

## OWNER'S MANUAL

# **XTR-105** Total Band Protection™ **LASER-RADAR DETECTOR**

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Customer Service Tel 800.531.0004

[www.whistlergroup.com](http://www.whistlergroup.com)

P/N 260009, © Whistler 2007



Dear Whistler Owner,

If you have questions concerning the operation of this Whistler product please call:

**CUSTOMER SERVICE**  
**1-800-531-0004**

Monday - Friday • 8:00 am - 5:00 pm CT  
or visit our website

[www.whistlergroup.com](http://www.whistlergroup.com)

Please keep the receipt in a safe place. You may register your product online at [www.whistlergroup.com](http://www.whistlergroup.com). For warranty verification purposes, a copy of your dated store receipt must still accompany any unit sent in for warranty work. If the unit is returned without a dated store receipts an out of warranty service charge applies.

## INTRODUCTION

**Note: Your warranty period begins at the time of purchase. The warranty is validated only by the dated store receipt!** Now is the time to record the serial number of the unit in the space provided in the warranty section of the manual.

To fully acquaint yourself with the operation of your Whistler detector and to better understand the differences between detecting radar, laser and safety radar signals, we recommend reading this entire manual or by visiting our FAQ page on our website  
[www.whistlergroup.com](http://www.whistlergroup.com)

Enjoy your Whistler detector and please drive safely.

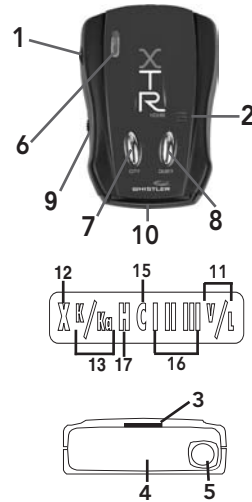
Sincerely,

The Whistler Group, Inc.

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## XTR-105 FEATURES



### Features

- Total Band Protection™
- ICON Display
- 360° Protection
- VG-2 Cloaking
- 3 City Modes
- Quiet/Auto Quiet Mode
- Tone Alerts
- Vehicle Battery Saver
- Setting Saver
- Safety Warning System™
- Alert Priority
- VG-2 Cloaking™

## FEATURE DESCRIPTIONS

Whistler's ergonomic and user-friendly design provides a new level of operating convenience. Special features include:

1. **Bracket Release Button** – Provides quick and easy release of the mounting bracket.
2. **Speaker** – Provides distinct audio warnings for X, K, Ka band radar, safety radar, laser and VG-2.
3. **Mounting Bracket Location** – Slot holds mounting bracket firmly.
4. **Radar Antenna** – Compact, high-efficiency antenna receives radar signals.
5. **Front Laser Antenna** – High gain optical lens provides increased sensitivity and field of view for leading-edge laser detection.
6. **Rear Laser Antenna** – An integrated optical waveguide provides superior detection of laser signals transmitted from behind.
7. **City Button** - Reduces the annoyance of false alerts typically encountered in urban driving areas.
8. **Quiet Button** - Pressing QUIET before a signal is detected engages Auto Quiet Mode which automatically reduces the audio level after the initial warning. Pressing QUIET during a radar encounter silences audio alerts, while allowing visual alerts to keep you informed.
9. **Power / Volume Control** – Turns unit on/off and adjusts audio level.

## FEATURE DESCRIPTIONS

10. **Icon Display** - offers easy-to-read icons to indicate power, city mode, radar band identification, and signal strength.
11. **VG-2/Laser Indicator** – Shows the unit is receiving VG-2 or laser signals.
12. **X-band Indicator** - Shows the unit is receiving an X-band signal.
13. **K/Ka band Indicator** - Shows the unit is receiving a K/Ka-band signal.
15. **City Indicator** - Indicates that the unit is operating in city mode.
16. **Signal Strength Indicator** - Shows the strength of the signal being detected.
17. **Highway Mode Indicator** - Indicates that the unit operating in highway mode.
  - **Total Band Protection™** - Complete Band Coverage that detects laser, radar, VG-2 and safety radar bands.

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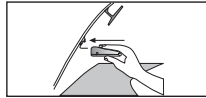
## INSTALLATION

### Mounting Guidelines

- Mount the unit as low as possible near the center of the windshield.
- Do not mount your unit behind wipers, ornaments, mirrored sunscreens, etc. These obstructions have metal surfaces which can affect radar and laser signals and reduce critical warning time. (Regular tinted glass does not affect reception.)
- Some windshields have an Instadclear™ or Electriclear™ type coatings, which affect radar signals. Consult your dealer or the owner's manual supplied with your vehicle to determine if your windshield has this coating.
- Avoid placing unit in direct contact with windshield.
- To reduce the possibility of theft, conceal your unit when not in use.

### Windshield Mounting

- Install the two suction cups and rubber bumper onto the bracket by fitting them into their holes.
- Press the suction cups onto the windshield at the location you have chosen.



**IMPORTANT:** Some newer cars have a plastic safety coating on the inside of the windshield. The windshield bracket may leave permanent marks on this type of surface. To find out if your vehicle has this type of windshield, check the owner's manual or ask your dealer. We recommend that you do not leave the suction cup bracket on the window in direct sunlight. If the detector is removed, this may cause blistering of the dash in some vehicles.

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## INSTALLATION

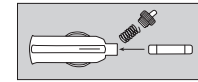
### Power Connection

- Plug the small end of the power cord into the unit's power jack.
- Plug the large end into the vehicle's cigarette lighter.

### Fuse Replacement

The lighter socket plug is equipped with a replaceable 2 amp 3AG fuse located behind the silver tip. To replace the fuse, carefully unscrew the tip of the plug.

**IMPORTANT: Unscrew slowly. The tip contains a spring which may fly out when disassembling.** Insert the new fuse with the spring and screw on the tip. **With use, screw cap on plug may loosen. Retighten occasionally.**



Unscrew the tip of the lighter socket plug carefully when replacing the 2 amp fuse.

## OPERATION

### Power On and Self Test

Each time your Whistler detector is turned on, an automatic self-test sequence confirms that the speaker and visual displays are functional. To increase volume, continue turning the volume knob.

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## OPERATION

### Feature Engaged Confirmation

Each time a button is pressed one beep confirms feature "on", two beeps confirm feature "off".

### Setting Saver

Setting Saver saves your personalized settings so that when the detection is turned off and then on again, you do not have to re-enter them.

### Auto Quiet Mode

Pressing Quiet before a radar signal is detected provides an alternate alert pattern, consisting of four beeps (indicating X, K, Ka or Safety Radar) followed by clicking. The clicking will continue for as long as the detected signal is present or any new signal is detected within 20 seconds, becoming more rapid as the strength of the signal increases.

### Quiet Mode

Pressing Quiet cancels audio during an alert and any new alert within 20 seconds. After approximately 20 seconds, 2 beeps are provided on any new alert, and unit then remains quiet.

- Press Quiet to cancel the audio.
- Press Quiet a second time during an alert to restore the standard audio alert pattern; or turn the unit off, then on.

## OPERATION

### City/City I/City II Mode

Whistler's Three Stage City Mode is designed to reduce the annoyance of automatic door openers, intrusion alarms and other devices which share frequencies with police radar. Generally, X band is used for these devices.

- Press City to cancel Highway mode and engage City. Display will switch from "H" to "C"
- Press City again to enter City I Mode
- Press City again to enter City II Mode

**Note:** After 3 seconds, "I" or "II" City Mode indicator turns off.

- Pressing City a fourth time cancels City II Mode and returns the unit to Highway Mode.

In City Mode, speed/safety radar signals give an initial alarm of two beeps, and then remains quiet until the signal becomes very strong and two additional beeps are provided. City I and City II Modes operate the same as Highway Mode, but in City I Mode, only the X band sensitivity is lowered. In City II Mode, X-band is not detected.

**Caution using City II mode:** *Some towns/small cities may still be using X band radar.*

**Note:** City Mode does not change the audio alert for laser or VG-2.

### Highway Mode

Highway mode provides full audio warnings any time radar (X, K, Ka, Safety Radar) or laser signals are detected, and is recommended for open road driving.

For more information on City and Highway mode, please visit our FAQ page on our website: [www.whistlergroup.com](http://www.whistlergroup.com)

## OPERATION

### Engaging/Disengaging VG-2

See VG-2 detection mode to turn this feature on.

### Vehicle Battery Saver Mode

The Vehicle Battery Saver Mode automatically shuts off your detector after 6 hours. The timer is reset if the detector is turned off, unplugged or any button is pressed before the time has expired. The detector will alert you with an audible and visual warning before it shuts off. During this warning you can reset the timer by pressing any button. If the unit has automatically turned itself off, press any button to turn the unit back on.

## LASER/RADAR ALERTS

### Speed Radar Audio / Visual Alerts

When X, K, or Ka band is detected, the band ID and signal strength is displayed. The audio alert is continuous and has a geiger counter-like pattern. The faster the beep, the closer or stronger the radar source.

"I" = weak signal, "III" = strong signal



"K/Ka" Icon will flash for Ka detection

### Laser Audio / Visual Alerts

When a laser signal is detected, the "V/L" will be illuminated. The audio alert is continuous for a minimum of 3 seconds.

## LASER/RADAR ALERTS

### Laser Tips

If you are the targeted vehicle, a laser gun can often determine your speed within a few seconds after you receive an alert. In this situation there is generally no time to safely adjust your speed. However, if you are traveling near or behind the targeted vehicle and receive an alert, response time should be sufficient. Any laser alert, regardless of duration, requires immediate action!

### Pulse Protection®

Pulse (or instant-on) radar is more difficult to detect than conventional radar because it remains off until activated to measure the speed of a targeted vehicle.

When a pulse type transmission is detected, your Whistler detector sounds an urgent 3-second audio warning and the display will show a max signal level.

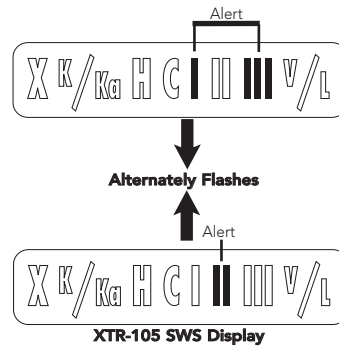


After the 3-second pulse alert, the standard alert pattern continues for as long as the signal is present. It is important to respond promptly to a pulse alert, since warning time may be minimal.

## LASER/RADAR ALERTS

### Safety Warning System/Audio/Visual Alerts

When your XTR-105 Whistler detector detects a safety radar signal, it provides a distinctive audio tone and Alternately flashes the "I" and "III" LEDs and then the "II" LED Signal Strength Indicator.



**Note:** You will not be able to receive SWS alerts if transmitters are not located in your area.

### Total Band Protection™

Complete Band Coverage that detects laser, radar, VG-2 and safety radar bands.

## VG-2 ALERTS

### VG-2 Detection Mode

The VG-2, also known as a "radar detector detector," is a special receiver used by police to detect signals radiated by a radar detector. See page 19 for more information on VG-2.

- Press and hold the Quiet button. Unit beeps once for VG-2 on, twice for VG-2 off.

When a VG-2 signal is detected the VG-2 alert is sounded. After 3 seconds, the audio is cancelled and the "VL" icon illuminates. This cycle is repeated if the VG-2 signal is again detected.

During the period a VG-2 signal is detected, a radar signal cannot be detected. However, because the VG-2 alert has confirmed that a patrol car is nearby, you are already aware of the potential for speed monitoring and can adjust your speed accordingly. Laser detection is not affected while a VG-2 signal is detected.

**Note:** VG-2 must be turned on each time the unit is turned on to receive VG-2 Alerts.

## TROUBLESHOOTING GUIDE

Your Whistler detector is expertly engineered and designed to exacting quality standards to provide you with reliable, trouble-free operation. If your unit has been correctly installed following the guidelines in this manual, but is not operating optimally, please refer to the troubleshooting guide below.

**PROBLEM: No display or audio.**

Check fuse in Whistler plug; replace if necessary with a 2 amp 3AG type. Check fuse for lighter socket; replace if necessary. Make sure lighter socket is clean.

**PROBLEM: Audio alerts are not loud enough.** Cancel Auto Quiet Mode or City Mode. Check audio level setting (see pg 7-8).

**PROBLEM: Unit gives laser alert when accelerating.** See F. A. Q. page at [www.whistlergroup.com](http://www.whistlergroup.com).

**PROBLEM: Unit alarms when vehicle hits bumps.** Check for loose lighter socket; tighten and clean. Check connections at both ends of power cord. Substitute another cord to determine if cord is defective. Return defective cord to the factory.

## TROUBLESHOOTING GUIDE

If difficulties occur which cannot be solved by information in this Troubleshooting Guide, please call Whistler Customer Service at **1-800-531-0004** or visit our FAQ page at [www.whistlergroup.com/faq-detectors.asp](http://www.whistlergroup.com/faq-detectors.asp) before returning your unit for service.

### Care & Maintenance

During the summer months, avoid prolonged exposure to direct sunlight by removing your unit from the dash when your vehicle is parked for an extended period of time. Do not spray water, cleaners, or polishes directly onto the unit. The spray may penetrate through the openings and damage the unit. Also, do not use any abrasive cleaners on the unit's exterior.

## ARE DETECTORS LEGAL?

### In Most States YES!

Laser-Radar detectors are legal in every state (with the exception of Virginia and Washington, D.C., which have local regulations restricting the use of radar receivers in any vehicle).

Concerning trucks over 10,000 lbs., the Federal Highway Administration (FHWA) issued a regulation, effective January, 1994 which prohibits radar detector use in these types of vehicles nationally.

### FCC Information

**FCC ID HSXWH01**  
**FCC ID HSXWH10**

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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**IMPORTANT:** FCC requirements state that changes or modifications not expressly approved by Whistler could void the user's authority to operate the equipment.

## SPEED FACTS

### Laser Facts

It's well documented that many radar guns cannot reliably provide the speed of a targeted vehicle that is traveling in a group of vehicles. In contrast, a laser gun can target a specific vehicle out of a line of traffic and determine its speed. The advantage of laser over radar in terms of target identification is the result of the laser gun's narrow beam. A radar transmission can cover more than a four-lane highway at a distance of 1,000 feet, compared with a laser transmission which covers about 3 feet at the same distance. For best protection keep these points in mind:

- Because your vehicle's license plate or headlights are the laser gun's primary targets, mounting your Whistler detector on the dashboard can improve laser detection at short range.
- Do not follow closely behind any vehicle you cannot see through. If you can't see past a vehicle ahead of you, chances are your detector won't either.
- The receiving range of your laser detector will not be the same as a radar detector. Laser guns are most often used at short range.

Whistler Laser/Radar detectors receive all current laser guns which operate at a laser wavelength of 905 +/- 10mm.

- Pro Laser™ I II III
- LTI 20-20
- Ultra Lyte

## SPEED FACTS

### Radar Facts

A radar gun operates by transmitting radio waves at certain frequencies which reflect off objects and are then picked up by the radar gun's receiving section. When a radar beam reflects off a moving target, a measurable frequency shift occurs. The radar unit converts this shift into miles per hour to determine your vehicle's speed. Currently, the FCC (Federal Communications Commission) permits operation of traffic radar guns at X Band (10.500 - 10.550 GHz), K Band (24.050 - 24.250 GHz), and Ka Band (33.400 - 36.000 GHz).

**Note:** A radar detector will not alarm if an officer is not transmitting on any one of the above radar bands frequencies.

### Other Speed Detection Systems

Several techniques other than radar or laser are used to measure vehicle speeds. When these methods are being used, no detector can provide a warning.

These techniques include:

- **Pacing** - A patrol car drives behind you and matches your driving speed.
- **Vascar/Aircraft** - The time it takes a vehicle to travel a known distance is measured.

## SPEED FACTS

### Radar Detector Detectors (VG-2)

**Spectre** The Interceptor VG-2, or simply VG-2, is a microwave receiver used by police to detect signals radiated by the local oscillator of a radar detector. Because its purpose is to identify persons driving with radar detectors, the VG-2 is known as a "radar detector detector". The VG-2 is the primary tool used by the police to identify radar detector equipped vehicles. If caught, in a state where detectors are illegal, (see page 16), drivers risk losing their radar detector and receiving a fine. In addition, instant-on radar is almost always used in combination with a VG-2, leaving unsuspecting motorists vulnerable to receiving two tickets—one potentially for speeding, the other for possession of a detector. Having a radar detector capable of detecting the VG-2 may alert you to the presence of a speed trap.

*For more information on speed monitoring technologies, please visit our FAQ page on our website: [www.whistlergroup.com](http://www.whistlergroup.com)*

**It is the responsibility of the individual radar detector owner to know and understand the laws in your area regarding the legality of the use of radar detectors.**

**NOTE:** Having a radar detector capable of detecting the VG-2 may alert you to the presence of a speed trap. The newest tool Police have to detect radar detectors is called Spectre, as of this printing. Spectre can detect most undetectable (VG-2) laser/radar detectors on the market.

## WARRANTY INFORMATION

### Consumer Warranty

This Whistler Laser/Radar detector is warranted to the original purchaser for a period of one year from the date of original purchase against all defects in materials and workmanship. This limited warranty is void if the unit is abused, modified, installed improperly, if the housing has been removed, or if the serial number is missing. There are no express warranties covering this product other than those set forth in this warranty. All express or implied warranties for this product are limited to one year. Whistler is not liable for damages arising from the use, misuse, or operation of this product.

## WARRANTY INFORMATION

**Service Under Warranty** During the warranty period, defective units will be repaired without charge to the purchaser when returned with a dated store receipt to the address below. Units returned without a dated store receipt will be handled as described in section **"Service Out Of Warranty."** Due to the specialized equipment necessary for testing a laser/radar receiver, there are no authorized service stations for Whistler brand detectors other than Whistler.

When returning a unit for service under warranty, please follow these instructions:

1. Ship the unit in the original carton or in a suitable sturdy equivalent, fully insured, with return receipt requested to:

**Whistler Repair Dept.**  
1201 North Dixieland Rd  
Rogers, AR. 72756

**Please allow 3 weeks turn around time.**

**IMPORTANT:** Whistler will not assume responsibility for loss or damage incurred in shipping. Therefore, please ship your unit insured with return receipt requested. **COD's will not be accepted!**

## WARRANTY INFORMATION

2. Include with your unit the following clearly printed information:

- Your name and street address (*for shipping via UPS*), a daytime telephone number and an e-mail address, if applicable.
- A detailed description of the problem (e.g., "Unit performs self-test but does not respond to radar").
- A copy of your dated store receipt or bill of sale.

3. Be certain your unit is returned with its serial number. For reference, please write your unit serial number in the following space:

\_\_\_\_\_

**Units without serial numbers are not covered under warranty.**

**IMPORTANT:** To validate that your unit is within the warranty period, make sure you keep a copy of your dated store receipt. You may register your warranty online at [www.whistlergroup.com](http://www.whistlergroup.com), however, for warranty verification purposes, a copy of your dated store receipt must accompany any unit sent in for warranty work.



## WARRANTY INFORMATION

### Service Out of Warranty

Units will be repaired at "out of warranty" service rates when:

- The units original warranty has expired.
- A dated store receipt is not supplied.
- The unit has been returned without its serial number.
- The unit has been abused, modified, installed improperly, or had its housing removed.

The minimum out of warranty service fee for your Whistler detector is \$35.00 (U.S.). If you require out of warranty service, please return your unit as outlined in the section "Service Under Warranty" along with a certified check or money order for \$35.00. Payment may also be made by MasterCard, VISA or American Express; **personal checks are not accepted.**

In the event repairs cannot be covered by the minimum \$35.00 service fee, you will be contacted by a Whistler technical service specialist who will outline options available to you. If you elect not to have your unit repaired, it will be returned to you along with your certified check or money order.

## WARRANTY INFORMATION

**IMPORTANT:** When returning your unit for service, be certain to include a daytime telephone number, and an email address (if applicable).

### Customer Service

If you have questions concerning the operation of your Whistler detector, or require service during or after the warranty period, please call Customer Service at:

**1-800-531-0004.**

Representatives are available to answer your questions Monday - Friday from 8:00 a.m. to 5:00 p.m. (CT).

[www.whistlergroup.com](http://www.whistlergroup.com)

## SPECIFICATIONS

### Laser Wavelength:

905 ± 50 nanometers (nm)

### Radar Frequencies:

10.500 - 10.550 GHz (X Band)

24.050 - 24.250 GHz (K Band )

33.400 - 36.000 GHz (Ka Superwideband)

### Operating Temperature Range:

-20° C to +80° C (-4° F to +176° F)

### Power Requirements:

Operational 12 to 15 volts DC, 250mA nominal  
Vehicle Battery Saver, 30mA nominal.

One or more U.S. patents may apply:

#5,146,227, #5,379,456, #5,666,120, #5,990,821

Specifications are subject to change without notice.

## ACCESSORIES

These and other accessories can be ordered directly from Whistler by calling **1-800-531-0004** or visiting our online store at [www.whistlergroup.com](http://www.whistlergroup.com)

Order #	Description	Price
202138	Visor Bracket	\$ 6.95
202151	Windshield Bracket Kit	\$ 9.95
206552	Straight Power Cord (5')	\$14.95
206553	Coiled Power Cord (7')	\$15.95
206880	Hardwire Kit (10') (for wiring to fuse box)	\$ 9.95
206666	Modular Cord Package (includes coiled and straight cords, and power adapter)	\$17.95
159032	Package of 8 Suction Cups	\$ 2.95
402081	Non Skid Dash Pad	\$ 6.95
206660	Straight Modular Cord & Socket Multiplier	\$11.95
206661	Coiled Modular Cord & Socket Multiplier	\$12.95

\* Modular: Interconnecting pieces cord and plug.  
**Shipping and handling (per order) \$5.00 Prices are subject to change without notice.**