the detector must have a clear view of the sky. See Mounting Location for more details.

The GPS indicator will flash on and off until it receives satellite data. Once received, the icon will stop flashing and remain on the display.

The GPS indicator also provides a visual acknowledgement that the detector is rejecting a signal that has been stored in memory using the TrueLock feature. Once a false alarm has been stored, the GPS indicator will rotate clockwise, indicating that it is rejecting that signal.

Mute

The Mute button, located on PASSPORT's front panel and SmartCord, allows you to silence the audio alert during a radar encounter.

To mute the audio for a specific signal, briefly press the Mute button. After that radar encounter has passed, the mute will automatically reset and the audio will alert you to the next encounter.

AutoMute

Your PASSPORT has our patented AutoMute feature. After Passport alerts you to a radar encounter at the volume you have selected, the AutoMute feature will automatically reduce the volume to a lower level. This keeps you informed without the annoyance of a continuous full-volume alert.

If you prefer, you can turn the AutoMute feature off. See the Preferences section for details.

TrueLock/GPS Filter

The "GPS" filter button turns PASSPORT's GPS-powered TrueLock feature on and off. (default is on)

To lockout a false alert, press the mute button three (3) times, (either on the detector or the SmartCord) during the alert.

Pressing the mute button the first time will silence the audio. Pressing it a second time will generate a prompt on the display that will read: "Lockout?" Press it a third time to confirm that you want to lock this signal out by location and frequency. A "Stored" message will be displayed.

Once a signal has been stored, the detector will reject this signal the next time you approach this area. (The GPS indicator will rotate clockwise, providing a visual indication that the signal is being rejected).

To unlock a signal that has already been stored, simply press and hold the mute button while the GPS indicator is rotating. The display will read: "Unlock? ". Press the mute button again to unlock it from memory.

Sensitivity Switch (SEN)

The "SEN" button selects PASSPORT's sensitivity mode. We recommend the Auto (AutoSensitivity) mode for most driving.

In the "Auto" mode, the 9500i provides real-time radar performance based on your vehicle speed. As your vehicle speed increases, the radar sensitivity (X and K-band) is set to maximum range. As the vehicle speed decreases, the radar sensitivity (X and K-band only) is minimized to further reduce unwanted false alarms. Full sensitivity is maintained on all other bands.

You can also select conventional Highway and City modes. Highway mode provides maximum sensitivity on all bands. City mode reduces X-band sensitivity and full sensitivity is maintained on all other bands. See the Preferences for details.

Brightness (BRT)

PASSPORT's BRT button selects the brightness of PASSPORT's display and keypad. There are five settings: Minimum (BRT MIN), Medium (BRT MED), Maximum (BRT MAX), Auto (BRT AUTO) and Full Dark (BRT DARK).

Brightness Auto (BRT AUTO) (default) In this setting, the display and key-pad brightness will automatically adjust based on the ambient light in the vehicle.

BRT Dark (Full Dark Mode)

When you select the Dark mode with the BRT switch, the display will not show any visual alerts, (i.e. display or keypad) when PASSPORT detects signals. Only the audible alert will tell you of detected signals.

In this mode, visual alerts can be seen on the SmartCord in addition to the audio alerts on the detector.

Mark Location (MRK)

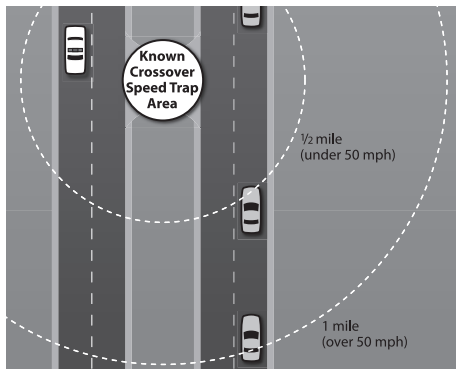
The "MRK" button allows you to mark a specific location and label it for future reference. Once marked, PASSPORT will provide an alert before you reach this area any time you return. This can be extremely useful when there are known speed traps or camera locations that you would like to remember .

To mark a particular location: Press the "MRK" button. The display will read: "Mark?". Press the "MRK" button again to

assign a label it, ("SPD TRAP" is the default label). To change the label to "Camera" or "Other" press the volume (+) or (-) buttons. Once you've selected the label, press the "MRK" button again.

Once you have marked the location, PASSPORT will provide an alert approximately 1 mile in advance when your vehicle is moving 50 mph or above. This alert distance is reduced to approximately a ½ mile when traveling below 50 mph.

NOTE: When a location is marked the first time, you must travel at least one mile away from that location to receive an alert.



To unmark a location, simply press the "MRK" button when you are receiving a "marked location" alert. The display will read: "Unmark?". Press the "MRK" again to confirm. The display will read: "Unmarked".

Audible Alerts

For Radar signals:

PASSPORT uses a Geiger-counter-like sound to indicate the signal strength and type of radar signal being encountered.

When you encounter radar, a distinct audible alert will sound and occur faster as the signal gets stronger. When the signal is very strong, the audible alerts will blend into a solid tone. This allows you to judge the distance from the signal source without taking your eyes from the road.

Each band has a distinct tone for easy identification.

- X-band = beep tone
- K-band = raspy brap tone
- Ka-band = double-brap tone
- Ku-band = beep tone (same as X-band)
- POP = solid brap tone

For Laser and POP signals:

Since laser and POP signals are a possible threat no matter how weak, PASSPORT will provide a full alert for these signals.

SmartCord

PASSPORT's power jack uses a telephone-type connector. This 4-conductor connector only works with the coiled SmartCord (included), or the optional Direct-wire SmartCord.

The coiled SmartCord is a special power cord that has a power-on indicator (which only lights up when the 9500i is turned on), a bright alert light that warns of radar or laser, and a convenient mute button right on the plug. It's perfect for any car where reaching the detector's mute button on the windshield is a stretch.

For discreet night driving, put PASSPORT in the Dark mode, and use the SmartCord for your visual alerts. Other drivers won't know you have a detector.

An optional Direct-wire SmartCord is also available. This version includes a small display module which can be wired directly into your electrical system, with a 10 foot straight cord to route to your PASSPORT.

For more information or to order, call us toll-free at 1-800-433-3487.

Speed Alert

PASSPORT's Speed Alert feature provides a visual indication of your vehicle speed during the first few seconds of an alert. This allows you to instantly check your speed without looking at your speedometer.

Speed Alert is displayed regardless of your meter setting.

NOTE: When traveling 15 mph or less, your speed will not be displayed.

If you prefer, you can turn the Speed Alert feature off. See Preferences for details.

Signal Strength Meter

PASSPORT's display provides an intuitive ultra-bright display of signal strength and text messages.

PASSPORT's standard bar-graph meter provides information on a single radar signal. If there are multiple signals present, PASSPORT's internal computer will determine which one is the most important threat to display.

When PASSPORT detects radar, it displays the band (X, K, Ka, or Ku), and a precise bar-graph of the signal strength. When PASSPORT detects a laser signal the display will display "LASER."

NOTE: If you are operating PASSPORT in the Dark mode, the display will not light when a signal is detected—only the audio and the flashing alert lamp on the SmartCord.

ExpertMeter

PASSPORT's ExpertMeter option is an advanced display for experienced detector users. Please use PASSPORT for a few weeks to get familiar with its other features before using ExpertMeter.

To use the ExpertMeter instead of the bar graph signal strength meter, you must select ExpertMeter in PASSPORT's Preferences (see pages 14-17).

PASSPORT's ExpertMeter simultaneously tracks up to 8 radar signals. It provides detailed information on up to 2 Ka-band, 2 K-band, and 4 X-band signals.

ExpertMeter can help you spot a change in your normal driving environment; for example, a traffic radar unit being operated in an area where there are normally other signals present.

The ExpertMeter is actually a miniature spectrum analyzer. It shows what band each signal is on and its relative signal strength.



Above is the ExpertMeter display if PASSPORT was detecting 2 strong Ka-band, 2 strong K-band, and 4 strong X-band signals.

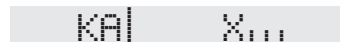
As you can see, there are vertical lines after each band designator. Each line shows a signal being detected. The height of each line shows the relative signal strength of that signal.

NOTE: If you use ExpertMeter, the brief signal shown in the power-on sequence when you turn on your PASSPORT will also be in ExpertMeter: an X with a single vertical line.

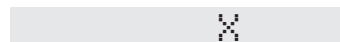
A few more examples will help you better see how the ExpertMeter works.



Here ExpertMeter shows 1 strong K-band signal, and three X-band signals, two strong and one weak.



Here ExpertMeter shows 1 strong Ka-band signal, and three weak X-band signals.



On very weak signals, there will be no vertical line. This shows a very weak X-band signal.

ExpertMeter Details

The band designators (X, K, Ka) will stay on the display for a few seconds after the signal has passed. This allows you to see what the unit detected, even on very brief signals.

However, the vertical lines representing individual signals continuously change (several times a second) to give you a continuous instantaneous view of all radar signals present.

SpecDisplay

PASSPORT's SpecDisplay option is also for the experienced detector user. In this mode, PASSPORT will display the actual numeric frequency of the radar signal being received.



SpecDisplay shows one K-band signal at 24.150 gigahertz.

NOTE: Even long-time detector users will require some amount of time to get familiar with this new level of information about detected signals.

GPS Signal Indicator

PASSPORT's GPS indicator will flash on and off until the GPS satellite signals are received. Once these signals are received, the indicator will stop flashing and remain on the screen.

This indicator also provides a visual reference for known false alarms that you have stored in memory using TrueLock. Once you have stored a signal and drive past that location again, this indicator will spin clockwise to visually show that it is detecting the signal, but will not alert.

How to use Preferences

There are 9 user-selectable Preferences so you can customize your 9500i for your specific driving needs. The buttons labeled “MRK” and “BRT” are also used to enter Preferences, REVIEW your current settings, and to CHANGE any settings as desired. The word PREF is located on the top of the detector, and is highlighted in colored graphics. Pages 16-18 explain each option in more detail.

How to use Preferences

- 1 To enter Preferences, press and hold the “MRK” and “BRT” buttons down for 2 seconds.** (The unit will beep twice, and will display the word `PREFS`.)
- 2 Then press the “BRT” button to review the current settings.** (You can either tap the button to change from item to item, or hold the button to scroll through the items.)
- 3 Press the “MRK” button to change any setting.** (You can either tap the button to change from setting to setting, or hold the button to scroll through all the options.)
- 4 To exit Preferences, simply wait 8 seconds without pressing any button, or press the power button (⏻).** The unit will display `Complete`, beep 4 times, and return to normal operation.

An example

Here is how you would turn PASSPORT’s AutoMute feature off.

- 1** Enter Preferences by holding both the MRK and BRT buttons down for 2 seconds. *PASSPORT will beep twice and display `PREFS`.*
- 2** Then hold the “BRT” button down. *PASSPORT will scroll through the categories, starting with Pilot Light (`Pilot`), then SpeedAlert (`sAlrt`), Power-on sequence (`PwrOn`), then Signal strength meter (`Meter`), and then AutoMute (`aMute`).*
- 3** Release the “MRK” button when PASSPORT shows the AutoMute item. *Since the factory setting is for AutoMute to be on, PASSPORT will display `aMute ON`.
(If you accidentally don’t release the “MRK” button in time, and PASSPORT goes to the next category, simply hold the “MRK” button down again, and after PASSPORT scrolls through all categories, it will begin again at the top of the list.)*
- 4** Press the MRK button to change from `aMute ON` to `aMute OFF`.
- 5** To complete choosing your Preferences, simply wait 8 seconds without pressing any buttons, or press the power button (⏻). *PASSPORT will display `Complete`, beep 4 times, and return to normal operation.*

Overview of Preferences

Press the **BRT** button to go from one category to the next

PILOT LIGHT
(Power-on indication)

Pilot HWY
Pilot H
Pilot H.>
Pilot V
Pilot SPD

Press the **MRK** button to change your setting within a category

* Full word: Highway or Auto or City
Letter: H or A or C
Letter, with scanning dot
Vehicle voltage
Vehicle speed

SPEEDALERT

sAlrt ON
sAlrt OFF

* Displays current speed during alert
SpeedAlert feature off

POWER-ON SEQUENCE

PwrOn STD
PwrOn FST

* Standard power-on sequence
Fast power-on sequence

SIGNAL STRENGTH METER

Meter STD
Meter EXP
Meter SPC

* Standard signal strength meter
ExpertMeter mode
SpecDisplay mode

AUTOMUTE

aMute ON
aMute OFF

* AutoMute on
AutoMute off

AUTOVOLUME

aVol ON
aVol OFF

* Audio alerts are controlled manually
Audio alerts increased automatically

UNITS

Units ENG
Units MET

* Speed/distance in English units
Speed/distance in Metric units

VOICE

Voice ON
Voice OFF

* Voice announcements on
Voice announcements off

BANDS

Bands DFT
Bands MOD

* Default settings
Bands have been modified

*** Restoring the Factory Default Settings**
To restore your PASSPORT to its original factory settings, press and hold the “SEN” and “BRT” buttons while turning the power on. A `Reset` message will be displayed, accompanied by an audible alert, acknowledging the reset.

Turn bands on/off by pressing the Mute button

X ON or OFF (default is on)
Ku ON or OFF (default is off)
K ON or OFF (default is on)
Ka ON or OFF (default is on)
POP ON or OFF (default is off)
SWS ON or OFF (default is off)
LSR ON or OFF (default is on)

Pilot Light (Power-on indication)

PilotHWY (Full description)

In this setting, PASSPORT will display “Highway,” “City,” or “Auto” as its power-on indication. (factory default)

Pilot H (Letter)

In this setting, Passport will display “H” for Highway, “C” for City, and “A” for Auto.

Pilot H.> (Letter with scanning dot)

In this setting, PASSPORT will display “H” for Highway, “C” for City, and “A” for Auto. In addition, a single dot will continuously scroll across the display.

Pilot V (Vehicle voltage)

In this setting, PASSPORT will continually display “H” for Highway, “C” for City, and “A” for Auto, and the vehicle’s voltage.

NOTE: If the vehicle’s voltage drops below 10.5 volts, a low voltage warning is displayed, followed by an audible alert. A high voltage warning is also given if the voltage goes above 16.5 volts. The high-voltage warning is also followed by an audible alert.

Pilot SPD (Vehicle speed)

In this setting, PASSPORT will continually display “H” for Highway, “C” for City, and “A” for Auto, and vehicle’s speed as its pilot.

SpeedAlert

SAir ON (SpeedAlert on)

In this setting, your vehicle’s speed will be displayed for a few seconds during an alert. After a few seconds, PASSPORT will display only the meter type you have selected, i.e. bar-graph, ExpertMeter or SpecMeter. (factory default)

SAir OFF (SpeedAlert off)

With speed alert off, PASSPORT will display the meter type you have selected.

Power-on Sequence

PwrOnSTD (Standard)

In this setting, each time you turn PASSPORT on it will display “PASSPORT,” “9500i,” “LASER,” “Ka-band,” “K-band,” “X-band,” followed by a brief X-band alert. (factory default)

If any bands have been changed from the factory defaults, a double beep tone and a corresponding message (i.e. “X OFF”), will be displayed.

PwrOnFST (Fast power-on)

In this setting, PASSPORT will provide a single X-band tone during the start-up sequence. If any bands have been changed from their factory default settings, a double X-band tone and corresponding message (i.e. “X OFF”), will alert you that one or more bands have been modified.

Signal Strength Meter

MeterSTD (Standard meter)

In this setting, the meter displays the band of the received signal, and a bar graph shows the relative signal strength. (factory default)

MeterEXP (ExpertMeter)

In this setting, the meter simultaneously tracks multiple radar signals. It can display up to 2 Ka band, 2 K band, and 4 X band signals at the same time.

NOTE: The ExpertMeter feature is explained in more detail on pages 10-11.

NOTE: Ku band is displayed as an X-band signal.

MeterSPC (SpecDisplay meter)

In this setting, the meter displays the actual numeric frequency of the radar signal received.

NOTE: The SpecDisplay feature is explained in more detail on page 11.

AutoMute

aMute ON (AutoMute on)

In this setting, PASSPORT’s audio alerts will initially be at the volume you set, but after a few seconds PASSPORT will automatically reduce the volume level to keep you informed, but not annoyed. (factory default)

aMute OFF (AutoMute off)

With AutoMute off, PASSPORT’s audio alerts will remain at the volume you set for the duration of the radar encounter.

AutoVolume

aVol ON (AutoVolume on)

In this setting, PASSPORT’S built-in microphone listens to the ambient noise in the vehicle and increases the audio in noisy conditions (e.g. loud music, excessive wind noise, etc.). (factory default)

aVol OFF (AutoVolume off)

In this setting, the volume level will not increase automatically.

Details of Preferences

Units

Units ENG (Speed measured in miles per hour)

In this setting, all speed related features are displayed in miles per hour (MPH). (factory default)

Units MET (Speed measured in kilometers per hour)

In this setting, all speed related features are displayed in kilometers per hour (KPH).

Voice Announcements

VoiceON (Voice announcements on)

In this setting, all alerts and instructions are communicated using a voice announcement. (factory default)

VoiceOFF (Voice announcements off)

With voice off, normal tones will be used for alerts.

Bands

BandsDFT

In this setting all radar and laser frequencies, (with the exception of POP mode) are monitored. This is the factory setting, and it is recommended that you use your PASSPORT in this mode.

BandsMOD

In this setting, PASSPORT will warn you with an audible alert, and associated text message stating which band has been modified (i.e. "X OFF"). This warning is displayed during the start up sequence (standard or fast).

WARNING: Only modify bands if you are absolutely certain that there are no traffic radar units using that specific band in your area.

Specifications

Features and Specifications

Operating Bands

- X-band 10.525 GHz \pm 25 MHz
- K-band 24.150 GHz \pm 100 MHz
- Ka-band 34.700 GHz \pm 1300 MHz
- Ku-band 13.450 GHz \pm 25 MHz
- Laser 904nm, 33 MHz bandwidth

Radar Receiver / Detector Type

- Superheterodyne, Varactor-Tuned VCO
- Scanning Frequency Discriminator
- Digital Signal Processing (DSP)

GPS Receiver

- SiFRstar III

Laser Detection

- Quantum Limited Video Receiver
- Multiple Laser Sensor Diodes

Display Type

- 280 LED Alphanumeric
- Bar Graph, SpeedAlert, ExpertMeter, or SpecDisplay
- 5-Levels of Brightness Control, including Full Dark Mode

Power Requirement

- 12VDC, Negative Ground
- SmartCord (included)

Preferences

- Power-On Indication
- SpeedAlert
- Power-On Sequence
- Signal Strength Meter
- AutoMute
- AutoVolume

- Units
- Voice Announcements
- Radar / Laser Bands
- AutoSensitivity, Highway and City

Sensitivity Control

- AutoCalibration Circuitry

SmartShield VG2 Immunity

Dimensions (Inches)

- 1.40" H x 2.90" W x 5.35" L

Patented Technology

PASSPORT is covered by one or more of the following U.S. patents:
6,836,238 6,693,578 6,614,385 6,587,068
6,400,305 6,249,218 6,069,580 5,668,554
5,600,132 5,587,916 5,559,508 5,446,923
5,402,087 5,365,055 5,347,120 5,305,007
5,206,500 5,164,729 5,134,406 5,111,207
5,079,553 5,049,885 5,049,884 4,961,074
4,954,828 4,952,937 4,952,936 4,939,521
4,896,855 4,887,753 4,862,175 4,750,215
4,686,499 4,631,542 4,630,054 4,625,210
4,613,989 4,604,529 4,583,057 4,581,769
4,571,593 4,313,216 D314,178 D313,365
D310,167 D308,837 D296,771 D288,418
D253,752

Passport is also covered by one or more of the following Canadian patents:
2,330,964 1,295,715 1,295,714 1,187,602
1,187,586

European patent:
1,145,030

Additional patents may be listed inside the product. Other Patents Pending.

Interpreting Alerts

Although PASSPORT has a comprehensive warning system and this handbook is as complete as we can make it, only experience will teach you what to expect from your PASSPORT and how to interpret what it tells you. The specific type of radar being used, the type of transmission

(continuous or instant-on) and the location of the radar source affect the radar alerts you receive.

The following examples will give you an introduction to understanding PASSPORT's warning system for radar and laser alerts.

Alert

Passport begins to sound slowly, then the rate of alert increases until the alert becomes a solid tone. The Signal Meter ramps accordingly.

Passport emits short alerts for a few seconds and then falls silent only to briefly alert and fall silent again.

Passport suddenly sounds a continuous tone for the appropriate band received. All segments in the Signal Strength Meter are lit.

A brief laser alert.

Passport receives weak signals. These signals may be a little stronger as you pass large, roadside objects. The signals increase in frequency.

Passport alerts slowly for awhile and then abruptly jumps to a strong alert.

Explanation

You are approaching a continuous radar source aimed in your direction.

An instant-on radar source is being used ahead of you and out of your view.

An instant-on radar source or laser source is being used nearby. This kind of alert requires immediate attention!

Laser is being used in the area. Because laser is inherently difficult to detect, any laser alert may indicate a source very close by.

A moving patrol car with continuous radar is overtaking you from behind. Because these signals are reflected (reflections are increased by large objects), they may or may not eventually melt into a solid point even when the patrol car is directly behind you.

You are approaching a radar unit concealed by a hill or an obstructed curve.

Alert

Passport alerts intermittently. Rate and strength of alerts may be consistent or vary wildly.

Passport alerts intermittently. Rate and strength of signal increases with each alert.

Passport gives an X-band alert intermittently.

Explanation

A patrol car is travelling in front of you with a radar source aimed forward. Because signals are sometimes reflected off of large objects and sometimes not, the alerts may seem inconsistent.

A patrol car is approaching from the other direction, sampling traffic with instant-on radar. Such alerts should be taken seriously.

You are driving through an area populated with radar motion sensors (door openers, burglar alarms, etc.). Since these transmitters are usually contained inside buildings or aimed toward OR away from you, they are typically not as strong or lasting as a real radar encounter.

CAUTION: Since the characteristics of these alerts may be similar to some of the preceding examples, over-confidence in an unfamiliar area can be dangerous. Likewise, if an alert in a commonly traveled area is suddenly stronger or on a different band than usual, speed radar may be set up nearby.

How Radar Works

How Radar Works

Traffic radar, which consists of micro-waves, travels in straight lines and is easily reflected by objects such as cars, trucks, even guardrails and overpasses. Radar works by directing its microwave beam down the road. As your vehicle travels into range, the microwave beam bounces off your car, and the radar antenna looks for the reflections.

Using the Doppler Principle, the radar equipment then calculates your speed by comparing the frequency of the reflection of your car to the original frequency of the beam sent out.

Traffic radar has limitations, the most significant of these being that it typically can monitor only one target at a time. If there is more than one vehicle within range, it is up to the radar operator to decide which target is producing the strongest reflection. Since the strength of the reflection is affected by both the size of the vehicle and its proximity to the antenna, it is difficult for the radar operator to determine if the signal is from a sports car nearby or a semi-truck several hundred feet away.

Radar range also depends on the power of the radar equipment itself. The strength of the radar unit's beam diminishes with distance. The farther the radar has to travel, the less energy it has for speed detection.

How POP Works

Because intrusion alarms and motion sensors often operate on the same frequency as X, and K-band radar, your PASSPORT will occasionally receive non-police radar signals. Since these X-Band transmitters are usually contained inside of a building, or aimed toward the ground, they will generally produce much weaker readings than will a true radar encounter. As you become familiar with the sources of these pseudo alarms in your daily driving, they will serve as confirmation that your PASSPORT's radar detection abilities are fully operational.

How "POP" Works

"POP" mode is a relatively new feature for radar gun manufacturers. It works by transmitting an extremely short burst, within the allocated band, to identify speeding vehicles in traffic. Once the target is identified, or "POPPED," the gun is then turned to its normal operating mode to provide a vehicle tracking history, (required by law).

NOTE: According to the operator's manual from the radar gun manufacturer, tickets should not be issued in POP mode.

How Laser Works

How Laser (Lidar) Works

Laser speed detection is actually LIDAR (Light Detection and Ranging). LIDAR guns project a beam of invisible infrared light. The signal is a series of very short infrared light energy pulses which move in a straight line, reflecting off your car and returning to the gun. LIDAR uses these light pulses to measure the distance to a vehicle. Speed is then calculated by measuring how quickly these pulses are reflected given the known speed of light.

LIDAR (or laser) is a newer technology and is not as widespread as conventional radar, therefore, you may not encounter laser on a daily basis. And unlike radar detection, laser detection is not prone to false alarms. Because LIDAR transmits a much narrower beam than does radar, it is much more accurate in its ability to distinguish between targets and is also more difficult to detect. ***AS A RESULT, EVEN THE BRIEFEST LASER ALERT SHOULD BE TAKEN SERIOUSLY.***

There are limitations to LIDAR equipment. LIDAR is much more sensitive to weather conditions than RADAR, and a LIDAR gun's range will be decreased by anything affecting visibility such as rain, fog, or smoke. A LIDAR gun cannot operate through glass and it must be stationary in order to get an accurate reading. Because LIDAR must have a clear line of sight and is subject to cosine error (an inaccuracy, which increases as the angle between the gun and the vehicle, increases) police typically use LIDAR equipment parallel to the road or from an overpass. LIDAR can be used day or night.

How SWS Works

Safety Warning System, or SWS, uses a modified K-band radar signal. The SWS safety radar system has 64 possible messages (60 currently allocated). The SWS messages your PASSPORT can display are listed on the facing page.

From the factory, your PASSPORT is programmed with SWS decoding ON. If SWS is used in your area, your PASSPORT will display the safety messages associated with the signal. If you do not wish to detect this system, use the Preferences feature to turn PASSPORT's SWS decoding OFF.

NOTE: Some of the safety messages have been condensed, so that each message can be displayed on one or two screens on PASSPORT's eight-character display.

Since Safety radar technology is relatively new, and the number of transmitters in operation is not yet widespread, you will not receive Safety signals on a daily basis. Do not be surprised if you encounter emergency vehicles, road hazards and railroad crossings that are unequipped with these transmitters. As Safety transmitters become more prevalent (the number of operating transmitters is growing every day), these Safety radar signals will become more common.

For more information and details about SWS safety radar, visit their web site at www.safetyradar.com.

SWS Text Messages

1	WorkZone	33	HighWind
2	Road Closed	34	Severe Weather
3	Bridge Closed	35	HeavyFog
4	WorkCrew Highway	36	Flooding
5	WorkCrew Utility	37	BridgIce
6	Detour	38	RoadIce
7	Truck Detour	39	Dust Blowing
8	MustExit	40	Sand Blowing
9	Rtlane Closed	41	Blinding Snow
10	CntrLane Closed	42	Future Use
11	LeftLane Closed	43	RestArea
12	Future Use	44	RestArea w/servic
13	Police	45	24hrFuel
14	Train	46	Insp Stn Open
15	Low Overpass	47	Insp Stn Closed
16	BridgeUp	48	Reduced Speed
17	Bridge Wt Limit	49	Speed Enforced
18	RockSlid Area	50	HazMatls Exit
19	School Zone	51	Expect Delay
20	Road Narrows	52	10 Min Delay
21	Sharp Curve	53	20 Min Delay
22	Crosswalk	54	30 Min Delay
23	Deer Crossing	55	1 Hour Delay
24	Blind or Deaf Kid	56	Traffic TunRadio
25	SteepUse LowGear	57	Pay Toll
26	Accident	58	Trucks ExitRight
27	PoorRoad Surface	59	Trucks ExitLeft
28	Loading SchoolBus	60	Future Use
29	DontPass	61	Emerg Veh Moving
30	Dangrous Intrsect	62	Police Pursuit
31	Emergncy Vehicle	63	Oversize Vehicle
32	Future Use	64	SloMving Vehicle

How GPS Works

How GPS Works

The Global Positioning System (GPS) is made up of twenty four orbiting satellites and was developed by the U.S. military. There are at least four satellites visible at any given time every day.

A GPS receiver is designed to locate and receive data from four of these satellites. This data includes the distance to your location from each of the satellites. Once the distance from each satellite is known, the receiver can calculate and pinpoint your exact location.



Service

Service Procedure

If Your PASSPORT ever needs service, please follow these simple steps:

- 1 Check the troubleshooting section of this manual. It may have a solution to your problem.
- 2 Call us at **1-800-543-1608**. We may be able to solve your problem over the phone. If the problem requires that you send your Passport to the factory for repair, we will provide you with a Service Order Number, which must be included on the outside of your shipping box.

Enclose the following information with your PASSPORT:

- Your Service Order Number
- Your name and return address
- Your daytime telephone number
- A description of the problem you are experiencing.

Out Of Warranty Repairs

For out of warranty repairs, include prepayment in the amount you were quoted by the Escort Customer Service Representative. If the detector has been damaged, abused or modified, the repair cost will be calculated on a parts and labor basis. If it exceeds the basic repair charge, you will be contacted with a quotation. If the additional payment is not received within 30 days (or if you notify us that you choose not to have your PASSPORT repaired at the price quoted), your PASSPORT will be returned, without repair. Payment can be made by check, money order, or credit card.

Mail PASSPORT and SmartCord To:

ESCORT
Customer Service Department
Return Authorization Number _____
5440 West Chester Road
West Chester, Ohio 45069

For your own protection, we recommend that you ship your PASSPORT postpaid and insured. Insist on a proof of delivery, and keep the receipt until the return of your PASSPORT.

Problem

PASSPORT beeps briefly at the same location every day, but no radar source is in sight.

PASSPORT does not seem sensitive to radar or laser.

PASSPORT did not alert when a police car was in view.

PASSPORT's display is not working.

PASSPORT's audible alerts are less loud after the first few alerts.

PASSPORT bounces or sags on windshield.

PASSPORT's power-on sequence reoccurs while you are driving.

Your 14-year old son has changed all 9 of the Preferences options.

PASSPORT feels very warm.

Solution

- An X-band motion sensor or intrusion alarm is located within range of your route. Use the TrueLock feature to filter this signal out.

- Make sure that windshield wipers do not block PASSPORT's radar antenna and that the laser lens is not behind tinted areas.
- Determine if your vehicle has an Instaclear[®], ElectriClear[®] or solar reflective windshield which may deflect radar or laser signals.
- PASSPORT may be in City Mode.

- VASCAR (Visual Average Speed Computer and Recorder), a stopwatch method of speed detection, may be in use.
- Officer may not have radar or laser unit turned on.

- Press the BRT button to deactivate Dark Mode.

- PASSPORT is in AutoMute Mode. See page 9 for details.

- PASSPORT is not making contact with the windshield to provide stability. While holding down PASSPORT's EasyMount button, slide Passport further back toward the windshield so that the back top edge makes firm contact.

- A loose power connection or dirty lighter socket can cause PASSPORT to be briefly disconnected.

- You can return all of the user Preferences to the factory defaults settings by holding down the "SEN" and "BRT" buttons while you turn PASSPORT on.

- It is normal for PASSPORT to feel warm.

Problem

PASSPORT will not turn on.

GPS indicator will not stop flashing.

TrueLock lock filter does not seem to be working.

At first detect, numbers come up on the display.

Solution

- Check that volume control is ON.
- Check that vehicle ignition is ON.
- Check that vehicle lighter socket is functional.
- Try Passport in another vehicle.

- PASSPORT does not have a clear view of the sky. Reposition it accordingly.

- Check to make sure the GPS button is on.

- SpeedAlert feature is on. You can turn it off in Preferences.

Explanation of Displays

No display PASSPORT is in Dark mode. Press the BRT button to change the brightness. (page 10)

PilotHWY One of the many Preferences. (pages 14-18)

*XI, or KI,
or KAI etc.* PASSPORT has been set to ExpertMeter Mode in Preferences. (page 12-13)

*Reset
Power* PASSPORT needs to cycle power. Unplug it from power socket and restart.

Accessories

Accessories

The following accessories and replacement parts are available for PASSPORT 9500i.



Standard Coiled SmartCord..... \$29.95
Available in red or blue



Direct-wire SmartCord..... \$29.95



Accessory Kit..... \$19.95



Visor Clip.....\$4.00

9500i Travel Case..... \$19.95

Escort Extended Service Plan

ESCORT offers an optional extended service plan. Contact ESCORT for details.

FCC NOTE: Modifications not expressly approved by the manufacturer could void the user's FCC granted authority to operate the equipment.

Register
online:

@**WWW**

EscortRadar.com

▼ Remove card along perforations ▼

ESCORT PRODUCT REGISTRATION CARD

ESCORT®

- ▲ If you purchased your detector directly from ESCORT, you do not need to fill this out.
- ▲ If you did not purchase your detector directly from ESCORT, please fill out this section and return to us, or register online at our web address: **www.EscortRadar.com**

1. First Name: _____ Middle Initial _____ Last Name _____
Address _____
City _____ State _____ Zip _____
E-mail (In case we have a question) _____

2. Product Purchased _____ Model _____ Serial Number _____
3. Place of Purchase _____ Date _____ Price _____
4. Primary reason for purchasing this ESCORT product _____

5. Would you like to be added to our mailing list? Yes No
6. Would you like us to e-mail you with updates? Yes No

ESCORT One Year Limited Warranty

What this warranty covers: ESCORT warrants your Product against all defects in materials and workmanship.

For how long: One (1) year from the date of the original purchase.

What we will do: ESCORT, at our discretion, will either repair or replace your Product free of charge.

What we will not do: ESCORT will not pay shipping charges that you incur for sending your product to us.

What you must do to maintain this warranty: Show original proof of purchase from an authorized ESCORT dealer.

Warranty Exclusions: Warranty does not apply to your product under any of the following conditions: 1. The serial number has been removed or modified. 2. Your product has been subjected to misuse or damage (including water damage, physical abuse, and/or improper installation). 3. Your product has been modified in any way. 4. Your receipt or proof-of-purchase is from a non-authorized dealer or internet auction site including E-bay, U-bid, or other non-authorized resellers. 5. You are not the original purchaser of the radar detector from an authorized dealer or did not receive it as a gift from the original purchaser of the radar detector from an authorized dealer.

To obtain service: 1. Contact ESCORT (1-800-543-1608) to obtain a Return Authorization number. 2. Properly pack

your product and include: your name, complete return address, written description of the problem with your product, daytime telephone number, and a copy of the original purchase receipt. 3. Label the outside of the package clearly with your Return Authorization number. Ship the product pre-paid (insured, for your protection) to: ESCORT Inc, 5440 West Chester Rd., West Chester, OH 45069.

LIMITATION OF WARRANTY: EXCEPT AS EXPRESSLY PROVIDED HEREIN, YOU ARE ACQUIRING THE PRODUCT "AS IS" AND "WHERE IS," WITHOUT REPRESENTATION OR WARRANTY. ESCORT SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY INCLUDING, BUT NOT LIMITED TO THOSE CONCERNING THE MERCHANTABILITY AND SUITABILITY OF THE PRODUCT FOR A PARTICULAR PURPOSE. ESCORT SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES INCLUDING, WITHOUT LIMITATION, DAMAGES ARISING OUT OF THE USE, MISUSE OR MOUNTING OF THE PRODUCT.

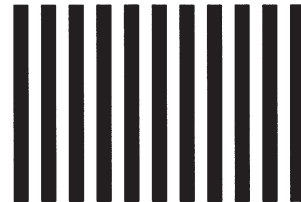
The above limitations or exclusions shall be limited to the extent they violate the laws of any particular state. ESCORT is not responsible for products lost in shipment between the owner and our service center.

Other legal rights: This Warranty gives you specific rights. You may have other legal rights, which vary, from state to state.

Remove card along perforations



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO 300 WEST CHESTER OH
POSTAGE WILL BE PAID BY ADDRESSEE

ATTN CUSTOMER SERVICE
ESCORT INC
5440 WEST CHESTER RD
WEST CHESTER OH 45069-9789

