



with 65 Digital Voice Messages and Digital Display



with 10 Digital Voice Messages and Digital Display

CHERS 920

sws I Ka X K

Operating instructions for models E926CS and E916CS





#### INTRODUCTION

Thank you for purchasing a EXPRESS 926 or EXPRESS 916 Radar/Laser/Safety detector. Your new unit offers the most advanced technology available for detecting all Radar and Laser speed monitoring devices. In addition, EXPRESS 926 features Digital Voice Messages for Radar/Laser and sws<sup>™</sup>

To ensure maximum benefit from your unit, please read all instructions before operation.

Remember, owning a Radar detector does not give you a license to speed. Alerts from a Radar detector serve as an effective reminder to check your speed. Laws vary throughout North America governing the use of a Radar detector. It is your responsibility to follow these laws.

#### SELECTABLE FEATURES

#### Safety Warning System<sup>®</sup> (sws<sup>™</sup>)

EXPRESS 926 and EXPRESS 916 detect encoded signals from sws<sup>w</sup> transmitters and provide distinct alerts for: Highway Construction/Maintenance, Highway Hazard Zones, Weather Related Hazards, Travel Information/Convenience and Emergency/Slow Moving Vehicles. EXPRESS 926 also provides 60 Digital Voice Messages.

For a complete description of sws<sup>™</sup> audio and visual alerts, see page 18.

### vg-2 Guard® Alert

EXPRESS 926 and EXPRESS 916 feature vg-2 Guard<sup>\*</sup> which alerts to the presence of the Interceptor vg-2 (Radar Detector Detector).

For a complete description of the vg-2 Guard<sup>\*</sup> audio/visual alert, see page 17.

### Safety Warning System® with Digital Voice Messages

Choose between Digital Voice Messages with a unique sws<sup>™</sup> tone or sws<sup>™</sup> tone only (see page 8).

#### Digital Voice Prompts for Radar/Laser/vg-2 Guard®

Choose between Radar/Laser/VG-2 Guard® Digital Voice prompts followed by "beeps" or "beeps" only (see page 9).

2

#### TABLE OF CONTENTS

Profile of Features ► page 4 Description of Features > page 5 Power-Up Test Sequence > page 5 Tutorial Mode ► page 5 Memory Retention of Feature Selections > page 5 Adjusting the Audio Level > page 5 DRK (Dim/Dark) Button ► page 6 AUD (Audio Mute) Button ► page 6 CTY (City/Highway) Button ► page 7 Reset to Factory Settings > page 8 Selectable Features > page 8 Entering Selectable Features Mode > page 10 Installation ► page 10 General Guidelines ► page 10 Understanding Radar, Laser and sws<sup>™</sup> ► page 13 Interpretation of Alerts > page 14 Radar Alerts > page 14 Instant-On/Pulsed Radar Alert > page 16 Typical False Alert (Radar) > page 16 Laser Alerts ► page 17 VG-2 Guard® Alert ► page 17 Safety Warning System<sup>®</sup> (sws<sup>™</sup>) Alerts ► page 18 Performance Verification ► page 19 Conditions That Affect Radar Alerts > page 19 Conditions That Affect Laser Alerts ► page 19 Troubleshooting > page 20 Consumer Warranty ► page 21 Service ► page 22 Warranty Service > page 22 Post-Warranty Service > page 22 Specifications ► page 23 Accessories ► page 23

**PROFILE OF FEATURES** 



- P/v (Power/Volume) Button: pressing P/v briefly will turn the unit on. Pressing P/v a second time will bypass the power up test sequence. Holding the P/v button down will change the audio level.
- sws<sup>™</sup> Indicator: illumination of green Safety Warning System<sup>\*</sup> LED confirms potential road hazards ahead.
- Digital Display: communicates all mode selections, Radar Signal Strength (1–9), presence of Laser (L) and sws<sup>™</sup> category (1–5). Display also indicates volume level selection.
- 4. **Ka/X/K Band Indicators:** the Radar band received is confirmed by the illumination of the appropriate letter.
- DRK (Dim/Dark) Button: provides dim or dark settings of the display for discreet night travel. Audio alerts are not affected.
- AUD (Audio Mute) Button: provides automatic and manual muting of X, K, Super Wideband Ka Radar and manual muting of sws "alerts.
- CTY (City/Highway) Button: minimizes unwanted X band alerts without reducing sensitivity. EXPRESS 926 includes city X/K/Ka for additional selectivity.

- Antenna Opening: Radar and sws<sup>™</sup> signals are received by a patented diecast antenna with integrated transition to microstrip mixer.
- 9. Laser Optical Sensors: collect Laser signals from in front and behind.
- 10. Audio Alert Speaker: all audible alerts and Digital Voice Messages are emitted from this location.
- 11. **Power Jack:** EXPRESS 926 and EXPRESS 916 operate in any vehicle with a 12 volt DC negative ground system (10.5 volt to 16 volt range).
- Note: EXPRESS 916 contains the same feature set as EXPRESS 926 pictured, except for city X/K/Ka and 60 SWS<sup>™</sup> Digital Voice Messages.

### DESCRIPTION OF FEATURES

### Power-Up Test Sequence

Each time your unit is turned ON, alerts for Laser, Ka, K, X and Safety Warning System<sup>\*</sup> are presented. After this test sequence, illumination of digits 1, 2, 3 and/or 4 indicates if Selectable Features are engaged (*see page 8*). To bypass the power-up test sequence, press the P/v button again. If your unit presents an illumination pattern other than this standard power-up test sequence, return it to BELTRONICS for servicing.

### Tutorial Mode

The Tutorial mode allows you to become more familiar with all audible and visual alerts. To engage this mode, press and hold CTT, then press AUD when the unit is OFF. The unit will cycle continuously through audio/visual alerts for Laser, Ka, K, X and vG-2 Guard<sup>®</sup> Alert as well as sample sws<sup>™</sup> messages or sws<sup>™</sup> categories (EXPRESS 916). To exit tutorial mode, press the P/v button and your unit will be ON and ready to receive signals.

#### Memory Retention of Feature Selections

Any time your unit is turned **OFF** or unplugged from the cigarette lighter socket, all feature settings are retained in the unit's memory. Memory retention eliminates the need to reset your preferred feature settings each time your unit is turned **OFF** and then back **ON**.

### Adjusting the Audio Level

Once your unit has completed the power-up test sequence, the audio level can be adjusted by holding the P/v button down. As you hear the audio level change, the digits 1-9 in the Digital Display provide a visual reference of the audio level.

To reverse the direction in which the audio level increases/ decreases, briefly release, then hold down the P/v button again.

#### DRK (Dim/Dark) Button

The DRK button allows selection of a dim or dark setting for all LEDS and the Digital Display. To engage dim mode, press the DRK button once. A single "beep" confirms your selection. To completely cancel the illumination of all LEDS, press DRK a second time. You'll notice a horizontal bar segment remains dim to indicate your unit is receiving power. To return to a full bright setting, press the DRK button a third time; two "beeps" confirm this selection. Use of the DRK button does not affect audio alerts.

*Important—if you press the the DRK button and do not receive audible confirmation, the audio level has been set too low.* 

### AUD (Audio Mute) Button

#### Continuous Audio Alert Pattern

Your unit has been preset at the factory to provide an X, K, Ka or Laser audio alert and Digital Voice announcement of the signal detected. Digital Voice prompts are provided once after the initial audio alert. This standard setting is often preferred when background noise in a vehicle is loud.

#### Automatic Mute Audio Alert Pattern (Radar)

To engage automatic muting, press the AUD button once when the unit is not alarming. A single "beep" and a decimal point in the upper left corner of the Digital Display confirm automatic mute mode has been engaged. The alert pattern when this mode is activated consists of a short X, K or Super Wideband Ka audio alert followed by the Digital Voice announcement of the signal detected *(if feature is engaged)*. After the Digital Voice announcement, a "clicking" tone keeps you quietly informed for as long as the signal is present. This "clicking" becomes more rapid as the strength of the Radar signal increases. With this mode engaged, the automatic mute mode enables you to conveniently monitor extended encounters without having to manually mute or adjust the volume setting. To return to the continuous audio alert pattern, press the AUD button a second time while the unit is not alarming. Two "beeps" and no decimal point in the upper left corner of the Digital Display confirm you have cancelled automatic mute mode.

Manual Muting of Audio Alerts (Radar & sws<sup>™</sup>)

Regardless of the AUD mode selected (continuous or automatic mute) the X, K, Super Wideband Ka and sws<sup>\*\*</sup> audio alerts can be completely muted by pressing the AUD button *during an alert*. Once the alert has passed, the unit will revert to the previous AUD setting (continuous or automatic mute).

Note—because Laser alerts are not lengthy or sustained, muting is not required (see page 17).

#### сту (City X/Highway) Button

The city X mode has been designed to effectively reduce unwanted audio alerts caused by intrusion alarms, door openers, and other devices which share X band with police Radar—without reducing sensitivity. Signals from non-police Radar sources are frequently encountered in urban and suburban areas, making use of this mode ideal in these areas.

Pressing the CTY button once engages the city X mode which is confirmed by a "C" in the Digital Display and a single audio "beep". Pressing the CTY button twice returns you to highway mode; a double "beep" and illumination of "H" in the display will confirm this selection. With CTY engaged, weak X band signals encountered will produce no audible alert until the signal strength reaches a preset level. However, visual alerts are processed the instant an X band signal is detected, keeping you quietly informed. Since most "false" X band signals are weak, the use of the city mode allows you to drive out of their range before they reach the preset level and trigger a full audio alert. In contrast, signals from X band traffic Radar are generally stronger and will exceed the preset level, causing a full X band audio alert. Activating the City X Mode will not change Super Wideband Ka, K or instant-on X band Radar alert patterns. *Note—the CTY mode does not change the presentation of alerts for Laser, sws*<sup>™</sup> or vG-2 signals.

### City ALL (X/K/Ka)-Model 926 only

City ALL provides an alternated approach for improving X, K and Ka band selectivity and is ideal for use in areas with a high level of microwave trasmissions which can cause falsing on all three bands. To engage City X/K/Ka mode, press CTY until the Dispay shows a capital "A". Once engaged, weak X, K or Super Wideband Ka signals encountered will provide no audible alerts until the signal strength reaches a preset level. Visual alerts are processed the instant an X, K or Super Wideband Ka signal is detected, keeping you quietly informed.

### **Reset to Factory Settings**

You can reset your unit to factory settings for volume, DRK, AUD, CTY and Selectable Features. With the unit OFF, press and hold CTY button then press the AUD and P/V buttons simultaneously. Two "beeps" and "F" in the digital display, confirm that the unit is reset to the original factory settings. Your unit is now **ON** and ready for operation.

#### SELECTABLE FEATURES

Safety Warning System<sup>\*</sup>, vG-2 Guard<sup>\*</sup> Alert, 60 sws<sup>™</sup> Digital Voice Messages (Model E926CS only) and Digital Voice prompts for Radar/Laser/vG-2 Guard<sup>\*</sup> are all features which may be selected on or oFF, depending upon your preference. These Selectable Features are referenced by the digits #1, #2, #3 and #4 respectively.

Safety Warning System<sup>®</sup> (sws<sup>™</sup>)—DIGIT #1

When **on**, unit will provide an sws<sup>™</sup> warning when sws<sup>™</sup> transmitters are detected. Factory setting is **on**.

Digit #1 *solid*—sws<sup>™</sup> is **on** Digit #1 *flashing*—sws<sup>™</sup> is **off** 

VG-2 Guard<sup>®</sup> Alert—DIGIT #2

When **on**, unit will detect signals from Interceptor vG-2 transmitters. Factory setting is **oFF**. Use of vG-2 Guard<sup>\*</sup> is recommended only in areas known to use the Interceptor vG-2. Digit #2 solid—vG-2 Guard<sup>\*</sup> is **oN** Digit #2 flashing—vG-2 Guard<sup>\*</sup> is **oFF** 

Safety Warning System<sup>\*</sup> with Digital Voice Messages—DIGIT #3 (EXPRESS 926 ONLY)

When **on**, unit will provide Digital Voice announcement when sws<sup>®</sup> transmitters are detected. Factory setting is **on**. When **off**, Digital Voice is replaced by sws<sup>®</sup> "tone/clicking" only. Digit #3 *solid*—sws<sup>®</sup> Digital Voice is **on** Digit #3 *flashing*—sws<sup>®</sup> Digital Voice is **off** (sws<sup>®</sup> tone only)

Digital Voice Prompts for Radar/Laser/sws<sup>™</sup> vG-2 Guard<sup>®</sup>

(DIGIT #3 FOR EXPRESS 916 ONLY)

When **on**, unit will provide Digital Voice prompts followed by "beeps" when X/K/Ka, Laser, VG-2 Guard<sup>®</sup> and the five sws<sup>®</sup> categories are detected. Factory setting is **on**. When **off**, Digital voice prompts are replaced by separate "beeps only.

Digit #3 solid—Digital Voice Prompts on. Digit #3 flashing—Digital Voice is off ("beeps" only)

Digital Voice Prompts for Radar/Laser/vG-2 Guard® Alert—DIGIT #4 (EXPRESS 926 ONLY)

When **on**, unit will provide Digital Voice prompts followed by "beeps" when X/K/Ka, Laser and vG-2 Guard" signals are detected. Additionally, EXPRESS 916 will provide Digital Voice for sws" categories only. Factory setting is **on**. When "**oFF**", Digital Voice prompts are replaced by "beeps" only. Digit #4 *solid*—Digital Voice prompts **on** Digit #4 *flashing*—Digital Voice prompts **oFF** ("beeps" only)

Note: Digital Voice messages for the Five sws<sup>™</sup> catagories are not exact to what is written on the sws<sup>™</sup> message information.

## **Entering Selectable Features Mode**

- 1. With the unit **OFF**, press and hold the CTY button then press the P/v button. The amber X LED will illuminate and a short "beep" will sound.
- 2. Immediately after the "beep", digit #1 will appear and indicate the status of the sws<sup>¬</sup> Selectable Feature. To select digit #2 (VG-2 Guard<sup>\*</sup>), press the CTY button again. To select digit #3 (sws<sup>¬</sup> Voice), press the CTY button a third time and to select digit #4 (Digital Voice prompts for Radar/Laser/VG-2 Guard<sup>\*</sup>) press the CTY button once again. Use the CTY button to select one of the four digits.
- If the selected digit is *solid*, feature is on, but may be canceled by pressing the AUD button. Two "beeps" and the flashing digit will confirm feature is OFF.
- 4. If the selected digit is *flashing*, the feature is OFF, but may be activated by pressing the AUD button. A single "beep" and *solid* illumination will confirm the feature is ON.
- Press the P/v button to retain your new settings for Selectable Features. Two "beeps" will confirm that you have exited from Selectable Features Mode and your unit will be on.

#### INSTALLATION

### **General Guidelines**

10

Do not mount your unit directly behind windshield wipers or mirrored sunscreens which block Radar and Laser signals and substantially reduce warning range. Unlike "after market" mirrored sun-screens, regular tinted glass does not affect Radar reception.

Radar signals are also reflected by the "heated windshields" known as Instaclear<sup>\*</sup> and ElectriClear<sup>\*</sup> available as an option on some vehicles. This type of windshield makes any dash, visor or windshield mounted detector ineffective. (If in doubt, check with an appropriate dealership to see if this applies to your vehicle.)

To achieve optimum performance, regardless of which mounting position you choose, follow these basic steps:

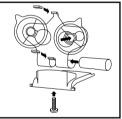
- Consider occupant safety when selecting a mounting location. Choose a location where the unit will not be hazardous in case of an accident.
- 2. For optimum detection, position your unit with a clear, unobstructed view of the road from the *front and rear*.
- 3. Do not allow the unit to make contact with the windshield. This will eliminate unnecessary vibration.
- Avoid placing your unit in direct sunlight. During the summer, the interior of an enclosed vehicle can sometimes reach temperatures that will cause premature aging of the unit.
- Your detector is not waterproof; exposure to water may cause damage.

# Dash Mounting

- Select an area that is relatively level, clean and dry. Adhere the soft portion of the enclosed hook and loop fastener to this area and the corresponding hard portion to the bottom of your unit.
- 2. Fasten unit to dash by placing hook and loop pieces together.

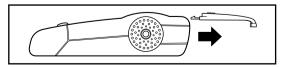
## Mounting Brackets

The visor bracket is fully assembled. To assemble the windshield bracket, follow this diagram.



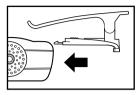
## Visor Mounting

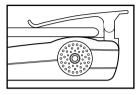
Remove the mounting bracket cover on top of the unit by pressing on the raised dots and pushing outward. Store the cover in a safe place.



1.

 Slide the visor bracket onto the top of the detector until it snaps into place. Clip the detector to the edge of the sun visor nearest the windshield.

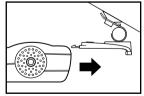




# Windshield Mounting

- Remove the mounting bracket cover on top of the unit by pressing on the raised dots and pushing outward. Store the cover in a safe place.
- Clean the selected windshield area, position the suction-cup mount on the windshield, and press firmly on each suction cup to secure it in place.
- 3. Use a screwdriver or a small coin to adjust the suction-cup mount until the base plate is level.
- 4. Slide detector onto base plate until it snaps into place.





Note—some vehicles have a plastic coating on the inside of the windshield designed to protect occupants in case of an accident. Use of the windshield bracket on this type of windshield can permanently mark the surface. Check with your dealer if you are unsure whether your vehicle is equipped with this type of windshield.

## Power Jack

Your BEL detector operates on 13.8 volts DC and receives power from the cigarette lighter socket. The cigarette lighter plug has been designed to fit universally in all sockets. The lighter socket must be clean and well grounded for proper operation.

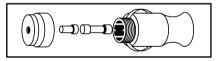
### **Fuse Replacement**

If your unit is not operating because the fuse has blown, replace the fuse as follows:

- 1. Carefully unscrew the tip of the cigarette lighter plug.
- 2. Remove the tip from the cigarette lighter plug, followed by the old fuse.

*Note—the tip is in two pieces. Be careful not to lose either piece or the spring inside the holder.* 

- 3. Replace the fuse with a 1-amp, 3AG fuse. (See *Accessories*, page 23, for proper replacement.) Defeating the fuse protection can damage your unit or your vehicle's electrical system and will void your warranty.
- 4. Press the tip of the plug into the body, and screw back into place.



#### UNDERSTANDING RADAR, LASER AND SWS

### **Three Radar Frequencies**

Three microwave frequencies have been allocated by the FCC (Federal Communications Commission) and are used for traffic Radar: X, K and Super Wideband Ka. Your EXPRESS detector provides detection of all known radar traffic devices.

## Total Tracking Laser<sup>™</sup>(TTL<sup>™</sup>)

Unlike Radar signals, which are highly reflective, Laser signals have very poor reflective characteristics. Many of today's Laser detectors do not have the high sensitivity necessary to detect Laser within a large "field of view". EXPRESS 926 and EXPRESS 916 incorporate BEL'S number one rated Laser detection. Twin Laser ports detect energy far outside the main Laser beam—including off-axis signals—providing the largest achievable 360° "field-of-view". The alerts received by your unit are the same whether they are received from the front or rear.

## Safety Warning System<sup>®</sup> (sws<sup>™</sup>)—What is it?

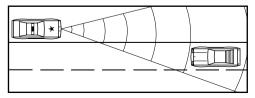
The Radio Association Defending Airwave Rights, Inc. (R.A.D.A.R.) conceived and developed the Safety Warning System<sup>\*</sup>. The concept behind this system is to warn motorists of potential road hazards by employing Safety Warning System<sup>\*</sup> transmitting devices in areas such as construction zones, accidents sites and detours. These sws<sup>\*\*</sup> transmitters operate within the 24 GHz portion of the K band frequency and broadcast unique, coded signals which are detected by your EXPRESS 926 or EXPRESS 916.

#### INTERPRETATION OF ALERTS

### Radar Alerts

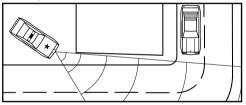
The alerts provided by your unit are affected both by the type of transmission (continuous wave or instant-on) and the position of the Radar source. Generally, when you drive closer to a Radar source, the intensity of the received signal increases, resulting in a higher number appearing in the Digital Display and a corresponding increase in the audio alert rate. Described below are five common types of Radar encounters and the alerts you will typically receive.

1. Stationary or moving Radar, straight ahead aimed in your direction.



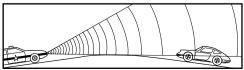
Since Radar signals travel in a straight line, this Radar encounter potentially offers maximum warning range. Once the signal is received, the initial warning consists of the X, K or Super Wideband Ka audio and visual alerts and the simultaneous illumination of a signal strength digit. The actual digit displayed will depend upon the strength of the signal received. As the strength of the Radar signal increases, the audio alert becomes more rapid and the signal strength digit will progressively increase. Assuming the Radar signal remains uninterrupted, the audible and visual alerts will clearly indicate a "weak" signal becoming stronger as you drive closer to the Radar source. Remember, when the police Radar source is moving toward you, the Radar signal strength will increase much more rapidly than if you are approaching a stationary source.

2. Stationary Radar aimed around a corner



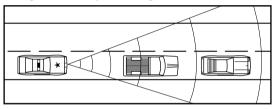
Under this circumstance, reaction time is considerably reduced. Since the Radar signals are transmitted across your line of travel, there is generally no signal available to receive until you are relatively close to the source. Once an alert is received, expect the strength of the signal to increase very quickly. Advanced warning in this situation may be reduced.

3. Stationary Radar concealed by the crest of a hill aimed in your direction.



Radar signals travel in a straight line and do not pass through earth. Consequently, police Radar aimed at the crest of a steep hill cannot be received until you are at or near the top. Warning time may be minimal (as in situation #2) since a strong signal is not present until you are near the crest of the hill. At this point, you may be nearly in the police officer's line of sight. When cresting a hill, a weak initial alert followed very quickly by a full alert is typical. This alert pattern requires prompt attention.

4. Moving Radar behind you, traveling in the same direction.



Police Radar signals transmitted from behind your vehicle can be received when reflected by objects in front of you such as large signs, bridges and trucks. As you drive, the size and configuration of these objects are constantly changing causing the strength of any reflected Radar signal received to vary. A strong, uninterrupted alert indicates the patrol car is close behind.

## Instant-On/Pulsed Radar

This type of signal appears suddenly when a Radar unit is "triggered". The instant-on alert consists of an intense, three second X, K or Super Wide band Ka audio "burst", coupled with the illumination of the digit "9" and the corresponding band indicator.

## Typical False Alert (Radar)

Ideally, a Radar detector should only alert in the presence of police Radar. However, because other devices share X band with police Radar, false alerts sometimes occur. Generally, a false signal produces only a short audio and visual alert. Since they are most often weak, it is possible to drive out of the signal's range very quickly and receive only a brief alert. Although many times the probable source of the false signal can be identified (supermarket, bank, commercial building, etc.), caution is advised until the source can be confirmed. The X band alert pattern caused by a non-police source can look like the initial alert produced by actual police Radar. For this reason appropriate action is required any time an alert is received.

#### Laser Alerts

When Laser is detected, a flashing "L" will appear in the Digital Display.

If a vehicle is a long distance from the source of Laser pulses, fewer pulses will generally be received. The closer the vehicle is to the source of Laser pulses, the greater the likelihood of receiving a steady stream of Laser pulses. The reason for this is the aiming stability of the Laser gun and the fact that it is impossible to hold the gun absolutely still. Any movement of the gun results in motion of the beam at the target. The further the target, the greater the displacement of the beam and the shorter the dwell time of the beam at the target point. Therefore, there is the possibility of receiving only a few Laser pulses.

Due to these characteristics, all Laser alerts received from your unit should be taken seriously.

### vg-2 Guard® Alert

Whenever your EXPRESS unit detects signals from the Interceptor vG-2 (Radar Detector Detector), the vG-2 Guard<sup>®</sup> feature engages, alerting you to the presence of the interceptor vG-2. (vG-2 Guard<sup>®</sup> must be selected **on**—see page 8 for more information on Selectable Features). A distinct, 2-second audio warning coupled with the Digital Voice announcement of "vG-2 Alert" and the flashing of the "H", or "A" (926 only) in the Digital Display confirms activation of the vG-2 Guard<sup>®</sup> feature. This flashing continues for as long as vG-2 Guard<sup>®</sup> is activated. During the vG-2 alert your unit does not detect Radar or sws<sup>®</sup> signals. However, the presence of the Interceptor vG-2 indicates that traffic is being monitored and speed measurements may be taken. When the "H" or "C" stops flashing, the vG-2 alert is over and your unit resumes scanning for Radar and sws<sup>™</sup> signals.

Note—activation of vG-2 Guard<sup>®</sup> does not affect detection of Laser signals.

# Safety Warning System<sup>®</sup> (sws<sup>™</sup>) Alerts

With the Safety Warning System<sup>®</sup> feature **on** and an sws<sup>®</sup> transmitter in use, your detector will alert with a unique, 2-second sws<sup>®</sup> audio tone coupled with the illumination of the sws<sup>®</sup> LED and the sws<sup>®</sup> message category digit (1–5). (If sws<sup>®</sup> Digital Voice is **on** (*model 926 only*) the appropriate message is heard *twice*, immediately after the 2-second tone.) After the Digital Voice Message, a "clicking" pattern is provided for as long as the the signal is present.

To select sws<sup>™</sup> ON or OFF, see Selectable Features, page 8.

Safety Warning System<sup>®</sup> (sws<sup>™</sup>) Categories

DIGIT #1—Highway Construction/Maintenance (messages 1–11)

DIGIT #2—Highway Hazard Zone Advisory (messages 13–31)

DIGIT #3—Weather Related Hazards (messages 33–41)

DIGIT #4—Travel Information/Convenience (messages 43–59)

DIGIT #5—Emergency/Slow Moving Vehicles (messages 61–64)

a "0" in the display indicates an incomplete or unknown message

Note—for a complete listing of the five Safety Warning System<sup>\*</sup> categories and messages, please refer to the **Safety Warning System<sup>\*</sup> Alert Card** enclosed with your manual.

*Note: EXPRESS 916 provides a Digital Voice Message for <u>each</u> <i>sws*<sup>™</sup> category only and <u>NOT</u> the catalogue of 60 individual *Voice Messages.* 

## Conditions that Affect Radar Alerts

If you feel your unit is not alerting properly, keep in mind that there are many conditions that influence the intensity or duration of an alert:

- The police are using instant-on/pulsed Radar, in which case no signal is transmitted until visual contact has been made with your vehicle. For detection of this signal, you must rely on reflected signals from Radar directed at traffic traveling ahead of you.
- 2. The police Radar unit is positioned perpendicular to the road, around a curve, or just over the crest of a hill, thus, significantly reducing the reception range.
- 3. The highway traffic between your vehicle and the police Radar source is heavy. This blocks/reflects transmitted signals. The presence of several large trucks between you and the police Radar unit could also significantly reduce reception.
- 4. Rain or humid weather conditions can absorb transmitted signals before they reach your vehicle, again reducing detection range.
- The police Radar unit is not properly tuned and is transmitting outside the FCC allocated X, K or Super Wideband Ka frequency ranges.

### Conditions that Affect Laser Alerts

If you feel your unit is not properly alerting to the presence of Laser signals, keep in mind that rain, fog, high humidity and traffic conditions can affect the range that the Laser beam can be detected.

### Solutions for Common Problems

If your EXPRESS 926 or EXPRESS 916 is not operating properly, please refer to the outline below.

Problem	Possible Cause	Corrective Procedure
Unit not receiving power	Plug not properly inserted	Reinsert plug and rotate
	Fuse in power cord is defective	Replace with 1 amp 250 Volt 3AG fuse (see page 12)
	Lighter socket not clean and negatively grounded	Consult your dealer or a professional mechanic
	Fuse or electrical wiring for lighter socket defective	Consult your dealer or a professional mechanic
"Poor detection range"	Antenna/lens opening partially blocked	Reposition unit with unobstructed view of road ahead and behind
	Radar signals unable to pass through windshield	Determine whether your vehicle has a "heated windshield" known as Instaclear" or ElectriClear", or is covered with a metallic sun screen
Erratic or frequent alerts	High concentration of non-police X band sources	Use city mode
		Review section in this manual on <i>Performance</i> Verification
Partial or no display	Dim or dark mode engaged	Disengage dim or dark mode

If you experience a problem with your unit that is not covered in this outline please call, Monday to Friday, 9 AM-5 PM EST, for assistance:

1-800-341-2288 USA

### Limited 1-Year Warranty

- This warranty covers all defects in materials and workmanship. This warranty does not apply if the unit has been subject to physical abuse, improper installation, modification, or if the housing or serial number of the unit has been removed.
- BELTRONICS manufactures its products using parts and components which are new or equivalent to new in accordance with industry standard practices.
- The enforceability of this warranty is limited to the original consumer purchaser and is not transferable to, or enforceable by, any subsequent owner.
- 4. In the event of a defect, malfunction or other failure to conform to this warranty, BELTRONICS will, at its sole discretion, repair or replace the unit at no charge. You are responsible for all shipping costs in connection with warranty service pursuant to this warranty.
- 5. This warranty commences on the date of retail purchase and shall be effective for a period of one year.
- 6. There are no EXPRESS warranties covering the unit other than those set forth in this warranty. All implied warranties are limited to the one-year period of this warranty and no warranties, expressed or implied, extend beyond this one-year period. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.
- 7. BELTRONICS will in no event be liable for any consequential, incidental, indirect or special damages (including, but not limited to, lost profits) arising out of or in connection with the use, misuse, or function of the unit. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

8. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

21

You must provide a copy of a dated sales receipt for your unit in order to receive service under warranty.

#### SERVICE

## Warranty Service

If you feel your detector is not functioning properly please review this manual, particularly the section on *Performance Verification*. If you still feel service is required, please follow the instructions below.

 To obtain service during the one-year warranty period, please call the appropriate number below to obtain an RA number and shipping instructions. Remember to return your detector postage paid, insured and in suitable packaging.

1-800-341-2288 USA

1-800-268-3994 CAN

- 2. For your own protection, obtain a proof of delivery receipt. Shipping costs are your responsibility.
- 3. Enclose with your unit the following information:
  - (a) Your name, complete return address and written description of the problem. (No P.O. BOX please.)
  - (b) A telephone number where you can be reached during regular business hours.

## (c) A copy of your dated sales receipt.

## Post-Warranty Service

The following arrangements apply if the one-year warranty period has expired or you are not able to provide a copy of your dated sales receipt indicating purchase within the last twelve months.

- Return your unit to the appropriate address under *Warranty* Service and follow steps 1 through 3(b) outlined in that section.
- 2. Enclose with your unit \$70 US or \$95 Canadian to cover inspection and postage return.

#### SPECIFICATIONS

Radar Receiver Frequencies: 10.45 GHz to 10.60 GHz (X Band), 24.05 GHz to 24.25 GHz (K Band), 33.4 GHz to 36.0 GHz (Super Wideband Ka)

Operating Temperatures: -4°F to 158°F (-20°C to 60°C)

Power Supply Requirements: 13.8 Volts, (10.5 volt to 16 volt range) 200 mA

Radar Antenna Type: Patented Diecast Horn with Integrated Transition to Microstrip Mixer

Maximum Dimensions: 5.3"(L) x 3.1"(W) x 1.8"(H)

Weight: 9.0 ounces

BELTRONICS reserves the right to incorporate design improvements which may not be reflected in the specifications listed in this owner's manual.

#### ACCESSORIES

If you require any additional accessories, replacement accessories or any accessory which is not included with your unit, call to order or for more information, Monday to Friday, 9 AM–5 PM EST.

1-800-341-2288 USA 1-800-268-3994 CANADA

MODEL NUMBER	COST USA	COST CANADA
DA-6	\$ 2.95	\$ 3.95
DA-16	\$ 9.95	\$ 11.95
DA-17	\$ 11.95	\$16.95
DA-19	\$ 3.95	\$ 5.95
DA-20	\$ 2.95	\$ 3.95
DA-48G	\$ 9.95	\$ 11.95
DA-702G	\$ 11.95	\$16.95
DA-62	13.95	\$19.95
916/926	N/C	N/C
	NUMBER DA-6 DA-16 DA-17 DA-19 DA-20 DA-48G DA-702G	NUMBER USA   DA-6 \$ 2.95   DA-16 \$ 9.95   DA-17 \$ 11.95   DA-19 \$ 3.95   DA-20 \$ 2.95   DA-48G \$ 9.95   DA-702G \$ 11.95   DA-702G \$ 11.95

Shipping & handling extra.



Head Office 2422 Dunwin Drive Mississauga, Ontario Canada L5L 1J9 (905) 828-1002 (905) 828-2951 FAX www.beltronics.com

This product is subject to one or more of the following patents:

U.S.P.	#4,571,593	C.P.	#1,187,586	
	#4,630,054		#1,187,602	
	#4,961,074		#1,295,714	
	#4,952,936		#1,295,715	
	#5,402,087			
	#5,446,923	Othe	er Patents Pending	
Safety Warning System L.CPatents Pending.				

Fundamental Mixer Technology, FMT and VG-2 Guard are registered trademarks of BELTRONICS. EXPRESS 926 and EXPRESS 916, Total Tracking Laser, and TTL are trademarks of BELTRONICS. Safety Warning System is a registered trademark of Safety Warning System L.C.

Printed in Canada