Congratulations!

Your new Road Tech 75 detector is the most advanced custom motorcycle-mounted radar detector available.

The Road Tech 75 detector includes full X, K, SuperWide Ka, including new "POP" mode, radar protection, Laser, Digital Signal Processing for superior range and improved anti-falsing, our patented Mute and AutoMute, audible and visual band alerts, and all the performance you'd expect from Escort.

In addition, the new Road Tech 75 Detector introduces a new level of open-road performance and motorcycle specific features.

- Turbo-Charged radar receiver for long-range warning
- Multiple laser sensors for advanced laser range
- Left-hand design for easy access while you ride
- Exclusive EZ-Programming lets you instantly set 8 features
- Exclusive AutoSensitivity mode, plus "Highway" and "City" settings
- 280 LED Ultra-bright Text-Matrix display for easy to read messages
- Exclusive ExpertMeter tracks and displays up to 8 radar signals
- Exclusive VG-2 Alert/Auto Shutoff

If you've used a radar detector before, a review of the “Quick Reference Guide” on page 4, and the “Customize Road Tech with EZ Programming” on page 12 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 new Road Tech 75 Detector. Please ride safely.

Laws and regulations regarding the ownership and operation of radar detectors vary from place to place. Check state and local laws and regulations.

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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Quick Reference Guide

Once the mount has been installed by an authorized dealer, simply slide the detector onto the mount. When properly done, the detector will lock into the mount. Note that the mount has two locks; primary and secondary.

**Volume Control**
Adjust the volume by pressing the VOL up or down buttons located on the top.

**EasyMount**
Slide the Road Tech 75 Detector onto the mount. See page 6.

**AutoMute**
Patented AutoMute feature automatically reduces the volume level of the audio alert. If you prefer, you can turn AutoMute off. See page 8.

**Power/Mute**
Press the Power/Mute button, to turn the detector on/off. You may also program the detector to turn on/off with the ignition.

Briefly press the Power/Mute button during an alert to silence the audio for that specific alert. See page 8.

**CITY Button**
Selects between AutoSensitivity, City and Highway sensitivity. In general, we recommend Auto mode. See page 8.

**Radar Antenna and Laser Lens**
The back of your Road Tech 75 Detector should have a clear view of the road ahead. See page 6. For best performance, do not place anything between your detector and the fairing.

**DIM Button**
Press to adjust display brightness. There are three brightness settings, plus full Dark Mode.
**Quick Reference Guide**

**Dark Mode**
In the Dark mode, the power-on indication will be changed to a very dim AD, HD, or CD (indicating Auto, Highway, or City Dark). In the Dark mode, the Road Tech 75's meter will not display during an alert, only the audio will alert you. See page 9.

**EZ Programming**
The Road Tech 75 Detector is ready to go, simply slide it onto the installed mount and turn it on. But you can also easily change 8 features for your riding preferences. Press both the **DIM** and **CITY** buttons to enter the Program mode, then easily Review or Change your settings. See page 9.

**Matrix Display**
The Road Tech 75's display will show "Highway," "Auto," or "City" as its power-on indication. See page 9.

If you prefer, you can choose other power-on indications. See "PILOT LIGHT (Power-on indication)" on page 14. During an alert, the display will indicate radar band, and a precise bar-graph of signal strength. See "SIGNAL STRENGTH METER" on page 14.

**NOTE**
In the Dark mode the display will not light during an alert. See page 9. You can program the Road Tech 75 for the ExpertMeter, which displays up to 8 radar signals at once. See page 10. The display can also show safety radar text messages. "SWS Safety Radar Text Messages" on page 26.
Installation

Power and Audio Connection
To power the Road Tech 75, simply slide the detector onto the installed mount. Power and audio connections are made through the integrated mount.

NOTE
Road Tech 75 operates on 12 volts DC negative ground only.

Mounting
Obtain the appropriate Road Tech Radar Detector mounting kit for your model motorcycle from a local Harley-Davidson dealer. Install the mounting kit per the instructions included in the kit.

1. Once the mounting kit has been installed on the motorcycle, position the detector to the mounting bracket with the controls facing up.
2. Slide the detector into the bracket until tab on detector fully engages with two sharp clicks.

NOTE
If the detector does not fasten with two definite clicks, it could slide off the bracket and fall to the pavement while the motorcycle is in motion.
Controls and Mounting of the Road Tech Detector
Controls and Features

Power and Mute: To turn the Road Tech 75 on, simply press and hold the large round button located on the top of the detector. To turn Road Tech off, simply press and hold again. This button also provides audio Mute capability. During an alert, momentarily press this button to silence the audio for that specific signal. Once that signal has passed, the audio will return to the volume level you selected.

Power-on Indication: After the Road Tech 75’s start-up sequence is complete, the matrix display will show “Highway”, “City”, or “Auto” to show which sensitivity mode is selected. If you prefer, you can select alternate power-on indications. See the EZ Programming section for details.

Volume Adjust: To adjust the audio volume on the Road Tech 75, simply press the VOL up button to increase or press the VOL down button to decrease the audio level. A corresponding bar graph will be displayed to show you where the volume is set. Your volume setting is stored in memory.

AutoMute: Your Road Tech 75 has Escort’s patented AutoMute feature. After it alerts you to a radar encounter at the full volume, it will automatically reduce the volume to a lower level. This keeps you informed without the intensity of a continuous full-volume alert. If you prefer, you can turn the AutoMute feature off. See the EZ Programming section for details.

Highway / Auto / City Switch: The CITY button selects the Road Tech 75’s sensitivity mode. We recommend the Auto (AutoSensitivity) mode for most riding.

Road Tech’s AutoSensitivity mode provides long-range warning, without false alarms from automatic door openers etc. In this mode, the internal computer...
Controls and Features

continuously analyzes all incoming signals and intelligently rejects false alarms.

You can also select Highway and City modes. When riding in urban areas where intense X-band intrusion alarms and door openers are common, City mode can be engaged to lower X-band sensitivity and reduce X-band alerts. Full sensitivity is maintained on all other bands.

You can customize the City mode sensitivity. See the EZ Programming section for details.

**Dim:** The Road Tech 75's DIM button selects the brightness of the display. There are four settings: Maximum, Medium, Minimum, and Dark. Press the DIM button to select your preferred brightness. Each time you turn the detector on, it automatically selects the brightness setting you last used.

**Dark Mode:** When you select Dark mode using the DIM switch, the display changes to a very inconspicuous power-on indication: a very dim "AD", "HD", or "CD". (In this display, the "A," "H" or "C" indicates Auto, Highway, or City, and the D indicating Dark.)

When the detector is in the Dark mode, the display will not show visual alerts when it detects signals. Only the audible alert will tell you of detected signals.

**Audible Alerts:** For Radar signals: The Road Tech 75 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.

*NOTE* Since Laser and “POP” signals are a possible threat no matter how weak, the Road Tech 75 alerts you to these with a full alert.
Controls and Features

Signal Strength Meter: The Road Tech 75's matrix display consists of 280 individual LED's, to provide an intuitive ultra-bright display of signal strength and text messages. When the Road Tech 75 detects radar, it displays the band of the radar (X, K, or Ka), and a precise bar graph of signal strength. When Road Tech detects laser or POP, the display will show “LASER” or “POP”.

NOTE
If you are operating the Road Tech 75 in the Dark mode, the display will not light when a signal is detected- only the audio will alert you.

ExpertMeter: The Road Tech 75’s ExpertMeter option is an advanced display for experienced detector users. Please use the detector 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 the EZ Programming section. See page 12.

The Road Tech 75’s standard signal strength meter only displays information about a single radar signal. If there are multiple signals present, the Road Tech 75’s internal computer determines which one is the most important threat to show on the bar graph meter. However, the Road Tech 75’s ExpertMeter simultaneously tracks up to 8 radar signals. It shows you 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 riding 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, its relative frequency within the band, and its signal strength.

KA || K || X ||

Above is the ExpertMeter display if the Road Tech 75 was detecting 2 strong Ka-band, 2 strong K-band, and 4 strong X-band signals.
Controls and Features

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. The position of the line shows the relative frequency of the signal within the band.

**NOTE**
If you use ExpertMeter, the brief signal shown in the power-on sequence when you turn on your Road Tech 75 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.

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

\[ KA | X | \]
Here ExpertMeter shows 1 weak Ka-band signal, and three weak X-band signals.

\[ X | X | X | \]
On very weak signals, there will not be a vertical line at all. This shows a very weak X-band signal.

**ExpertMeter Details:** The band designators (X, K, and 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 and instantaneous view of all radar signals present.

**NOTE**
Even long-time detector users will require a significant time to get familiar with this new level of information about detected signals.
Customize Road Tech with EZ Programming

There are 8 user-selectable options so you can customize your Road Tech 75 for your own preferences. The CITY and DIM buttons are used to enter the Program mode, to review your current program settings, and to change any settings as desired. "Details of EZ Programming Options" on page 16 will explain each option in more detail.

How to use EZ Programming

1. To enter Program mode, hold both the CITY and DIM buttons down for 2 seconds. (The unit will beep twice, and will display "Program").

2. Then press the REVIEW 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 CHANGE 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 leave the Program mode, simply wait 8 seconds without pressing any button. (The unit will display "Complete", beep 4 times, and return to normal operation.)

(To quickly return to the all of the factory defaults, hold the CITY, DIM buttons down while turning on the unit.)
Customize Road Tech with EZ Programming

**Example of Programming**

Here is how you would turn the Road Tech 75’s AutoMute feature off.

1. Enter the Program mode by holding the **CITY** and **DIM** buttons down for 2 seconds. The Road Tech 75 will beep twice and display “Program”.

2. Then hold the **REVIEW** button down. The Road Tech 75 will scroll through the categories, starting with Pilot Light (“Pilot”), then Power-up (“Pwr Auto”), then Power-On Sequence (“PwrOn”), then Signal Strength Meter (“Meter”), and then AutoMute (“aMute”).

3. Release the **REVIEW** button when the Road Tech 75 shows the AutoMute item. Since the factory setting is for AutoMute to be on, the Road Tech 75 will display “aMute ON”. (If you accidentally don’t release the **REVIEW** button in time, and the Road Tech 75 goes to the next category, simply continue to hold the **REVIEW** button down until it scrolls through all categories. It will begin again at the top of the list.)

4. Press the **CHANGE** button to change from aMute ON to aMute OFF.

5. To complete the Programming, simply wait 8 seconds without pressing any button. The Road Tech 75 will display “Complete”, beep 4 times, and return to normal operation.
Customize Road Tech with EZ Programming

Overview of EZ Programming Options

Press the REVIEW button to go from one category to the next.
Press the CHANGE button to change your setting within a category.

PILOT LIGHT
(Power-on indication)
- Pilot HWY * (full word: Highway or Auto or City)
- Pilot H (letter: H or Auto or C)
- Pilot H.> (letter, with scanning dot)
- Pilot V (motorcycle voltage)

POWER-UP
- Pwr Auto *(power on with the Motorcycle)
- Pwr Man (power on manually)

POWER-ON SEQUENCE
- PwrOn STD *(standard power-on sequence)
- PwrOn FST (fast power-on sequence)

SIGNAL STRENGTH
- Meter STD *(standard bar-graph)
- Meter EXP* (Expert Meter)

AUTOMUTE
- aMute ON *(automute on)
- aMute OFF (automute off)

CITY MODE SENSITIVITY
- City STD *(Standard City mode sensitivity)
- City LoX (low X-band sensitivity in City mode)
- City NoX (No X band sensitivity in City mode)

DARK MODE
- Dark STD (provides dim HD, AD, or CD)
- Dark ALL (All dark, no visual indications)
Overview of EZ Programming Options

**BANDS**

- Bands DFT (Factory defaults)
- Bands MOD (Factory defaults modified)

(turn bands on or off by pressing the **Power/Mute** button)

- X On or Off (default is on)
- K On or Off (default is on)
- Ka On or Off (default is on)
- POP On or Off (default is off)
- Laser On or Off (default is on)
- SWS On or Off (default is off)
- VG2 On or Off (default is off)

*These are Road Tech 75's factory settings*
Customize Road Tech with EZ Programming

Details of EZ Programming Options

Pilot Light (power-on indication):

NOTE
When you are using the Dark mode, the display will only show “HD”, “AD”, or “CD” (Highway-Dark, Auto-Dark, or City-Dark).

Pilot HWY (full description)
In this setting, Road Tech 75 will display “Highway,” “City,” or “Auto” as its power-on indication. (factory default)

Pilot H (letter)
In this setting, Road Tech 75 will display “H” for Highway, “C” for City, and “A” for Auto.

Pilot H.> (Letter with scanning dot)
In this setting, Road Tech 75 will display “H” for Highway, “C” for City, and “A” for Auto. Also, a single dot will continuously scroll across the display.

Pilot V (motorcycle voltage)
In this setting, Road Tech 75 will continually display “H” for Highway, “C” for City, and “A” for Auto, and the motorcycle voltage. If the motorcycle voltage drops below 9.0 volts, a low voltage warning is displayed, followed by an audible alert. A high voltage warning is also given if the voltage goes above 15.0 volts.

Power-Up:

PwrAuto (standard)
In this setting, Road Tech 75 will turn on or off automatically with the bike’s ignition.

PwrMan (manually)
In this setting, Road Tech 75 will need to be turned on with the top-mounted Power/Mute button.
Details of EZ Programming Options

Power-On Sequence:
- PwrOnSTD (standard)
  In this setting, each time the Road Tech 75 comes on, it will display “Road Tech”, “75”, “LASER”, “Ka-band”, “K-band”, “X-band”, followed by a brief X-band alert. (factory default)
- PwrOnFST (fast power-on)
  In this setting, each time you turn on Road Tech 75, it will display a brief X-band alert.

Signal Strength Meter:
- MeterSTD (standard meter)
  In this setting, the meter displays the band of the received signal, and a bar graph showing the relative signal strength. (factory default)
- MeterEXP (Expert Meter)
  In this setting, the meter simultaneously tracks multiple radar signals. It shows up to 2 Ka band, 2 K band, and 4 X band signals.

  The ExpertMeter feature is explained in more detail on page 10.

AutoMute:
- aMute ON (automute on)
  In this setting, the Road Tech 75’s audio alerts will initially be at the volume you’ve set, but after a few seconds, the audio will automatically reduce the volume level, to keep you informed, but at a lower volume. (factory default)
- aMuteOFF (automute off)
  With AutoMute off, Road Tech 75’s audio alerts will remain at the volume you set for the duration of the radar encounter.
Customize Road Tech with EZ Programming

Details of EZ Programming Options

City Mode Sensitivity:
City STD (Standard)
In this setting, when you put the Road Tech 75 in the City mode, X-band sensitivity is significantly reduced, to reduce false alarms from X-band intrusion alarms and motion sensors. (factory default)

City LoX (Low X band sensitivity)
In this setting, when you put Road Tech 75 in the City mode, X-band sensitivity is reduced more than the standard setting. This will reduce X band alarms from other sources even further, but also significantly reduces range to X band traffic radar.

City NoX (No X band sensitivity)
In this setting, when you put Road Tech 75 in the City mode, Road Tech will not respond to any X band signals.

NOTE
Only choose this setting if you are absolutely certain that there are no X band traffic radar units where you ride.

Dark Mode:
Dark STD (standard)
In this setting, when you select dark mode in programming, the only visual indication will be a very dim HD, AD, or CD, indicating the sensitivity setting and that the detector is in the dark mode. (Highway-Dark, Auto-Dark, or City-Dark) (factory default)

Dark ALL (completely dark)
In this setting, when you select dark mode in programming, the Road Tech 75 will become totally dark. This means that there will be no alert lamp or display indication. However, during start-up, a brief “Dark All” message will appear, notifying the user that the detector is in this mode.
Customize Road Tech with EZ Programming

Details of EZ Programming Options

Bands:
BandsDFT
In this setting the recommended radar and laser frequencies are monitored. This is the factory setting, and it is recommended that you use your Road Tech 75 in this mode.

BandsMOD
In this setting, the Road Tech 75 will warn you with an audible alert, and associated text message stating which band has changed from the original factory setting (i.e. “POP ÓN”). This warning is displayed during the start up sequence (standard or fast).

NOTE
Do not turn off a band unless you are absolutely certain that there are no traffic radar units using that specific band in your area.
Interpreting Alerts

Although the Road Tech 75 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 Road Tech 75 detector and how to interpret what it is telling you. The radar alerts you receive are affected by the specific type of radar being used, the type of transmission (continuous or instant-on) and the location of the radar source.

The following examples will give you an introduction to understanding the Road Tech 75’s warning system for radar, laser and safety alerts.

<table>
<thead>
<tr>
<th>Alert</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Tech 75 begins to sound slowly and then the rate of alerts increases until the alert becomes a solid tone. The Signal Meter ramps accordingly.</td>
<td>You are approaching a continuous radar source aimed in your direction.</td>
</tr>
<tr>
<td>Road Tech 75 emits short alerts for a few seconds and then falls silent only to briefly alert and fall silent again.</td>
<td>An instant-on radar source is being used ahead of you and out of your view.</td>
</tr>
<tr>
<td>Road Tech 75 suddenly sounds a continuous tone for the appropriate band received. All segments in the Signal Strength Meter are lit.</td>
<td>An instant-on radar source or laser source is being used nearby. This kind of alert requires immediate attention!</td>
</tr>
<tr>
<td>A brief laser alert.</td>
<td>Laser is being used in the area. Because laser is inherently difficult to detect, any laser alert may indicate a source very close by.</td>
</tr>
</tbody>
</table>
## Interpreting Alerts

<table>
<thead>
<tr>
<th>Alert</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Tech 75 receives weak signals. These signals may</td>
<td>A moving patrol car with continuous radar is overtaking you from behind.</td>
</tr>
<tr>
<td>be a little stronger as you pass large, roadside objects.</td>
<td>Because these signals are reflected (reflections are increased by large</td>
</tr>
<tr>
<td>The signals increase in frequency.</td>
<td>objects), they may or may not eventually melt into a solid point even when</td>
</tr>
<tr>
<td></td>
<td>the patrol car is directly behind you.</td>
</tr>
<tr>
<td>Road Tech 75 alerts slowly for awhile and then abruptly</td>
<td>You are approaching a radar unit concealed by a hill or an obstructed curve.</td>
</tr>
<tr>
<td>jumps to a strong alert.</td>
<td></td>
</tr>
<tr>
<td>Road Tech 75 alerts intermittently. Rate and strength of</td>
<td>A patrol car is traveling in front of you with a radar source aimed forward.</td>
</tr>
<tr>
<td>alerts may be consistent or vary wildly.</td>
<td>Because signals are sometimes reflected off of large objects and sometimes</td>
</tr>
<tr>
<td>Road Tech 75 alerts intermittently.</td>
<td>not, the alerts may seem inconsistent.</td>
</tr>
<tr>
<td></td>
<td>A patrol car is approaching from the other direction, sampling traffic with</td>
</tr>
<tr>
<td></td>
<td>instant-on radar. Such alerts should be taken seriously.</td>
</tr>
</tbody>
</table>
Interpreting Alerts

<table>
<thead>
<tr>
<th>Alert</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Tech 75 gives an X-band alert intermittently.</td>
<td>You are riding 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.</td>
</tr>
</tbody>
</table>

**CAUTION**

Since the characteristics of these alerts may be similar to some of the preceding examples, 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.
Detection Technology

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 motorcycle travels into range, the microwave beam bounces off your motorcycle, 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 motorcycle 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 car or motorcycle 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 car or motorcycle and its proximity to the antenna, it is difficult for the radar operator to determine if the signal is from a car or motorcycle 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-band and K-band radar, your Road Tech 75 will occasionally receive non-police radar signals. Since these X-band and K-band transmitters are usually contained inside of buildings 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 riding, they will serve as confirmation that your Road Tech 75’s radar detection abilities are fully operational.
Detection Technology

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 and motorcycles 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, which is required by law.

How Laser 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 motorcycle and returning to the gun.

LIDAR uses these light pulses to measure the distance to a motorcycle. 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 motorcycle increases) police typically use LIDAR equipment parallel to the road or from an overpass. LIDAR can be used day or night.
How Safety Radar Works

From the factory, your Road Tech 75 is programmed with Safety Warning System (SWS) decoding OFF. If SWS is used in your area, your Road Tech 75 will display these signals as K-band radar signals instead of safety radar unless you use the EZ Programming to turn Road Tech 75’s SWS decoding ON.

The SWS safety radar system has 64 possible messages (60 currently allocated). The SWS messages displayed on your Road Tech are listed below.

NOTE
Some of the safety messages have been condensed, so each message can be displayed on one or two screens on Road Tech 75’s eight character display.

Since SWS is relatively new and the number of transmitters in operation is not yet widespread, you will not receive SWS alerts on a daily basis and should not be surprised to encounter emergency vehicles, road hazards and railroad crossings that are unequipped with these transmitters and, therefore, fail to provide a signal.
<p>| | | | |</p>
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<td>WorkZone</td>
<td>23</td>
<td>Deer Crossing</td>
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<td>Road Closed</td>
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<td>Blind or Deaf Kid</td>
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<td>MustExit</td>
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<td>Emergency Vehicle</td>
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<td>10</td>
<td>CenterLane Closed</td>
<td>32</td>
<td>Future use</td>
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<tr>
<td>11</td>
<td>LeftLane Closed</td>
<td>33</td>
<td>HighWind</td>
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<td>BridgeUp</td>
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<td>Roadice</td>
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<td>18</td>
<td>RockSlide Area</td>
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<td>48 Reduced Speed</td>
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<td>27</td>
<td>Insp Stn</td>
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<td>DON'T Pass</td>
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<td>Dangerous Intrsect</td>
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<td>Emergency Vehicle</td>
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<td>Future use</td>
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<td>30 Min Delay</td>
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<td>32</td>
<td>HighWind</td>
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<td>Severe Weather</td>
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<td>Pay Toll</td>
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<td>35</td>
<td>Flooding</td>
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<td>Trucks ExitRight</td>
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<tr>
<td>36</td>
<td>BridgeCle</td>
<td>59</td>
<td>Trucks ExitLeft</td>
</tr>
<tr>
<td>37</td>
<td>Roadice</td>
<td>60</td>
<td>Future use</td>
</tr>
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<td>38</td>
<td>Dust Blowing</td>
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<td>Blinding Snow</td>
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<td>Future use</td>
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<td>Slow Moving Vehicle</td>
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<td>42</td>
<td>RestArea</td>
<td>65</td>
<td>RestArea w/service</td>
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</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Tech 75 beeps briefly at the same location every day, but no radar source is in sight.</td>
<td>An X-band motion sensor or intrusion alarm is located within range of your route. With time, you will learn predictable patterns of these signals. Road Tech 75 may be in City mode.</td>
</tr>
<tr>
<td>Road Tech 75 does not seem sensitive to radar</td>
<td>VASCAR, (Visual Average Speed Computer and Recorder) a stopwatch method of speed detection, may be in use or the officer may not have radar or laser unit turned on.</td>
</tr>
<tr>
<td>Road Tech 75 did not alert when a police car was in view.</td>
<td>Safety transmitters may not be commonly used in your area.</td>
</tr>
<tr>
<td>Road Tech 75 did not provide a Safety signal while within range of an emergency vehicle.</td>
<td>Press the DIM button to deactivate Dark mode.</td>
</tr>
<tr>
<td>Road Tech 75’s display is not working</td>
<td>Road Tech 75 is in AutoMute mode. See page 17.</td>
</tr>
<tr>
<td>Road Tech 75’s audible alerts are less loud after the first few alerts.</td>
<td>Road Tech 75 may not be fully engaged to the mount. Check connection or contact your dealer.</td>
</tr>
<tr>
<td>Road Tech 75's power-on sequence reoccurs while you are riding.</td>
<td>You can return all of the programming options to the factory defaults by holding down the CITY and DIM buttons while you turn Road Tech 75 on.</td>
</tr>
<tr>
<td>Your 14-year old son has changed all 8 of the EZ programming options.</td>
<td></td>
</tr>
</tbody>
</table>

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Troubleshooting (continued)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot find any description that matches my difficulty</td>
<td>Contact Escort Technical Service for issues related only to operation of the Road Tech 75 Detector at 1-800-543-1608</td>
</tr>
</tbody>
</table>

Explanation of Displays

- **AD**  
  Sensitivity control is in Auto mode, display in Dark mode

- **HD**  
  Sensitivity control is in Highway mode, display in Dark mode

- **CD**  
  Sensitivity control is in City mode, display in Dark mode

- **No Display**  
  Road Tech 75 is in Dark mode

- **PilotHWY**  
  One of the many programming messages

- **WorkZone**  
  One of the many safety radar messages.

- **Caution**  
  Road Tech 75 has detected a Safety Radar Signal, but the signal isn’t strong enough to decode the specific safety message.

- **X_j, or K_j, or Ka or KA_j etc.**  
  Road Tech 75 has been programmed in the ExpertMeter mode

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Service
The ROAD TECH 75 DETECTOR has no serviceable parts. If problems arise, check the troubleshooting section in this manual for a solution. If a solution is not available in the troubleshooting section, please contact your local dealer. They will evaluate your detector and mount and arrange repairs if necessary.
Care and Maintenance

The case of your Harley-Davidson Road Tech 75 DETECTOR is constructed from an injection molded plastic LEXAN®. Some steps will help aid long-term reliability and cosmetic appearance.

Do not use solvent based chemicals or waxes directly on plastic components as they can affect the overall performance and appearance of the plastic.

The black plastic front face can be cared for with a plastic/rubber protectant to reduce the cosmetic affects of long term outdoor exposure. Follow directions on product labels for correct application and use. Use soft cloths such as Harley-Davidson Microfiber Detailing Cloth (Part No. 94663-02) or Softcloth (Part No. 94656-98) to avoid scratches.

The LEXAN screen can be cleaned with Novus® No. 1 Cleaner and Protectant (Part No. 99837-94T).

If corrosion is present on contacts or mating spring terminals, gently wipe contacts with a clean soft cloth using mild soap and water. If detector is to remain on motorcycle for an extended period of time, a light application of dielectric grease can be applied to the contacts to further enhance weather protection.
### Specifications

#### Features and Specifications

<table>
<thead>
<tr>
<th>Operating Bands</th>
<th>Radar Receiver / Detector Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-band 10.525 GHz ± 25 MHz</td>
<td>Superheterodyne, GaAs FET VCO</td>
</tr>
<tr>
<td>K-band 24.150 GHz ± 100 MHz</td>
<td>Scanning Frequency Discriminator</td>
</tr>
<tr>
<td>Ka-band 34.700 GHz ± 1300 MHz</td>
<td>Digital Signal Processing (DSP)</td>
</tr>
<tr>
<td>Laser 900nm, 33 MHz bandwidth</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laser Detection</th>
<th>Display Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantum Limited Video Receiver</td>
<td>280 LED Text/Matrix</td>
</tr>
<tr>
<td>Multiple Laser Sensor Diodes</td>
<td>Bar Graph or ExpertMeter™</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Requirement</th>
<th>Sensitivity Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>12VDC, Negative Ground</td>
<td>AutoSensitivity™, Highway, and City</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmable Features</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot, Power-Up, Power-On Sequence, Signal Strength Meter, AutoMute, City Mode Sensitivity, Dark Mode, Bands</td>
<td>4.06 x 4.08 x 1.35 inches</td>
</tr>
</tbody>
</table>

**Patented Technology**

Passport is covered by one or more of the following Escort U.S. patents:

- 6,693,578
- 6,14,385
- 6,587,068
- 6,400,305
- 6,249,218
- 6,069,580
- 5,668,554
- 5,600,132
- 5,559,508
- 5,587,916
- 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

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Warranty and Accessories

ESCORT Limited Warranty

ESCORT and Harley-Davidson warrants your Road Tech 75 against defects in materials and workmanship for a period of two (2) years if purchased with a new motorcycle and installed by an authorized Harley-Davidson dealer, one (1) year if installed by an authorized Harley-Davidson dealer, and ninety (90) days if purchased but not installed by an authorized Harley-Davidson dealer, and registered from the date of the original purchase, subject to the following terms and conditions:

The sole responsibility of ESCORT and Harley-Davidson under this Warranty is limited to either repair or, at the option of ESCORT or Harley-Davidson, replacement of the Road Tech 75 detector. There are no expressed or implied warranties, including those of fitness for a particular purpose or merchantability, which extend beyond the face hereof. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

ESCORT and or Harley-Davison are not liable for any incidental or consequential damages arising from the use, misuse, or mounting of the Road Tech 75. 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.

This Warranty gives you specific rights.

You may have other legal rights which vary from state to state. This Warranty does not apply if the serial number on the housing of the Road Tech 75 has been removed, or if your Road Tech 75 has been subjected to physical abuse, improper installation, or modification.

Accessories - See all of our products and accessories at www.harley-davidson.com