Your new BEL Pro RX55 is the most advanced radar and laser detector available. The RX55 includes full X, K, and SuperWide Ka radar protection, front and rear laser detection, Digital Signal Processing for superior range and false detection rejection, our patented Mute and AutoMute, audible and visual band alerts, and all the performance you'd expect from Beltronics.

In addition, the new BEL Pro RX55 introduces a new level of performance and innovative features.

• New long-range radar performance
• Multiple laser sensors for improved long-range detection
• Exclusive Programming lets you instantly set 7 features
• Exclusive AutoScan™ mode, plus Highway and City settings
• 280 LED Text-Matrix Display for easy to read messages
• Detects and decodes all Safety Radar signals
• New VG-2 Alert/Auto Shutoff
• Optional SmartPlug compatible

If you've used a radar detector before, a review of the Quick Reference Guide on pages 4 and 5, and the Programming information on pages 12 and 13 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 RX55's performance and features.

Please drive safely.

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

Congratulations
Quick Reference Card
1
Programming Details

An example of Programming
Here is how you would turn RX55's AutoMute feature off.
1. Enter the Program Mode by holding both the CITY and BRT buttons down for 2 seconds. The RX55 will beep twice and display "Program".
2. Press and hold the RVW button. The RX55 will scroll through the categories, starting with Power-on indication (PWR), then Power-on sequence (PwrOn), Voice (VoiceOn), and then AutoMute (aMute).
3. Release the RVW button when the RX55 shows the AutoMute item. Since the factory setting is for AutoMute to be on, the RX55 will display "aMute ON".
4. Press the CHG button to change from "aMute ON" to "aMute OFF".
5. To complete the Programming, simply wait 8 seconds without pressing any button. The RX55 will display "Complete", beep 4 times, and return to normal operation.

There are 7 user-selectable options so you can customize your RX55's preferences.

The buttons labeled CITY and BRT are also used to enter the Program Mode, REVIEW your current program settings, and to CHANGE any settings as desired. The words PROGRAM, RVW and CHG are located on the top of the detector.

How to use Programming
1. To enter Program Mode, press and hold the CITY and BRT buttons down for 2 seconds. (The unit will beep twice, and will display the word "Program").
2. Then press the RVW 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 item).
3. Press the CHG 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 Program Mode, simply wait 8 seconds without pressing any button. (The unit will display Complete, beep 4 times, and return to normal operation).

Factory Default Settings
To reset RX55 to its original factory settings, press and hold the "CITY" and "BRT" buttons while turning the power on. The RX55's display will provide a "Reset" message, accompanied by an audible alert, acknowledging the reset.

Remove card along perforations
Quick Reference Card

Remove card along perforations

BEL Pro RX55 Quick Reference Card

Press the REV button to go from one category to the next

Press the CHG button to change your setting within a category

PILOT

Pilot HW (Power-on indication)

Pilot H

Pilot V

* Full word: Highway or AutoScan or City Letter: H or A or C

Vehicle voltage

POWER-ON SEQUENCE

Pwr On STD

Pwr On FST

* Standard power-on sequence

Flat power-on sequence

VOICE

Voice ON

Voice OFF

* Voice alerts on

Voice alerts off

AUTOMUTE

aMute ON

aMute OFF

* AutoMute on

AutoMute off

CITY MODE SENSITIVITY

City STD

City LoX

City NoX

* Standard City mode sensitivity

Low X band sensitivity in City Mode

No X band sensitivity in City Mode

SWS

SWS Off

SWS On

* SWS detection off

SWS detection on

VG2

VG2 Off

VG2 On

* VG2 detection off

VG2 detection on

* Factory Default Settings

Quick Reference Guide 4-5

Installation 6-7

• Power Connection 6

• Mounting Location 6

• Windshield Mount 7

Controls and Features 8-11

• Power and volume control 8

• Power-on indication 8

• Voice Alerts 8

• AutoMute 8

• Mute 8

• Highway / AutoScan / City Switch 8-9

• Brightness 9

• Dark Mode 9

• Audible Alerts 9

• Signal Strength Meter 10

• VG2 11

Programming 12-16

• How to use Programming 12

• Example of Programming 12

• Overview of Programming 13

• Details of Programming 14-16

Technical Details 17-23

• Specifications 17

• Interpreting Alerts 18-20

• How Radar Works 20

• How Laser Works 21

• How Safety Radar Works 22-23

Service 24-27

• Troubleshooting 24-25

• Service 26

• Registration 27

• Warranty and Accessories 29
**To begin using your RX55, just follow these simple steps**

1. Plug the telephone jack end of the power cord into the side jack of the detector, and plug the lighter adapter end of the power cord into your car’s lighter socket.

2. Mount your RX55 on the windshield using the supplied windshield mount.

3. Press the PWR button on the top left side to turn it on.

4. Press and hold the Mute/Volume button to adjust the volume.

Please read the manual to fully understand RX55’s operation and features.
Power Connection
To power the RX55, plug the small end of the supplied coiled power cord into the telephone-type power jack on RX55’s right side, and plug the lighter adapter into your vehicle’s lighter socket or accessory socket.

RX55 operates on 12 volts DC negative ground only. The lighter plug provided is standard size and will work in most vehicles. Of course, your lighter socket must be clean and properly connected for proper operation.

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

RX55’s standard lighter adapter has an integral fuseholder. If it is ever necessary to replace the fuse, simply unscrew the tip of the lighter plug and replace the fuse with an identical 2 amp fuse.

Optional power cords
See the Accessories section for details on our optional SmartPlug.

Mounting Location
WARNING: BELTRONICS cannot anticipate the many ways the RX55 can be mounted. It is important that you mount RX55 where it will not impair your view nor present a hazard in case of an accident.

Where to mount RX55
For optimum detection performance, we recommend the following:

• Using the Windshield Mount, mount your RX55 level, a few inches above the dashboard, and high enough on your front windshield to provide a clear view of the road from the front and rear.

• Mount RX55 away from windshield wipers, other solid objects, and heavily tinted areas that might obstruct the radar antenna or laser lens.

Windshield Mount
RX55’s QuickMount windshield bracket is designed for unobtrusive and hassle-free mounting.

1. Depress the QuickMount button on the top of RX55 (by the word BELTRONICS) and slide the QuickMount bracket into the slot until it is locked into the position which best fits the angle of your windshield (there are four settings available). For extremely horizontal or extremely sloped windshields, the QuickMount bracket can be bent.

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

2. To adjust RX55 on your windshield, use the QuickMount button located on the top of the RX55, and slide RX55 forward or backward to obtain a level horizontal position.

When installed and adjusted properly, the back top edge of the RX55 should rest solidly against your windshield.

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

User’s Tip
You can leave the QuickMount bracket in place on your windshield, and easily remove the RX55 by pressing the adjustment button and sliding it off the mount. Again, be sure to position the bracket where it won’t present a hazard in the event of an accident. Additional mounts are available.
Controls and Features

Power On/Off
To turn the RX55 on, press the PWR button on the left side of the top case. When you turn the RX55 on, it goes through a sequence of alerts.

If you prefer, you may program your RX55 for a shorter power-on sequence. See the Programming section for details.

Power-on indication
After RX55’s start-up sequence is complete, the alphanumeric display will show Highway, City, or AutoScan to indicate which sensitivity mode is selected.

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

Voice
The RX55 has our Digital Voice feature, which provides a digital voice announcement of the band being detected.

If you prefer, you can turn the Digital Voice feature off in programming. See the Programming section for details.

AutoMute
Your RX55 has our patented AutoMute feature. After RX55 alerts you to a radar encounter at the volume you have selected, the AutoMute feature will automatically reduce the volume to a lower level. This keeps you informed without the annoyance of a continuous full-volume alert.

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

Volume / Mute Button
To adjust the alert tone volume, press and hold the Volume/Mute bar located on the top case until display shows visual of volume level.

The Mute button, located on RX55’s top case, allows you to silence the audio alert during a radar encounter.

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

Highway / AutoScan / City Button
The City button selects RX55’s sensitivity mode. We recommend the AutoScan mode for most driving.

The RX55’s AutoScan mode provides long-range warning, with minimum false alarms. In this mode, the RX55’s internal computer continuously analyzes all incoming signals and intelligently adjusts the sensitivity circuits.

You can also select conventional Highway and City modes. When driving in urban areas where annoying 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 RX55’s City mode sensitivity. See the Programming section for details.

Brightness
The RX55’s BRT button is located on the top right, and selects the brightness of the display. There are four settings: Maximum, Medium, Minimum, and Dark. Press the BRT button to select your preferred brightness.

Dark Mode
When you select the Dark mode with the BRT button, RX55 changes to a very inconspicuous power-on indication: a very dim AD, HD, or CD. (In this display, the A, H, or C indicates AutoScan, Highway, or City, and the D indicates Dark.)

When RX55 is in the Dark mode, the display will not show visual alerts when RX55 detects signals. Only the audible alert will tell you of detected signals.

Audible Alerts
For Radar signals:
RX55 uses a Geiger-counter-like sound (and digital voice if programmed) 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. This allows you to judge the distance from the signal source without taking your eyes from the road.

Each band has a distinct tone for easy identification:
- X-band = chirping tone
- K-band = buzzing tone
- Ka-band = double-chirp tone

For Laser signals:
Since laser signals are a possible threat no matter how weak, RX55 alerts you to all laser signals with a full laser alert.

For Safety signals:
RX55 will alert you to these signals with a double-buzz tone (and digital voice if programmed) with a corresponding text message. A complete listing of the text messages is on page 23.
Controls and Features

Power Connector
RX55’s new power jack uses a telephone-type connector. This new 6-pin connector works with the included coiled cord, and with our optional new SmartPlug.

The SmartPlug is a special power cord that has a power-on indicator, a bright alert light that warns of radar or laser, and a convenient mute button right on the plug.

It’s the perfect addition for any car where reaching the detector mute button on the windshield is a stretch. And for discreet night driving, put the RX55 in the Dark Mode, and use the SmartPlug for your visual alerts. Other drivers won’t know you have a detector.

Two versions are available: A SmartPlug that plugs into your lighter socket and has a coiled cord, and a Direct-wire SmartPlug module that you wire into your electrical system, with an 8 foot straight cord to route to your RX55.

For more information or to order, call us toll-free at 1-800-341-2288.

Signal Strength Meter
RX55’s alphanumeric display consists of 280 individual LEDs, to provide an intuitive ultrabright display of signal strength and text messages.

RX55’s standard bar-graph signal strength meter only displays information on a single radar signal. If there are multiple signals present, the RX55’s internal computer determines which is the most important threat to show on the bar-graph meter.

When RX55 detects radar, it displays the band (X, K, or Ka), and a precise bar graph of the signal strength. When RX55 detects a laser signal, the display will show “Laser.”

NOTE: If you are operating the RX55 in Dark mode, the display will not light when a signal is detected – only the audio alert will be heard.

VG2
If the VG2 band (Radar detector detector) is turned on, VG2 units will be detected with an audible and visual alert. Once detected, the RX55’s internal oscillator will shut down for a period of time, making it undetectable. The RX55’s receiver will then periodically turn back on to see if the VG2 unit is still present. If not, RX55 will return to normal operation.

NOTE: With VG2 detection on, other radar detectors could be detected as well.
Programming

There are 7 user-selectable options so you can customize your RX55 for your own preferences. The buttons labeled CITY and BRT are also used to enter the Program Mode, REVIEW (RVW) your current program settings, and to CHANGE (CHG) any settings as desired. The words PROGRAM, RVW, and CHG are located on the top of the detector, and are highlighted graphically. Pages 14-16 explain each option in more detail.

How to use Programming

1. To enter Program Mode, press and hold the CITY and BRT buttons down for 2 seconds. (The unit will beep, and display the word “Program”).

2. Then press the RVW 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 CHG 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, or press the PWR button. (The unit will display Complete, beep, and return to normal operation).

An example

Here is how you would turn RX55’s AutoMute feature off.

1. Enter the Program Mode by holding both the CITY and BRT buttons down for 2 seconds. The RX55 will beep twice and display “Program”.

2. Then hold the RVW button down. The RX55 will scroll through the categories, starting with Pilot (Pilot HWY), then Power-on sequence (PwrOnSTD), then Voice (Voice ON), and then AutoMute (aMute).

3. Release the RVW button when RX55 shows the AutoMute item. Since the factory setting is for AutoMute to be on, RX55 will display “aMute ON”.

4. Press the CHG button to change from aMute ON to aMute OFF.

5. To complete the Programming, simply wait 8 seconds without pressing any button, or press the PWR button. The RX55 will display Complete, beep, and return to normal operation.

Overview of Programming

- **PILOT**
  - Pilot HWY
  - Pilot H
  - Pilot V

- **POWER-ON SEQUENCE**
  - PwrOn STD
  - PwrOn FST

- **VOICE**
  - Voice ON
  - Voice OFF

- **AUTOMUTE**
  - aMute ON
  - aMute OFF

- **CITY MODE SENSITIVITY**
  - City STD
  - City LoX
  - City NoX

- **SWS**
  - SWS Off
  - SWS On

- **VG2**
  - VG2 Off
  - VG2 On

*Factory Default Settings*

To reset RX55 to its original factory settings, press and hold the “CITY” and “BRT,” buttons while turning the power on. The RX55’s display will provide a “Reset” message, accompanied by an audible alert, acknowledging the reset.
Details of Programming

Pilot (Power-on indication)
Note: When you are using the Dark mode, the display will only show HD, AD, or CD, (Highway-Dark, AutoScan-Dark, or City-Dark).

Pilot HWY (Full description)
In this setting, RX55 will display “Highway,” “City,” or “AutoScan” as its power-on indication. (factory default)

Pilot H (Letter)
In this setting, RX55 will display “H” for Highway, “C” for City, and “A” for AutoScan.

Pilot V (Vehicle voltage)
In this setting, the RX55 will provide “H” for Highway, “C” for City and “A” for AutoScan, and the vehicle’s voltage. If the vehicle’s voltage drops below 10.5 volts, a low voltage warning will be displayed, followed by an audible alert. A high voltage warning is also provided when the vehicle’s voltage exceeds 16.0 volts.

Power-on Sequence
PwrOnSTD (Standard)
In this setting, each time you turn on the RX55, it will display “BEL RX55,” “Laser,” “K-band,” “X-band,” “Safety,” and any changes to factory settings. (factory default)

PwrOnFST (Fast power-on)
In this setting, the RX55 will only provide a brief audible tone, and will display any non-factory settings.

Voice
Voice On (Voice alerts on)
In this setting, all radar, laser, and SWS (if programmed on) alerts will be accompanied by a digital voice.

Voice Off (Voice alerts off)
In this setting, only the audio tones will be heard during an alert or SWS message.

AutoMute
AutoMute On (AutoMute on)
In this setting, RX55’s audio alerts will initially be at the volume you set, but after a few seconds, the RX55 will automatically reduce the volume level, to keep you informed, but not annoyed. (factory default)

AutoMute Off (AutoMute off)
With AutoMute off, RX55’s audio alerts will remain at the volume you set for the duration of the radar encounter.

City Mode Sensitivity
City STD (Standard)
In this setting, when you put RX55 in the City mode, X-band sensitivity is significantly reduced, to reduce annoyance from X-band intrusion alarms and motion sensors. (factory default)

City LoX (Low X band sensitivity)
In this setting, when you put RX55 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 RX55 in the City mode, it will not respond to any X band signals. WARNING: Only choose this setting if you are absolutely certain that there are no X band traffic radar units where you drive.

NOTE: These settings only apply when RX55 is operated in City mode. X-band sensitivity is not affected when used in “AutoScan,” or “Highway” modes.
Safety Warning System

Safety Warning System detection off. (factory default)

Safety Warning System

In this setting, safety messages will be detected in areas using this technology.

VG-2 Alert

VG-2 Off

VG2 alert detection off. (factory default)

VG2 On

VG2 alert detection on. In this setting, RX55 will alert you to VG2 signals and automatically shut the detector off for approximately 15 seconds. Once the VG2 signal has passed, RX55 will automatically return to normal operation.

NOTE: When VG2 alert is on, other radar detectors can be detected as well.

Features and Specifications

Operating Bands

- X-band 10.525 GHz ± 25 MHz
- K-band 24.150 GHz ± 100 MHz
- Ka-band 34.700 GHz ± 1300 MHz
- Laser 904nm, 33 MHz bandwidth

Radar Receiver / Detector Type

- Superheterodyne
- Scanning Frequency Discriminator
- Digital Signal Processing (DSP)

Laser Detection

- Quantum Limited Video Receiver
- Multiple Laser Diodes

Display

- 280 LED Matrix/Text
- Bar Graph
- 3-Level Dimming, plus Dark Mode

Power Requirement

- 12VDC, Negative Ground
- Optional SmartPlug Compatible

Programmable Features

- Pilot
- Power-On Sequence
- Voice Alerts
- AutoMute
- City Mode Sensitivity
- Safety Warning System Alerts
- VG2 Alert

Technical Details

Sensitivity Control

- AutoScan™, Highway and City

Dimensions (Inches)

- 1.1 H x 2.75 W x 4.75 L

Patented Technology

RX55 is covered by one or more of the following US patents:

6,836,238 6,693,578 6,614,385 6,587,068
6,400,305 6,249,218 6,069,580 5,668,554
5,600,132 5,587,916 5,559,508 5,365,055
5,347,120 5,446,923 5,402,087 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
4,996,855 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

RX55 is also covered by one or more of the following Canadian patents:

2,330,964 1,295,715 1,295,714 1,187,602
1,187,586

European patent:

1,145,030

Other patents pending. Additional patents may be listed inside the product.
Interpreting Alerts

Although the RX55 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 RX55 and how to interpret what it tells you. The specific type of radar being used, the type of transmission (continuous or instant-on) and the location of the radar source affect the radar alerts you receive.

The following examples will give you an introduction to understanding the RX55’s warning system for radar, laser and safety alerts.

Alert

The RX55 begins to sound slowly, then the rate of alert increases. The Signal Meter ramps accordingly.

RX55 emits short alerts for a few seconds and then falls silent only to briefly alert and fall silent again.

RX55 suddenly sounds a continuous tone for the appropriate band received. All segments in the Signal Strength Meter are lit.

A brief laser alert.

RX55 receives weak signals. These signals may be a little stronger as you pass large, roadside objects. The signals increase in frequency.

Explanation

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

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

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

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

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

Alert

RX55 alerts slowly for a while and then abruptly jumps to a strong alert.

RX55 alerts intermittently. Rate and strength of alerts may be consistent or vary wildly.

RX55 gives an X-band, or K-band alert intermittently.

Explanation

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

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.

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

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

CAUTION: Since the characteristics of these alerts may be similar to some of the preceding examples, over confidence in an unfamiliar area can be dangerous. Likewise, if an alert in a commonly traveled area is suddenly stronger or on a different band than usual, speed radar may be set up nearby.
How Radar Works
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-Band radar, your RX55 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 RX55’s radar detection abilities are fully operational.

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

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

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

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

Safety Warning System, or SWS, uses a modified K-band radar signal. The SWS safety radar system has 64 possible messages (60 currently allocated). The SWS messages your RX55 can display are listed on the facing page.

From the factory, your RX55 is programmed with SWS decoding OFF. If SWS is used in your area, your RX55 will display the safety messages associated with the signal. If you wish to detect this system, use the Programming feature to turn RX55’s SWS decoding ON.

NOTE: Some of the safety messages have been condensed, so that each message can be displayed on one or two screens on RX55’s eight-character display.

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

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

SWS Text Messages

Highway Construction or Maintenance
1 Work Zone Ahead
2 Road Closed Ahead/Follow Detour
3 Bridge Closed Ahead/Follow Detour
4 Highway Work Crews Ahead
5 Utility Work Crews Ahead
6 All Traffic Follow Detour Ahead
7 All Trucks Follow Detour Ahead
8 All Traffic Exit Ahead
9 Right Lane Closed Ahead
10 Center Lane Closed Ahead
11 Left Lane Closed Ahead
12 For future use

Highway Hazard Zone Advisory
13 Stationary Police Vehicle Ahead
14 Train Approaching/At Crossing
15 Low Overpass Ahead
16 Drawbridge Up
17 Observe Drawbridge Weight Limit
18 Rock Slide Area Ahead
19 School Zone Ahead
20 Road Narrows Ahead
21 Sharp Curve Ahead
22 Pedestrian Crossing Ahead
23 Deer/Moose Crossing
24 Blind/Deaf Child Area
25 Steep Grade Ahead/Truck Use Low Gear
26 Accident Ahead
27 Poor Road Surface Ahead
28 School Bus Loading/Unloading
29 No Passing Zone
30 Dangerous Intersection Ahead
31 Stationary Emergency Vehicle Ahead
32 For future use

Weather Related Hazards
33 High Wind Ahead
34 Severe Weather Ahead
35 Heavy Fog Ahead
36 High Water/Flooding Ahead
37 Ice On Bridge Ahead
38 Ice On Road Ahead
39 Blowing Dust Ahead
40 Blowing Sand Ahead
41 Blinding Snow Whiteout Ahead
42 For future use

Travel Information/Convenience
43 Rest Area Ahead
44 Rest Area With Service Ahead
45 24 Hour Fuel Service Ahead
46 Inspection Station Open
47 Inspection Station Closed
48 Reduced Speed Area Ahead
49 Speed Limit Enforced
50 Hazardous Materials Exit Ahead
51 Congestion Ahead/Expect Delay
52 Expect 10 Minute Delay
53 Expect 20 Minute Delay
54 Expect 30 Minute Delay
55 Expect 1 Hour Delay
56 Traffic Alert/Tune AM Radio
57 Pay Toll Ahead
58 Trucks Exit Right
59 Trucks Exit Left
60 For future use

Fast/Slow Moving Vehicles
61 Emergency Vehicle In Transit
62 Police In Pursuit
63 Oversize Vehicle In Transit
64 Slow Moving Vehicle
Troubleshooting

Problem
RX55 beeps briefly at the same location every day, but no radar source is in sight.

RX55 does not seem sensitive to radar or laser.

RX55 did not alert when a police car was in view.

RX55 did not provide a Safety signal while within range of an emergency vehicle.

RX55’s display is not working.

RX55’s audible alerts are less loud after the first few alerts.

RX55 bounces or sags on windshield.

RX55’s power-on sequence reoccurs while you are driving.

Your 14-year old son has changed all 7 of the Programming options.

Solution

• 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.

• Make sure that windshield wipers do not block RX55’s radar antenna and that the laser lens is not behind tinted areas.

• Determine if your vehicle has an Instaclear®, ElectriClear® or solar reflective windshield which may deflect radar or laser signals.

• RX55 may be in City Mode. (Radar signals only)

• VASCAR (Visual Average Speed Computer and Recorder) a stopwatch method of speed detection, may be in use.

• Officer may not have radar or laser unit turned on.

• Safety transmitters may not be commonly used in your area.

• Press the BRT button to deactivate Dark Mode.

• RX55 is in AutoMute Mode. See page 8 for details.

• RX55 is not making contact with the windshield to provide stability. While holding down RX55’s QuickMount button, slide RX55 toward the windshield so that the back top edge makes firm contact.

• A loose power connection or dirty lighter socket can cause RX55 to be briefly disconnected.

You can return all of the programming options to the factory defaults by holding down the CITY and BRT buttons while turning the power on.

Problem
RX55 will not turn on.

RX55 feels very warm.

Solution

• Check to make sure that the RX55 is turned on.

• Check that vehicle ignition is ON.

• Check that vehicle lighter socket is functional.

• Try RX55 in another vehicle.

• It is normal for RX55 to feel warm.

Explanation of Displays

AD  Sensitivity control is in AutoScan, display is in Dark mode (page 9)

HD  Sensitivity control is in Highway mode, display is in Dark mode (page 9)

CD  Sensitivity control is in City mode, display is in Dark mode (page 9)

No display  RX55 is in the Dark mode (page 9, 16)

Pilot HWY  One of the many programming messages (pages 12-16)

Work Zone  One of the many Safety Radar messages (pages 22-23)

Caution  RX55 has detected a Safety Radar Signal, but the signal isn’t yet strong enough to decode the specific safety message (page 22-23)

VG2  RX55 has detected a VG2 unit (radar detector detector)
Service Procedure
If your RX55 ever needs service, please follow these simple steps:

1. Check the troubleshooting section of this manual. It may have a solution to your problem.

2. Call us at 1-800-341-2288. We may be able to solve your problem over the phone. If the problem requires that you send your RX55 to the factory for repair, we will provide you with a Service Order Number, which must be included on the outside of your shipping box.

Enclose the following information with your RX55:
- Your Service Order Number
- Your name and return address
- Your daytime telephone number
- A description of the problem you are experiencing.

Out Of Warranty Repairs
For out of warranty repairs, include prepayment in the amount you were quoted by the Beltronics Customer Service Representative. If the detector has been damaged, abused or modified, the repair cost will be calculated on a parts and labor basis. If it exceeds the basic repair charge, you will be contacted with a quotation. If the additional payment is not received within 30 days (or if you notify us that you choose not to have your RX55 repaired at the price quoted), your RX55 will be returned, without repair. Payment can be made by check, money order, or credit card.

Ship RX55 and Power Cord To:
BELTRONICS
Customer Service Department
Service Order Number ______________
5442 West Chester Road
West Chester, Ohio 45069

For your own protection, we recommend that you ship your RX55 postpaid and insured. Insist on a proof of delivery, and keep the receipt until the return of your RX55.

Register online:
@ www.beltronicspro.com

BELTRONICS PRODUCT REGISTRATION CARD
If you purchased your detector directly from BELTRONICS, you do not need to fill this out. If you did not purchase your detector directly from BELTRONICS, please fill out this section and return to us, or register online at our web address: www.beltronics.com.

1. First Name:___________________ Middle Initial____ Last Name__________________________
Address______________________________________________________________________
City_______________________________________ State_____________ ZIP______________
Phone Number (In case we have a question)_____________________________________________

2. Product Purchased________________________ Model___________ Serial Number___________

3. Place of Purchase__________________________________ Date_________ Price____________

4. Primary reason for purchasing this BELTRONICS product____________________________________
____________________________________________________________________________
____________________________________________________________________________

Remove card along perforations
/L50772 /L50772
BELTRONICS One Year Limited Warranty
What this warranty covers: BELTRONICS warrants your Product against all defects in materials and workmanship.
For how long: One (1) year from the date of the original purchase.
What we will do: BELTRONICS, at our discretion, will either repair or replace your Product free of charge.
What we will not do: BELTRONICS 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 BELTRONICS dealer.
Warranty Exclusions: Warranty does not apply to your product under any of the following conditions:
1. The serial number has been removed or modified.
2. Your product has been subjected to misuse or damage (including water damage, physical abuse, and/or improper installation). 3. Your product has been modified in any way. 4. You do not supply original proof-of-purchase or 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 seller or resellers. 5. You are not the original purchaser of the radar detector from an authorized dealer or did not receive it as a gift from the original purchaser of the radar detector from an authorized dealer.

To obtain service:
1. Contact BELTRONICS (1-800-341-2288) to obtain a Return Authorization number.
2. Properly pack your product and include: your name, complete return address, written description of the problem with your product, daytime telephone number, and a copy of the original purchase receipt. 3. Label the outside of the package clearly with your Return Authorization number. Ship the product pre-paid (insured, for your protection) to: Beltronics Inc, 5442 West Chester Rd., West Chester, OH 45069.

LIMITATION OF WARRANTY:
EXCEPT AS EXPRESSLY PROVIDED HEREIN, YOU ARE ACQUIRING THE PRODUCT "AS IS" AND "WHERE IS," WITHOUT REPRESENTATION OR WARRANTY.
BELTRONICS SPECIFICALLY DISCLAIMS ANY REPRESENTATION OR WARRANTY INCLUDING, BUT NOT LIMITED TO THOSE CONCERNING THE MERCHANTABILITY AND SUITABILITY OF THE PRODUCT FOR A PARTICULAR PURPOSE. BELTRONICS SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES INCLUDING, WITHOUT LIMITATION, DAMAGES ARISING OUT OF THE USE, MISUSE OR MOUNTING OF THE PRODUCT. The above limitations or exclusions shall be limited to the extent they violate the laws of any particular state. BELTRONICS is not responsible for products lost in shipment between the owner and our service center.
Other legal rights: This Warranty gives you specific rights. You may have other legal rights, which vary, from state to state.

BELTRONICS Extended Service Plan
BELTRONICS offers an optional extended service plan. Contact BELTRONICS for details (1-800-341-2288).

Accessories
The following accessories and replacement parts are available for BEL Pro RX55.

Replacement coiled cord.............$14.00
Direct-wire..........................$10.00
Soft Carrying Case....................$12.00
SmartPlug (coiled)....................$29.95
SmartPlug (direct-wire)............$29.95

See all of our products and accessories at www.beltronicspro.com

Features, specifications and prices are subject to change without notice.