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**ESCORT Live Compatible** 

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FCC NOTE:

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

FCC ID: QKLM7R, CONTAINS FCC ID: QKLBT2

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.

# The World's Most Advanced Detection System





Exclusive Digital LNA Design Delivers Extreme Range



Laser Shifters Provide Speed of Light Protection



True Stealth Operation Lets
You Drive 100% Undetected



ESCORT Live App Provides Crowd Sourced Alerts



GPS Intelligence Rejects False Alerts

Owner's Manual

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# **Installed Power. Precision.**

Your new ESCORT MAX Ci is the most advanced custom-installed radar and laser defense system ever designed.

The ESCORT MAX Ci includes multiple LNA (low noise amplifier) receivers using Ultra DSP (digital signal processing) for superior radar detection range and false alert filtering.

The included Laser ShifterMax shifters deliver the ultimate defense against all LIDAR laser guns, including new variable pulse rate guns. Also included is a full color OLED display and all the performance and features that only ESCORT can deliver.

In addition, the ESCORT MAX Ci contains the following revolutionary features:

- Updatable IVT Filter automatically reduces false alerts from moving In-Vehicle Technology systems and adaptive cruise control
- · GPS location-based intelligence automatically locks out false alerts and allows you to mark locations for future reference
- Exclusive TotalShield™ Technology makes the ESCORT MAX Ci totally undetectable by any radar detector detector (RDD)
- Access to ESCORT's DEFENDER Database, which warns you of verified speed traps, speed cameras and red light cameras
- Built-In Bluetooth technology gives you access to ESCORT's award-winning real-time ticket protection app, ESCORT Live!

Please drive safely.

# **Important Notes**

### Warning

Never, under any circumstances, look at the Laser ShifterMax sensors while they are powered on and operating. Do not view with optical instruments (like magnifiers).

#### **CLASS 1 LASER PRODUCT**

This product complies with IEC 60825-1:2007-03 Ed. 2.0

This product complies with 21CFR Subchapter J Parts 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50 dated June 24, 2007.

#### **Please Note**

This product may be limited or prohibited in some jurisdictions. Check applicable laws before using.

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

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# What's in the Box

#### **Front Radar Receiver**



#### Front Laser ShifterMax Sensors



### ShifterMax Bridge Box

**GPS Antenna** 





### **Display Module**

**Control Module** 



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#### Interface



Not shown: Concealed Alert Indicator Radio Mute Cable **Download Data Cable Documentation & Mounting Hardware** 

# Registration

Follow these steps to register your ESCORT MAX Ci. You will need the detector's serial number to complete the registration. To view the serial number, hold down the MRK and SEN buttons while powering on the detector.

- 1 Visit www.EscortRadar.com and click Product Registration.
- 2 Click the "Registration for all devices" link.
- 3 Follow the onscreen instructions to register your device.

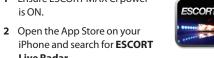
Be sure to write down the username and password you create, as you will need this information to access the ESCORT Live ticket protection app. (You will also receive an e-mail with this information. once you have registered your device.)

## **ESCORT Live**

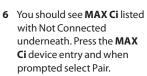
#### For iPhone:

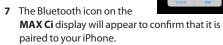
Live Radar.

1 Ensure ESCORT MAX Ci power is ON.



- 3 Follow the onscreen instructions to download **ESCORT Live Radar** and then open the app.
- 4 When prompted, enter the username and password you created when registering your product at EscortRadar.com.
- **5** Press the Settings button then select Devices.





#### For Android based smartphones:

- 1 Ensure ESCORT MAX Ci power is ON.
- 2 On your smartphone go to Bluetooth® Settings and make sure that Bluetooth® is ON.
- 3 Press Scan for devices and wait for the device list to populate, MAX Ci should appear under Available devices.
- 4 Press the MAX Ci device entry.
- 5 The Bluetooth icon on the ESCORT iX display will appear to confirm that it is paired to your smartphone.
- **6** Open Google Play on your smartphone and search for **Escort Live Radar.**



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- **7** Follow the onscreen instructions to download Escort Live Radar and then open the app.
- 8 When prompted, enter the username and password you created when registering your product at EscortRadar.com.
- 9 Open the app, walk through the tutorial, and you're ready to hit the road!



# **Controls & Features**

### Sensitivity (SEN)

The SEN button selects the ESCORT MAX Ci's radar sensitivity. The choices are:

**Highway** – Full sensitivity

**Auto** – Reduces X and K band sensitivity based on the speed of the vehicle

**AutoNoX** – Same as Auto but without X band detection

**AutoLoK** – Same as Auto but with lowered K band sensitivity at all times

# Power (PWR)

Press and hold to manually turn ESCORT MAX Ci on or off. If installed properly, the system will turn on or off automatically with the vehicle's ignition.

### Volume Button (VOL)

Press and hold the VOL button to adjust the alert volume level. The audio will ramp up or down accompanied by a bar-graph on the display. To change the direction of the audio ramping simply release the VOL button and quickly press and hold it again.

NOTE: Your preferred audio level will be stored in memory, even after the detector is turned off.

### **Control Module**



#### Mute Button (Mute)

The Mute Button has several functions depending on the scenario:

- Press to mute the audio for a specific alert.
- Press three times to lock out a false alert.
- Press twice while receiving a grey locked-out alert to unlock it.
- Press twice while Laser Shifting to put the sensors into receive-only mode for one minute. Laser Shifting must first be enabled, see Settings & Preferences.
- When connected to ESCORT Live press and hold mute button to manually report to other users a verified X or K-band alert, or a police officer observing traffic.

#### Mark Location Button (MRK)

The "MRK" button allows you to mark a specific location and label it for future reference. Once marked, the ESCORT MAX Ci will provide an alert before you reach this area again. This can be extremely useful when there are known speed traps or safety cameras in a particular location.

### **Display Brightness (BRT)**

The "BRT" button selects your preferred brightness level. The factory default setting is Auto (automatic), which will adjust the display brightness based on the ambient light in the vehicle.

### **Over Speed/Speed Limit**

Over Speed Alert setting that can be adjusted in Preferences. Displays Bluetooth icon when paired to phone, and posted speed limit for current location when connected to ESCORT Live app.







### **Concealed Alert Indicator**

- · Multi-color indicator is:
  - Briefly lit green at power up
  - Blinking red when receiving a front alert
- Blinking blue when receiving a rear alert (only with optional rear radar receiver)

## **Display Module**

### **Current Speed**

Shows current display or battery voltage when Speed Display is turned off in Preferences



# Alert Area •

ESCORT MAX Ci offers seven different settings for displaying front and rear alerts.

### **Threat-Direction Arrows**

Reports the direction an alert is coming from.



# **Settings & Preferences – Overview**

### **How To Use Preferences**

To access the Preferences menu, press and hold both the SEN and MUTE buttons. ESCORT MAX Ci will display "Preferences," indicating that it is in program mode.

Once in Preferences mode, the SEN button is used to review the preference categories, and the Up and Down buttons are used to change the individual settings within the selected category.

To exit the Preferences menu, press the power button or simply wait a few seconds without pressing any button. A "Completed" message will display, confirming your selection(s).

Press SEN to go from one category to the next		Press Up or Down to change your setting within a category
User Mode	Advanced* Novice	Access and customize all Settings and Preferences Access and customize units and display color, (all other Settings are set to factory defaults) NOTE: Switch to Advance mode to view all Preferences
		NOTE: SWITCH to Advance mode to view all Preferences
Pilot Mode	Scanning* Full Word	Scanning Bar with Full Word Full Word: Highway, Auto, AutoNoX, or AutoLoK
Display Color	Blue* / Green / Red / Amber	Set color to match your vehicle's dash intrumentation
Speed Display	On* Off	Displays current speed Displays battery voltage
Cruise Alert Over Speed	20 mph*, Off / 20-160 mph 70 mph*, Off / 20-160 mph	
Meter Mode	Standard Spec Expert Simple	Primary alert band, with bar graph of signal strength Single band with numeric frequency Multiple bands with bar graph of signal strengths Simple messages replace bands: Caution (if traveling below Cruise Alert limit) Slow Down (if traveling above Cruise Alert limit)
Tones	Standard* Standard+ Mild	Standard ESCORT alert tones Standard ESCORT alert tones for primary alert and double-beep tones for additional alerts Mild doorbell chime alert tones
AutoMute	Low/Med*/High/Off	Automatically reduces audio to preferred volume during alert
AutoLearn	On*/Off	Automatically stores and locks out false alarms
Units	English* / Metric	Units for distance and speed
Language	English* / Espanol	Language for voice and text
Voice	On*/Off	Voice announcements
GPS Filter	On*/Off	Enables GPS-powered features

AutoPower	Off 1 Hour 2 Hours 4 Hours* 8 Hours	When installed to a switched power supply, powers off with the vehicle's ignition Powers off automatically after 1 hour Powers off automatically after 2 hours Powers off automatically after 4 hours Powers off automatically after 8 hours Powers off automatically after 8 hours NOTE: AutoPower only works with constant power-ignition. If AutoPower is on, the display screen goes blank after 30 minutes to save screen life. Display screen will turn on automatically after you reach 10 mph	
Band Enables	Default* Modified	Default Settings for North America Customize the bands you want to monitor	
Press MUTE to go from one category to the next		Press Up or Down to change your setting w	rithin a category
X Band K Band Ka Band Ka-POP Laser TSR	On*/Off On*/Off On*/Off On/Off* On*/Off	Automatically rejects traffic flow sensor false al	larms
Shifters	Receive*/Shift/Off	Select the mode used by all shifters. Receive = receive-only mode	Notes: For descriptions of fea-
Marker Enables	Default* Modified	Default settings Customize the types of locations you want alerted to	tures and functions available when connected to ESCORT Live, visit EscortRadar.com To view serial number and
Press MUTE to go from one category to the next		Press Up or Down to change your setting within a category	software revision press MRK and SEN while powering on
Other Redlight Red & Speed Speed Camera Speed Trap Air Patrol	On* /Off On*/Off On*/Off On*/Off On*/Off On/Off*	Other location Red light camera Red light & speed camera Speed camera Speed trap Known aircraft patroled areas NOTE: User cannot mark an Air Patrol location	detector.  To restore ESCORT MAX Ci to its original factory settings, press and hold MRK and BRT while turning the power on. A Restored message will display, acknowledging the reset.
Clear Locations	Marked Lockouts Defender Format	Clear all user-marked locations. Press MUTE bu Clear all lockouts. Press MUTE button to confir Clear all DEFENDER Database data. Press MUTE Clear DEFENDER Database, all markers, and all Press MUTE button to confirm	m E button to confirm

\*Default Setting

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# **Settings & Preferences**

#### **User Mode**

ESCORT MAX Ci offers two unique user modes: **Advanced** 

In Advanced mode you can access and customize all settings and preferences.

Novice

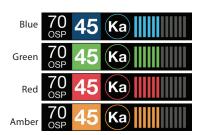
In this mode, you can only access and customize units (English or metric) and display color. All other preferences are set to the factory defaults. To view all settings and preferences, you must switch to Advanced mode.

#### Pilot Mode

You can select the pilot mode power-on indication of the unit. **Scanning Bar** shows an animated scanning bar along with the selected sensitivity mode. **Full Word** only displays the selected sensitivity mode.

### **Display Color**

Your detector screen can be displayed with blue, green, red or amber accents to match the dashboard lighting of various vehicles.



### **Speed Display**

ESCORT MAX Ci displays your current speed just to the right of the Over Speed Alert setting (or the posted speed limit for your current location, if connected to ESCORT Live). If speed display is OFF, your battery voltage will be displayed in this location.

Speed display ON Current speed



Speed display OFF: Battery voltage



#### Cruise Alert

While you are traveling below the specified Cruise Alert speed, all alerts will only sound a short double-beep. The alert will fully sound when you exceed the Cruise Alert speed. The factory default setting is 20 mph.

#### **Over Speed Alert**

You can set the Over Speed alert to notify you when you are traveling over a specified speed. When you travel above the speed threshold that you have set, the background display for your current speed will turn red and a voice prompt will announce that you have exceeded the set Over Speed limit. When using Escort Live with the ESCORT MAX Ci, the Over Speed setting is automatically set to the speed limit showing on the display. If no speed limit data is available from Escort Live, the Over Speed setting is used. The factory default setting is 70 mph.

#### **Meter Mode**

ESCORT MAX Ci offers seven different settings for displaying information about alerts. Standard FR1 is the factory default meter mode setting.

#### Standard



The Standard meter mode provides only the band information and signal strength information of a single alert. When radar is detected, the band (X, K or Ka) and a bar graph of the signal's strength are displayed. When laser is detected, the display will simply read "Laser." If there are multiple alerts present, only the highest priority threat is displayed. Laser is the highest priority threat, followed by Ka, K, then X band radar.

#### **SpecDisplay**



The SpecDisplay option is an advanced display for experienced detector users. In this mode, it will display the actual numeric radar frequency being received. Even long-time detector users will require some time to get familiar with this new level of information about detected signals. To use SpecDisplay instead of the Standard bar graph meter, select Spec in Preferences.

#### **ExpertMeter**



ESCORT's exclusive ExpertMeter option is also designed for the advanced detector user. In this mode, ESCORT MAX Ci simultaneously tracks up to four radar signals. It shows each band along with a bar graph of its signal strength. In the image above, a Ka band, K band and two X bands are being detected with the greyed out X band being a locked out false. ExpertMeter can help you spot a change in your normal driving environment (e.g., a traffic radar unit being operated in an area where there are normally other signals present).

### Simple



Simple messages replace actual bands and signal strengths or frequencies. "Caution" is used when an alert is received while you are traveling below your current Cruise Alert setting (or posted speed limit for your current location when connected to ESCORT Live). "Slow Down" is displayed when an alert is received while you are traveling above the current Cruise Alert setting (or posted speed limit of your current location, when connected to ESCORT Live).



# **Settings & Preferences**

#### **Alert Tones**

#### Standard

The factory default Standard alert tones uses a Geiger counter-type sound to indicate the signal strength and type of radar signal being encountered. When you encounter radar, a distinct audible alert will sound and will increase as the signal gets stronger. This allows you to judge the distance from the signal source without taking your eyes off of the road. Each band has a distinct tone for easy identification:

X band = beep tone

K band = brap tone

Ka band = double-brap tone

Laser = solid brap tone

Pop = solid brap tone

#### **Standard Plus**

Features the Standard alert tones outlined above for the primary alert, plus double-beep tones for additional alerts.

#### Mild

Mild alert tones offer softer, simpler alert tones that are less obtrusive to the driving experience:

- X band, K band, Ka band and POP = Doorbell chime
- Low signal strength = Double chime
- $\bullet \ \ High \ signal \ strength = Triple \ chime$
- If alert remains in area more than 15 seconds = Single chime (as a reminder)
- Laser = Solid brap tone

Since laser signals are a possible threat no matter how weak, laser alerts are always full strength.

#### AutoMute

Your ESCORT MAX Ci also includes ESCORT's patented AutoMute feature. Once ESCORT MAX Ci alerts you to a radar encounter at your selected volume level, it automatically reduces the volume to the selected AutoMute level. This keeps you informed without the annoyance of a continuous full-volume alert. If you prefer, you can turn the AutoMute feature off.

#### **AutoLearn**

The AutoLearn feature analyzes (over time) the source of radar signals by location and frequency. This allows ESCORT MAX Ci to determine if a fixed location signal is a real threat or a false one. If it determines that the signal is an automatic door opener, motion sensor, etc., it automatically locks out this source at this particular location. A "Stored" message will appear on the display when a signal has been automatically locked out. AutoLearn typically needs to encounter the exact frequency in the same location approximately three times to lock it out. Since some door openers are turned on and off routinely, some variations may occur. ESCORT MAX Ci will also unlearn signals to protect you from locking out real threats. If a particular signal is no longer present at a location that was previously locked out, ESCORT MAX Ci will unlock that signal. If you prefer, you can turn the AutoLearn feature off.

#### **GPS Filter/TrueLock**

ESCORT MAX Ci is equipped with a TrueLock GPS Filter to store and lock out, or ignore, fixed location false alerts in its memory. Common sources of fixed location false alerts are storefront automatic door openers and motion sensors. The TrueLock GPS Filter will not lock out moving false alerts that are commonly caused by vehicle's blind spot monitoring and collision avoidance systems.

#### **GPS Filter/TrueLock** continued

**Locking Out False Alerts** 

To manually lock out a fixed location false alert (X band, K band or laser only), press the MUTE button three times during an alert. Pressing the first time will silence the audio. Pressing a second time will generate a prompt on the display that will read "Lockout?" Press a third time to confirm you want to lock this signal out by location and frequency. A "Stored" message will be displayed. Once a signal has been stored, ESCORT MAX Ci will not audibly alert the next time you approach this area but will display the locked-out alert in grey.

Locked Out Alert





To unlock a signal that has already been stored, simply press the MUTE button twice while receiving the locked out alert. The display will read "Unlock?" when pressing MUTE the first time. Press the MUTE button again to unlock it from memory. The display will read "Unlocked" to confirm your action.

Note: When the GPS Filter is set to OFF, you do not have access to ESCORT MAX Ci's other GPS-enabled features (e.g., Defender Database alerts, marking locations, etc.).

#### **AutoPower**

This feature automatically turns off ESCORT MAX Ci after a set period of time to save unnecessary drain on your battery. This is especially useful if your vehicle has a constant-power ignition. To turn ESCORT MAX Ci on again you must press the power button.

Note: If AutoPower is on, to save screen life the display screen goes blank after 30 minutes without moving. The display screen will turn on automatically after you reach 10MPH.

#### **Band Enables**

In the factory default setting the suggested radar and laser bands for North America are monitored and sources of some common false alerts are rejected. It is highly recommended that you use your ESCORT MAX Ci in this mode.

If you modify Band Enables then this setting will show Modified. The ESCORT MAX Ci will also notify you during the startup sequence with an audible alert, and associated text message stating which bands have changed from the factory default settings.

WARNING: Do not turn off any bands unless you are absolutely certain there are no traffic radar guns using that specific band in your area.

#### **Shifters**

ESCORT MAX Ci is equipped with two front Laser ShifterMax sensors. Additional sensors, including rear sensors, can be added to the ESCORT MAX Ci. These highly sensitive laser transceivers will detect a laser signal and, when Shifting is enabled, will respond (or transmit) a pulsed signal back in order to "Shift" or confuse the targeting laser gun.

The MUTE button can be used to manually shut off Laser Shifting once you have checked your speed. Since some laser guns provide "jamming" codes for the officer, this can be useful to avoid any undue attention. Simply press the MUTE button twice during a laser alert. All Shifters will cease to transmit and the display will change from "Shifting" to "Laser". "Laser" indicates that you are receiving a laser alert in "Receive Only" mode.

The Shifters will remain in the "Receive Only" mode for approximately sixty seconds, giving you time to pass the speed trap. Once this time has expired a double beep tone will be given, indicating that the Shifters are now back in "Shifting" mode.

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# **Settings & Preferences**

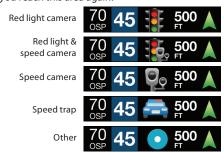
#### **Marker Enables**

In the factory default setting, the suggested fixed location alerts are reported. It is highly recommended that you use your ESCORT MAX Ci in this mode.

If you modify Marker Enables then this setting will show Modified and only the Markers that you have selected are reported.

#### **Marking Locations**

The MRK button allows you to mark a specific location and label it for future reference. Once marked, ESCORT MAX Ci will provide an alert when you reach this area again.



ESCORT MAX Ci gives an advanced warning of upcoming markers at the following distances:

- Red light cameras: 250 ft or 10 seconds
- Red light & speed cameras: 250 ft or 10 seconds
- **Speed cameras**: 500 ft when traveling below 55 mph; 1,000 ft when traveling above 55 mph
- Speed traps: 0.3 mi or approximately 1,584 ft
- Other: 500 ft when traveling below 55 mph; 1,000 ft when traveling above 55 mph

To mark a location, press the MRK button. The display will read "Mark?" Press MRK again to bring up a menu of markers to choose from.

Repeatedly press MUTE to scroll through the markers then press MRK to select the marker that you wish to use at this location. The display will read "Marked!"

Air Patrol locations cannot be marked by the user.

Note: When a location is marked the first time, you must travel at least 1 mile away from that location to receive an alert when you return to the area.

To unmark a location, touch the MRK button when you are receiving a marked-location alert. The display will read "Unmark?" Touch the MRK button again to confirm. The display will read "Unmarked!"

#### **Clear Locations**

At some point, you may wish to clear some of the data in ESCORT MAX Ci's database. This may include any of the following: Defender Database data, Marked locations or false alert Lockouts. To clear all data in ESCORT MAX Ci's database. select Format then press MUTE to confirm.

### **Restore factory Settings**

To restore ESCORT MAX Ci to it's original factory settings, press and hold MRK and BRT while turning the power on. A Restored message will display, acknowledging the reset.

#### **Serial Number and Software Version**

To view your ESCORT MAX Ci's serial number and software revision, press and hold the MRK and SEN buttons while powering on the detector.





# **Understanding Your Detector**

Although the ESCORT MAX Ci has a comprehensive warning system and this Manual is as complete as we can make it, only experience will teach you what to expect from your detector 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 affects the radar alerts you receive.

The following examples will give you an introduction to understanding the detector warning system for radar, laser and safety alerts.

Alert	Explanation
Detector begins to sound slowly; rate of alert increases until it becomes a solid tone. The signal meter ramps accordingly.	You are approaching a continuous radar source aimed in your direction.
Detector emits short alerts for a few seconds then falls silent, only to briefly alert and fall silent again.	An instant-on radar source is being used ahead of you and out of your view.
Detector suddenly sounds a continuous tone for the appropriate band received.	An instant-on radar or laser source is being used nearby. This kind of alert requires immediate attention.
Detector sends a brief laser alert.	Laser is being used in the area. Because laser is inherently difficult to detect, any laser alert may indicate a source very close by.
Detector receives weak signals. Signals may be a little stronger as you pass large, roadside objects. Signals increase in frequency.	A moving patrol car with continuous radar is over- taking 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.
Detector alerts slowly for a while then abruptly jumps to a strong alert.	You are approaching a radar unit concealed by a hill or an obstructed curve.

Alert	Explanation
Detector alerts intermittently. Rate and strength of alerts may be consistent or vary wildly.	A patrol car is traveling 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.
Detector alerts intermittently; rate and strength of signal increases with each alert.	A patrol car is approaching from the other direction, sampling traffic with instant-on radar. Such alerts should be taken seriously.
Detector gives an X band alert intermittently.	You are driving through an area populated with radar motion sensors (e.g., door openers or burglar alarms). 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: Overconfidence 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.

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# **Understanding Your Detector**

#### **How Radar Works**

Traffic radar, which consists of microwaves, 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.

Because intrusion alarms and motion sensors often operate on the same frequency as X, and K-band radar, your detector 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 device's radar detection abilities are fully operational.

#### How "POP" Works

POP 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 radar gun manufacturers, tickets should not be issued in pop mode.

### **How Laser (Lidar) Works**

Laser speed detection is actually light detection and ranging (LIDAR). Laser guns project a beam of invisible infrared light. The signal is a series of very short infrared light energy pulses that move in a straight line, reflecting off your car and returning to the gun. Laser 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.

Laser is a newer technology whose use is not as widespread as conventional radar; therefore, you may not encounter it on a daily basis. And unlike radar detection, laser is not prone to false alarms. Because laser 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 laser, however. Laser is much more sensitive to weather conditions than radar, and a laser gun's range will be decreased by anything affecting visibility, such as rain, fog or smoke. A laser gun cannot operate through glass, and it must be stationary to get an accurate reading. Because laser must have a clear line of sight and is subject to cosine error (an inaccuracy that increases as the angle between the gun and the vehicle increases), police typically use laser equipment parallel to the road or from an overpass. Laser can be used day or night.



# **Understanding Your Detector**

### **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.

### **How Total Shield Works**

ESCORT's TotalShield Technology keeps RF signals from radiating from the detector. Unlike other radar and laser detectors, which merely move their RF signals (local oscillators) to another frequency (which will be detectable by future detector-detectors), this revolutionary design keeps you unseen by current radar detector-detectors, including VG-2 and Spectre. This unique design will also keep you unseen from any future radar detector detectors as well.

Although the ESCORT MAX Ci is a completely undetectable radar, laser and safety detector, driving techniques and reactions to alerts can still draw unwanted attention. Here are a few examples:

- Hitting the brakes immediately when the ESCORT MAX Ci provides an alert can broadcast use of a detector.
- 2. Traveling at night with a glow from a radar detector's display visible from outside your vehicle can also draw unwanted attention. The ESCORT MAX Ci offers adjustable brightness, including a full dark mode which will provide audio alerts, but no visual indication.

### TSR Signal Ranking Software

Your radar detector includes a new optional boost in anti-falsing software to eliminate excessive alerts from erroneous X and K-band sources. One example of this is traffic flow monitoring systems. These systems, which are becoming more widely used in several countries, generate K-band signals to measure the flow of traffic on a given road. Unfortunately most detectors see this as a real threat and will alert you to it unnecessarily. Our new proprietary software (TSR), intelligently sorts, ranks and rejects this type of false alarm automatically. The result is ultimate protection without excessive false alarms.

The TSR software is set up as an option and can be activated through the Programming section. We suggest you turn TSR on if you are experiencing extreme false alerts in your area. If not, your detector is ready to start protecting you right out of the box.

If you have any questions about this new feature, please give us a call or visit our website for more details.



# **Troubleshooting**

Problem	Solution
Detector beeps briefly at the same location every day, but no radar source is in sight.	A motion sensor or intrusion alarm is located within range of your route. If you have AutoLearn enabled, the factory default setting, then ESCORT MAX Ci will store this signal after about 3 passes and no longer alert to it.
Detector did not alert when a police	Officer may not have radar or laser unit turned on.
car was in view.	VASCAR (Visual Average Speed Computer and Recorder), a stopwatch method of speed detection, may be in use.
Detector's audible alerts become softer after the first few alerts.	Detector is in AutoMute mode. See "AutoMute" in the Settings & Preferences section for details.
The power-on sequence reoccurs while you are driving.	A loose power connection can cause ESCORT MAX Ci to be briefly disconnected and will retrigger the power-on sequence. Check all connections.
You wish to restore the factory default settings.	Press and hold the MRK and BRT buttons while powering on the detector. A "Factory Settings Restored" message will display, acknowledging the reset.
The device will not turn on.	Check that vehicle ignition is on.
The display is blank.	ESCORT MAX Ci is in Dark mode. Press the BRT button to adjust the brightness.
Detector displays "Check FR"	There is a communication issue with the Front Receiver (FR). The Front Receiver's connections and wiring should be checked. If no connection or wiring issue is found and the message persists there may be an issue with the component.
Detector displays "Replace FR"	A critical issue has been reported from the Front Receiver (FR) requiring it to be replaced or repaired.

# **Service Procedure**

### **Service Procedure**

If your ESCORT MAX Ci 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 Contact your installing dealer. They will evaluate your unit and arrange repairs if necessary.





# **Warranty**

### **ESCORT One Year Limited Warranty**

### **Three-Year Limited Warranty with** installation by authorized installer

What this warranty covers: Escort, Inc. ("Escort") warrants your Product against all defects in materials and workmanship.

For how long: One (1) year from the date of original purchase from an authorized Escort dealer or three (3) years from the date of original purchase when installed by an authorized Escort installer. For a list of authorized Escort installers, see the following

https://www.escortradar.com/dealer-locator/

What we will do: If a breach of warranty occurs, Escort, at its 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 and proof of installation by an authorized Escort installer to be eligible for three years of warranty coverage.

Warranty exclusions: This 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 Product from an authorized dealer or did not receive it as a gift from the original purchaser of the Product 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 proof of purchase or receipt. 3. Label the outside of the package clearly with your Return Authorization Number. Ship the Product pre-paid (insured, for vour protection) to: Escort, Inc., 5440 West Chester Rd., West Chester, OH 45069.

**LIMITATION OF WARRANTY:** The obligations set forth above are Escort's sole obligations and your exclusive remedy. Escort makes no other express warranty. Any implied warranty of merchantability or fitness for a particular purpose that may be applicable to the Product is limited in duration to the duration of this warranty. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. 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. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Escort is not responsible for products lost in shipment between the owner and our service center.

Other legal rights: This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

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EscortRadar.com

@www

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Place of Purchase\_

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