The BEL Pro300 is the most advanced radar, laser and safety detector ever designed by Beltronics. The BEL Pro300 includes full X, K, SuperWide Ka, and Safety Warning System radar capability, front and rear laser detection, digital signal processing (DSP) for superior range and reduced false alarms, our patented Mute and AutoMute, audible and visual band alerts, and all the performance you'd expect from Beltronics. In addition, the BEL Pro300 introduces a new level of revolutionary performance and innovative features.

- Superior long-range radar and laser detection, including new “POP” mode alert
- Advanced Programming lets you customize 7 features
- AutoScan mode drastically reduces false alarms, plus Highway and City settings
- Ultra-bright alphanumeric Display with 280 LEDs
- Exclusive Threat Display tracks and displays multiple radar signals, including signal strength.
- Tech Display provides actual numeric radar frequency for any radar signal

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.

There are 7 user-selectable options so you can customize your Pro300 for your own 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, and are highlighted in graphics.

How to use Programming
1. To enter Program Mode, press and hold both 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 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 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.

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

Congratulations

Register online: Beltronics.com

Receive a FREE Travel Case when you register your Pro300 on our website at Beltronics.com

Quick Reference

An example
Here is how you would turn Pro300’s AutoMute feature off.
1. Enter the Program Mode by holding both the CITY and BRT buttons down for 2 seconds. Pro300 will beep twice and display Program.
2. Then hold the RVW button down. The Pro300 will scroll through the categories, starting with Pilot (Pilot), then Voice (Voice), then PwrScan sequence (PwrScan), then Signal strength meter (Heter), and then AutoMute (AutoMute).
3. Release the RVW button when Pro300 shows the AutoMute item. Since the factory setting is for AutoMute to be on, Pro300 will display Autmute ON. If you accidentally don’t release the RVW button in time, and the Pro300 goes to the next category, hold the RVW button down again, and after Pro300 scrolls through all categories, it will begin again at the top of the list.
4. Press the CHG button to change from Autmute ON to Autmute OFF.
5. To complete the Programming, simply wait 8 seconds without pressing any button, or press the PWR button. The Pro300 will display Complete, beep, and return to normal operation.

Factory Default Settings
To reset Pro300 to its original factory settings, press and hold the “CITY” and “BRT” buttons while turning the power on. Pro300’s display will provide a Reset message, accompanied by an audible alert, acknowledging the reset.

Congratulations
Quick Reference

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

PILOT
(Power-on indication)

• Pilot HWY
• Pilot H
• Pilot U

Press the CHG button to change your setting within a category

VOICE

• Voice ON
• Voice OFF

POWER-ON SEQUENCE

• PurOn STD
• PurOn FST

SIGNAL STRENGTH METER

• Meter STD
• Meter THT
• Meter TEC

AUTOMUTE

• aMute ON
• aMute OFF

CITY MODE SENSITIVITY

• City STD
• City LoX
• City NoX

BANDS

• Bands ALL
• Bands MOD

Turn bands ‘ON’ or ‘OFF’ by pressing the VOLUME•MUTE button

X ON or OFF (Default is ON)
K ON or OFF (Default is ON)
TSR ON or OFF (Default is ON)
Ka USR* or Int1 or OFF
POP ON or OFF (Default is OFF)
LSR ON or OFF (Default is OFF)
SMS ON or OFF (Default is OFF)

* 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
• Voice 8
• Power-on indication 8
• AutoMute 8
• Mute 8
• Highway / AutoScan / City Switch 8
• Brightness and Dark Mode 9
• Audible Alerts 9
• Power Connector 10
• Signal Strength Meter 10
• Threat Display 11
• Tech Display 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 18-19
• How Radar Works 20
• How POP Works 20
• How Laser Works 21
• How TS R Works 22
• How Safety Radar Works 22-23

Service 24-28

• Troubleshooting 24-25
• Service 26
• Warranty and Accessories 27
To begin using your Pro300, just follow these simple steps

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

2. Mount your Pro300 on the windshield using the supplied windshield mount.

3. Press the PWR button, located top left, to turn Pro300 on.

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

Please read the manual to fully understand Pro300’s operation and features.

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QuickMount Slot
Insert Pro300’s adjustable Windshield mount into this slot. Page 7

QuickMount Button
Press the button, and slide the Windshield mount into one of its four locking positions. Page 7

City Button
Switches between AutoScan, City and Highway, settings. In general, we recommend AutoScan. Page 8

Power Button
Press the PWR button to turn the Pro300 on or off. Page 8

AutoMute
Pro300’s patented AutoMute automatically reduces the volume level of the audio alert after a brief period. Page 8. If you prefer, you can turn AutoMute off. Page 8

Programming
Pro300 is ready to go, just plug it in and turn it on. But you can also easily change 8 features for your preferences. Page 12-16

Rear Laser Port
Receives laser signals from behind the vehicle.

Earphone Jack
Accepts standard 3.5mm MONO earphone.

Brightness Button
Press to adjust display brightness. There are three brightness settings, plus Dark Mode. In the Dark Mode, the power-on indication will be changed to a dim “AD,” “HD,” or “CD” (indicating AutoScan, Dark, Highway Dark, or City Dark). In the Dark Mode, Pro300’s meter will not display during an alert, only the audio will alert you. Page 9

Power Jack
Plug the SmartCord into this connector. Pages 6

Volume / Mute Button
Press and hold to adjust the volume level. Briefly press this button (above the display) to silence the audio for a specific alert. Page 8

Alphanumeric Matrix Display
Pro300’s display will show Highway, AutoScan, or City as its power-on indication. If you prefer, you can choose other power-on indications. Page 12-14

During an alert, the display will indicate radar band, and a precise bar graph of signal strength. Page 10

NOTE: In the Dark Mode the display will not light during an alert. Page 9

The display can also show Safety Radar text messages. Page 22-23

Radar Antenna and Laser Lens
The rear panel of your Pro300 should have a clear view of the road ahead. For best performance, do not mount the Pro300 directly behind windshield wipers or tinted areas. Page 6
**Power Connection**

To power Pro300, plug the small end of the SmartCord (telephone-type connector) into the modular jack on Pro300’s right side, and plug the lighter plug adapter into your vehicle’s lighter socket or accessory socket.

Pro300 operates on 12 volts DC negative ground only. The lighter plug provided is a standard size and will work in most vehicles. However, some vehicles may require the optional European sleeve to ensure a snug fit. If so, simply call our service department to order one. This sleeve slides over the SmartCord’s lighter plug adapter. 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.

**Optional power cords**

See the Accessories section for details.

---

**Mounting Location**

WARNING: Beltronics cannot anticipate the many ways the Pro300 can be mounted. It is important that you mount Pro300 where it will not impair your view nor present a hazard in case of an accident.

**Where to mount Pro300**

For optimum detection performance, we recommend the following:

- Using the Windshield QuickMount, mount your Pro300 level, and high enough on your front windshield to provide a clear view of the road from the front and rear.
- Mount Pro300 away from windshield wipers, other solid objects, and heavily tinted areas that might obstruct the radar antenna or laser lens.

---

**Windshield QuickMount**

Pro300’s QuickMount windshield bracket is designed for unobtrusive and hassle-free mounting.

1. Depress the QuickMount button on the top of Pro300 (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 Pro300 on your windshield, use the QuickMount adjustment button located on the top of the Pro300, and slide Pro300 forward or backward to obtain a level horizontal position.

When installed and adjusted properly, the back top edge of the Pro300 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 Pro300 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.

---

**Installation**

**Windshield QuickMount**

Pro300’s QuickMount windshield bracket is designed for unobtrusive and hassle-free mounting.

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You can leave the QuickMount bracket in place on your windshield, and easily remove the Pro300 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.

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**Installation**

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---

**User’s Tip**

You can leave the QuickMount bracket in place on your windshield, and easily remove the Pro300 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 Pro300 on, press the PWR button on the left side of the top case. When you turn the Pro300 on, it goes through a sequence of alerts. If you prefer, you may program your Pro300 for a shorter power-on sequence. See the Programming section for details.

Voice
The Pro300 has our Digital Voice feature, which provides a digital voice announcement of the band being detecting. If you prefer, you can turn the Digital Voice feature off in programming. See Programming section for details.

Power-on indication
After Pro300'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.

AutoMute
Your Pro300 has our patented AutoMute feature. After Pro300 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 button located on the top case.

The Mute button, located on Pro300'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 Switch
The City button selects Pro300's sensitivity mode. We recommend the AutoScan mode for most driving.

Pro300's AutoScan mode provides long-range warning, with minimum false alarms. In this mode, Pro300's internal computer continuously analyzes all incoming signals and intelligently adjusts the sensitivity.

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 Pro300's City mode sensitivity. See the Programming section for details.

Bright Button
Press the BRT button to select your preferred brightness.

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 Pro300's City mode sensitivity. See the Programming section for details.

Brightness Button
Pro300's BRT button selects the brightness of Pro300's 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 switch, Pro300 changes to a very inconspicuous power-on indication: a very BRT AD, HD, or CD. (In this display, the A, H, or C indicates AutoScan, Highway, or City, and the D indicates Dark.)

When Pro300 is in the Dark mode, the display will not show visual alerts when Pro300 detects signals. Only the audible alert will tell you of detected signals.

Audible Alerts

For Radar signals:
Pro300 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. 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, Pro300 alerts you to all laser signals with a full laser alert.

For Safety signals:
Pro300 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
Pro300’s power jack uses a telephone-type connector. This new 6-pin connector only works with the included coiled SmartCord, or the optional Direct-wire SmartCord.

The coiled SmartCord is a special power cord that has a power-on indicator (which only lights up when the Pro300 is turned on), a bright alert light that warns of radar or laser, and a convenient mute button right on the plug. It’s perfect for any car where reaching the detector’s mute button on the windshield is a stretch.

For discreet night driving, put Pro300 in the Dark mode, and use the SmartCord for your visual alerts. Other drivers won’t know you have a detector.

An optional Direct-wire SmartCord is also available. This version includes a small display module, which can be wired directly into your electrical system, with a 10 foot straight cord to route to your Pro300.

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

Signal Strength Meter
Pro300’s alphanumeric display consists of 280 individual LEDs, to provide an intuitive ultra-bright display of signal strength and text messages.

Pro300’s standard bar-graph signal strength meter only displays information on a single radar signal. If there are multiple signals present, Pro300’s internal computer determines which is the most important threat to show on the bar-graph meter.

When Pro300 detects radar, it displays the band (X, K, or Ka), and a precise bar graph of the signal strength. When Pro300 detects a laser signal, the display will show “Laser.”

NOTE: If you are operating Pro300 in the Dark mode, the display will not light when a signal is detected – only the audio alert will be heard, and the flashing alert lamp on the SmartCord.

Threat Display
Pro300’s Threat Display option is an advanced display for experienced detector users. Please use Pro300 for a few weeks to get familiar with its other features before using Threat Display.

To use the Threat Display instead of the bar-graph signal strength meter, you must select Threat Display in Pro300’s Programming (see pages 12-15).

Pro300’s Threat Display simultaneously tracks multiple radar signals and their relative signal strength.

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

The Threat Display is actually a miniature spectrum analyzer. It shows what band each signal is and its signal strength.

NOTE: If you use Threat Display, the brief signal shown in the power-on sequence when you turn on your Pro300 will also be in Threat Display: an X with a decaying numeric signal.

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

Here Threat Display shows a strong K-band signal, and a weak X-band signal.

Here Threat Display shows a weak Ka-band signal, and a strong X-band signal.

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

Tech Display
BEL Pro300’s new Tech Display option is also for the experienced detector user. In this mode, Pro300 will display the actual numeric frequency of the radar signal being received.

Tech Display shows one K-band signal at 24.150 gigahertz.

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

There are 7 user-selectable options so you can customize your Pro300 for your own 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, and are highlighted in colored graphics. 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 for 2 seconds. The unit will beep twice, and will display the word Program.

2. Then hold the RVW button down. The Pro300 will scroll through the categories, starting with Pilot (Pilot), then Voice (Voice), then Power-on sequence (PwrOn), then Signal strength meter (Meter), and then AutoMute (AMute).

3. Release the RVW button when Pro300 shows the AutoMute item. Since the factory setting is for AutoMute to be on, Pro300 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 unit will display Complete: beep 4 times, and return to normal operation.

An example

Here is how you would turn Pro300’s AutoMute feature off.

1. Enter the Program Mode by holding both the CITY and BRT buttons down for 2 seconds. The Pro300 will beep twice and display Program.

2. Then hold the RVW button down. The Pro300 will scroll through the categories, starting with Pilot (Pilot), then Voice (Voice), then Power-on sequence (PwrOn), then Signal strength meter (Meter), and then AutoMute (AMute).

3. Release the RVW button when Pro300 shows the AutoMute item. Since the factory setting is for AutoMute to be on, Pro300 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 Pro300 will display Complete, beep 4 times, and return to normal operation.

Overview of Programming

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

<table>
<thead>
<tr>
<th>PILOT</th>
<th>VOICE</th>
<th>POWER-ON SEQUENCE</th>
<th>SIGNAL STRENGTH METER</th>
<th>AUTOMUTE</th>
<th>CITY MODE SENSITIVITY</th>
<th>BANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot HWY</td>
<td>Voice ON</td>
<td>PwrOn STD</td>
<td>Meter STD</td>
<td>AMute ON</td>
<td>City STD</td>
<td>Bands ALL</td>
</tr>
<tr>
<td>Pilot H</td>
<td>Voice OFF</td>
<td>PwrOn FST</td>
<td>Meter THT</td>
<td>AMute OFF</td>
<td>City LoX</td>
<td>Bands MOD</td>
</tr>
<tr>
<td>Pilot U</td>
<td></td>
<td></td>
<td>Meter TEC</td>
<td></td>
<td>City NoX</td>
<td></td>
</tr>
</tbody>
</table>

Press the CHANGE button to change your setting within a category

- Full word: Highway, AutoScan or City Letter: H or A or C
- Vehicle voltage
- Voice alerts on
- Voice alerts off
- Standard power-on sequence
- Fast power-on sequence
- Standard signal strength meter
- Threat Display
- Tech Display
- AutoMute on
- AutoMute off
- Standard City mode sensitivity
- Low X band sensitivity in City Mode
- No X band sensitivity in City Mode
- Default bands
- One or more bands are disabled

* Factory Default Settings

To reset Pro300 to its original factory settings, press and hold the “CITY” and “BRT” buttons while turning the power on. The Pro300’s display will provide a Reset* message, accompanied by an audible alert, acknowledging the reset.

<table>
<thead>
<tr>
<th>X</th>
<th>ON or OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>ON or OFF</td>
</tr>
<tr>
<td>Ka</td>
<td>USR or OFF</td>
</tr>
<tr>
<td>POP</td>
<td>ON or OFF</td>
</tr>
<tr>
<td>LSR</td>
<td>ON or OFF</td>
</tr>
<tr>
<td>SWX</td>
<td>ON or OFF</td>
</tr>
<tr>
<td>TSR</td>
<td>ON or OFF (Default is ON)</td>
</tr>
</tbody>
</table>
**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, Pro300 will display “Highway,” “City,” or “Auto” as its power-on indication. (factory default)

**Pilot H (Letter)**

In this setting, Pro300 will display “H” for Highway, “C” for City, and “A” for AutoScan.

**Pilot U (Vehicle voltage)**

In this setting, Pro300 will continually display “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 is displayed, followed by an audible alert. A high voltage warning is also given if the voltage goes above 16.0 volts. The high-voltage warning is also followed by an audible alert.

**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.

**Power-on Sequence**

**PwrOnSTD** (Standard)

In this setting, each time you turn on the Pro300, it will display “Pro300,” “Laser,” “Ka-band,” “K-band,” “X-band,” “Safety,” and any changes to factory settings. (factory default)

**PwrOnFST** (Fast power-on)

In this setting, the Pro300 will only provide a brief audible tone, and will display any non-factory settings.

**Signal Strength Meter**

**MeterSTD** (Standard meter)

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

**MeterTHT** (Threat Display)

In this setting, the meter simultaneously tracks multiple radar signals, including relative signal strength for each. NOTE: The Threat Display feature is explained in more detail on pages 10-11.

**MeterTEC** (Tech Display meter)

In this setting, the meter displays the actual numeric frequency of the radar signal received. NOTE: The Tech Display feature is explained in more detail on page 11.

**AutoMute**

**aMute ON** (AutoMute on)

In this setting, Pro300’s audio alerts will initially be at the volume you set, but after a few seconds, the Pro300 will automatically reduce the volume level, to keep you informed, but not annoyed. (factory default)

**aMuteOFF** (AutoMute off)

With AutoMute off, Pro300’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 Pro300 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 Pro300 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 Pro300 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 Pro300 is operated in City mode. X-band sensitivity is not affected when used in “AutoScan,” or “Highway” modes.
Bands

Bands.ALL
In this setting all radar, laser, and SWS frequencies are monitored. This is the factory setting and it is highly recommended that you use your Pro300 in this mode.

Bands.MOD
In this setting, Pro300 will warn you with an audible alert, and associated text message stating which band is turned off (i.e. “SWS OFF”). This warning is displayed during the start up sequence (standard or fast).

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

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, GaAs FET VCO
- Scanning Frequency Discriminator
- Digital Signal Processing (DSP)

Laser Detection
- Quantum Limited Video Receiver
- Multiple Laser Diodes

Display
- 280 LED Alphanumeric
- Bar Graph, Threat Display, or Tech Display
- 3 Levels of Brightness, plus Dark Mode

Power Requirement
- 12VDC, Negative Ground
- SmartCord (included)

Programmable Features
- Power-On Indication
- Voice Alerts
- Power-On Sequence
- Signal Strength Meter
- AutoMute
- City Mode Sensitivity
- Radar / Laser Bands

Sensitivity Control
- Highway, AutoScan and City

Auto Calibration Circuitry

VG2 Immunity

Dimensions (Inches)
- 1.25 H x 2.75 W x 4.75 L
Interpreting Alerts

Although the Pro300 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 Pro300 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 Pro300’s warning system for radar, laser and safety alerts.

### Alert

**Explanation**

The Pro300 begins to sound slowly, then the rate of alert increases. The Signal Meter ramps accordingly.

Pro300 emits short alerts for a few seconds and then falls silent only to briefly alert and fall silent again.

Pro300 suddenly sounds a continuous tone for the appropriate band received. All segments in the Signal Strength Meter are lit.

A brief laser alert.

Pro300 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!

A 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

Pro300 gives an X-band, or K-band alert intermittently.

### Explanation

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.

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**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.
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.

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.
Technical Details

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 Pro300 can display are listed on the facing page.

From the factory, your Pro300 is programmed with SWS decoding OFF. If SWS is used in your area, your Pro300 will display the safety messages associated with the signal. If you wish to detect this system, use the Programming feature to turn Pro300’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 Pro300’s eight-character display.

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

The TSR software is turned on by default in the Programming section of your detector. If you believe this type of system isn’t used in your area, you can simply turn it off. Otherwise, your detector is ready to start protecting you right out of the box.

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

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

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 Snow Slide 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

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

Travel Information/Convenience
42 For future use
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

Fast/Slow Moving Vehicles
60 For future use
61 Emergency Vehicle In Transit
62 Police In Pursuit
63 Oversize Vehicle In Transit
64 Slow Moving Vehicle

For future use
For future use
### Troubleshooting

**Problem**

Pro300 beeps briefly at the same location every day, but no radar source is in sight.

Pro300 does not seem sensitive to radar or laser.

Pro300 did not alert when a police car was in view.

Pro300 did not provide a Safety signal while within range of an emergency vehicle.

Pro300’s display is not working.

Pro300’s audible alerts are less loud after the first few alerts.

Pro300 bounces or sags on windshield.

Pro300’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 Pro300’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.
• Pro300 may be in City Mode.

• VASCAR (Visual Average Speed Computer and Recorder) a stopwatch method of speed detection, may be in use.
• Officer may not have radar or laser unit turned on.
• Safety transmitters may not be commonly used in your area.

• Pro300 may be in City Mode.

• Pro300 feels very warm.

**Explanation of Displays**

<table>
<thead>
<tr>
<th>Display</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>Sensitivity control is in Auto mode, display is in Dark mode (page 9)</td>
</tr>
<tr>
<td>HD</td>
<td>Sensitivity control is in Highway mode, display is in Dark mode (page 9)</td>
</tr>
<tr>
<td>CD</td>
<td>Sensitivity control is in City mode, display is in Dark mode (page 9)</td>
</tr>
<tr>
<td>No display</td>
<td>Pro300 is in the Dark mode, and is programmed for Dark All (page 9)</td>
</tr>
<tr>
<td>PilotHWY</td>
<td>One of the many programming messages (pages 12-16)</td>
</tr>
<tr>
<td>WorkZone</td>
<td>One of the many Safety Radar messages (pages 22-23)</td>
</tr>
<tr>
<td>Caution</td>
<td>Pro300 has detected a Safety Radar Signal, but the signal isn’t yet strong enough to decode the specific safety message (page 22-23)</td>
</tr>
<tr>
<td>X5, or K5, or KA9 etc.</td>
<td>Pro300 has been programmed in the Threat Display mode (page 10-11)</td>
</tr>
<tr>
<td>VG2</td>
<td>Pro300 has detected a VG2 unit (radar detector detector)</td>
</tr>
</tbody>
</table>
Service Procedure
If your Pro300 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 Pro300 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 Pro300:
- 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 payment 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 Pro300 repaired at the price quoted), your Pro300 will be returned, without repair. Payment can be made by check, money order, or credit card.

Ship Pro300 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 Pro300 postpaid and insured. Insist on a proof of delivery, and keep the receipt until the return of your Pro300.

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 its 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. If the product has been repaired, replacement parts are warranted for a period of ninety (90) days from the date of repair.

What you must do to maintain this warranty:
- Show original proof of purchase from an authorized Beltronics dealer.
- The warranty is non-transferable.
- This warranty does not cover damage due to acts of nature, accident, abuse, neglect, or unauthorized repairs.

Warranty Exclusions: Warranty does not apply to:
- Physical or electrical abuse.
- Defects from normal wear and tear.
- Products damaged in shipment or handling.
- Products sold “AS IS” or “WHERE IS”.

Limitation of Warranty: Except as expressly provided herein, you are acquiring “AS IS” and “WHERE IS,” without representation or warranty, expressed or implied, including but not limited to representation or warranty of merchantability and fitness for a particular purpose.

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.贝尔tronics 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).

Warranty and Accessories
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Limitation of Warranty: Except as expressly provided herein, you are acquiring “AS IS” and “WHERE IS,” without representation or warranty, expressed or implied, including but not limited to representation or warranty of merchantability and fitness for a particular purpose.

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.

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Accessories
The following accessories and replacement parts are available for Bel Pro300:

Standard Coiled SmartCord $29.95
Coiled SmartCord $29.95
Zippered Travel Case $14.95
Windshield Single Cup Mount $14.95
Windshield Suction Cups Mount $9.95
Visor Clip Mount $7.95

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

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