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How to Use Your Cobra ESD Radar/Laser Detector

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- eatures of This Product
- Safety Alert® Traffic Warning System
- Strobe Alert[™]
- Voice Alert
- Separate Visual and Audio Alarms
- Laser Eye 360° Detection
- VG-2 Undetectable
- Auto and Manual Muting

(+)

- 3 Level Dim Button
- Audio Jack

1

 $-\bigcirc$

- Superior Audio Volume
- Adjustable Windshield Mounting Bracket

Installation

Installation

Windshield Mounting Windshield Location Location Mounting Selecting the proper location to mount the Cobra Ð ESD-9200 is very important for optimum performance. Both radar and laser transmissions pass through glass but not through other objects. For this reason the Cobra ESD-9200 lenses must not be blocked. The Laser Eye should have a view of the rear window to take advantage of its 360° 1 Attach cups to 2 Attach bracket to detection capability. It is best to locate your windshield. bracket. detector as low on the front windshield as possible. Examples of metal in the windshield area that can block or weaken incoming radar/laser signals: 1. Windshield wiper blades. 2. Mirrored sun screens. 3 Attach detector Bend bracket for 3. Regular tinted glass does not affect radar correct detection to bracket. reception, although the darker tint at the angle (if needed). top of the tinted windshield prevents laser Do not use the ESD-9200 to bend light from penetrating. bracket. 4. Heated windshields, currently available as an option for some Ford[®] (Instaclear) and GM® (Electriclear vehicles act as an impenetrable barrier to radar signals). If in doubt, check with your dealer to see if this applies to your vehicle. **5** Plug power cord 6 Plug power cord into detector. into cigarette lighter. 2 3

Installation

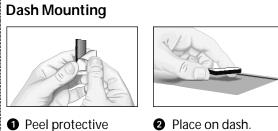
Quick Start

Dash Mounting

Note

It will be easy for you to remove and reinstall your Cobra ESD-9200 detector at any time using this hook and loop material on the dashboard.

Remember: Without the means to adjust the angle of the detector (when mounted as above), be sure you that your Cobra ESD-9200 has a level, clear view of the road before you attach the hook and loop material.



 Peel protective paper off one side of hook and loop material.



3 Peel top paper off.



5 Plug power cord into detector.

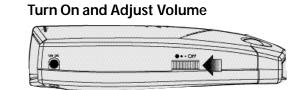
4



Place detector on hook and loop pad.



 Plug power cord into cigarette lighter.



• Rotate ON-OFF Volume Control to left (away from you). An audible "tone" will indicate the unit is on. IPWR LED on front of unit is illuminated.

Turn On and Adjust Volume

Note

For your convenience Display Dim, City/Highway, and Muting mode settings are retained in memory even when the power is unplugged.



Quick Start

Quick Start

Set Display Brightness

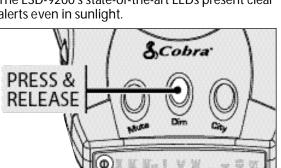
Set Display Brightness

Select from three levels of LED brightness for your Cobra ESD-9200 display: Normal, Dim and Dark. The ESD-9200's state-of-the-art LEDs present clear alerts even in sunlight.

LED Displays

Note

A three position Dim mode is provided for dusk or night driving (please see Dim Button,page 14 for details).

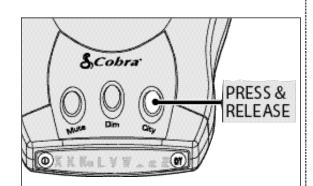


• Press and release O Dim button to select normal setting. Press and release O Dim button twice to select Dim setting. Press and release Dim button a third time to select Dark setting.

Set Highway/City Mode

City

For urban driving–reduces number of X-Band audible alerts.



• Press and release $\bigcup_{n \in \mathcal{N}}$ CITY button.

IT CITY LED will illumina te orange while in City mode

Highway

For all other driving.

6

Set Highway/ City Mode



Quick Start

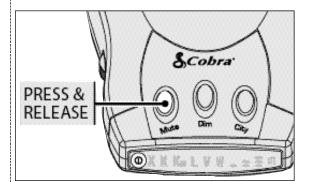
Operation

Set Muting Mode

Auto Muting

Set Muting Mode

Automatically reduces volume of alert in progress after 3 seconds.



Manual Muting

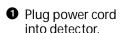
• Press and release O MUTE button to reduce volume of alert in progress.

To Switch Between Modes

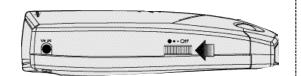
Press and release OMUTE Button when no signal is being received.

One "beep" = Mute Two "beep" = Auto Mute





 Plug power cord into cigarette lighter. into detector.



3 *Rotate* ON-OFF Volume Control to the left (away from you). An audible "tone" will indi-cate the unit is on and the **(1)** PWR LED on the front of the unit will illuminate orange.



Turning On Your ESD-9200





Operation

Operation

Dim Button

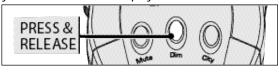
Normal = "Beep-Beep"

Dim = "Beep"

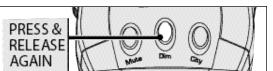
Dark = "Beep"

Dim Button

You may select from three levels of brightness for your Cobra ESD-9200 display: Normal, Dim, and Dark.



• Press and release $\bigcup_{n \to \infty}$ DIM button to reduce the LED display brightness to Dim.A single beep confirms dim led brightness.

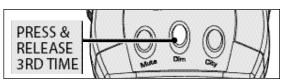


Note

Note

The ESD-9200 will retain the chosen mode while OFF.

2 Press and release \bigcap_{m} DIM button again to turn LED display off. A single beep confirms no LED display. The power LED will stay on dim.

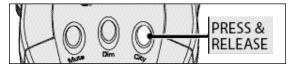


3 Press and release \bigcirc DIM button a third time to return led display to Normal. A double beep confirms normal LED brightness.

Highway/City Mode

The Highway/City function is controlled by a 2-step button. The Highway mode is automatically engaged when the unit is powered up. In the City mode, false radar alerts will be reduced.

To engage City Mode:



• Press and release $\bigcup_{n \in \mathbb{N}} CITY$ button and the **III** LED on the front of the unit will illuminate red. A single beep confirms City mode. The X LED will be visible showing you are receiving a signal.



To reactivate the Highway Mode:

- Press and release (C CITY button again. A double beep confirms Highway Mode.

The ESD-9200 will retain the chosen mode while OFF.





Highway/City Mode

Note

Use City Mode in or near cities where there are many sources of false radar signals such as microwave relay towers and automatic door openers. This will filter out weak signals.

Note

City = "Beep" Highway = "Beep-Beep"

Note

The unit will announce "Highway" or "City" in Voice Mode.

Note

Operation

Operation

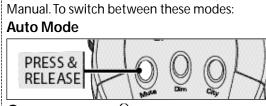
Muting Mode

Note

Mute = "Beep" OR Auto Mute = "Beep-Beep"

Note

In either mode the next alarm will begin with normal volume. The ESD-9200 wil retain the chosen mode while **OFF**.

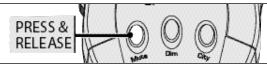


The ESD-9200 offers two Mute Modes; Auto and

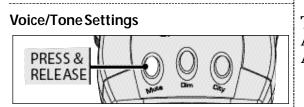
Press and release OMUTE button when no signal is being received. In Auto mode, the alarm will be reduced in volume after three seconds.

Manual Mode

Muting Mode



• Press and release \bigcup_{Matter} MUTE button to reduce volume.



• Press and hold O MUTE button for two seconds to change between Voice and Tone Alarms.

Memory Set

Your Cobra ESD-9200 features an automatic, internal electronic memory system. It will automatically "remember" your settings when the unit is turned "OFF" or removed from the power source.

Auxiliary Audio Jack

Use to connect an external speaker to your Cobra ESD-9200 in environments with high ambient noise levels. The internal speaker will be disconnected. The audio output will be voice or tone depending on your selection.

Tone Alarm And Voice Alert

Memory Set

Auxiliary

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Detection

Radar

Begin Band Detection

Speaker and

Voice Alert

Band Detection

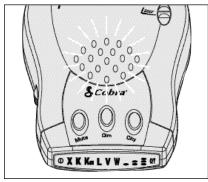
This detector is designed to detect X, K, Superwide Ka Band Radar, Laser (including LTI 20-20*, Ultra Lyte* and ProLaser* technologies), VG-2, Safety Alert and Strobe Alert* signals. *360[°] Detection

Audible Alarm Audible Alarm Speaker

A different alert tone will sound for X, K, Ka,Laser (plus a distinctly different tone for each of the three laser signals: LTI 20-20, Ultra Lyte and ProLaser), VG-2, and Safety and Strobe Alert signals.

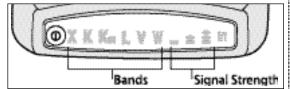
Voice Alert

The ESD-9200 will also announce the reception of these signals with the statement, "Be careful...X Alert, K Alert, Ka Alert, Laser Alert, VG-2 Alert, Emergency Vehicle Approaching, Road Hazard Ahead, Train Approaching and Emergency Vehicle Approaching."



Radar

The display will show the band (X,K/Ka). The signal strength will first be indicated by the band being illuminated, then the band plus –, finally the band plus = and \equiv will be illuminated. At the same time the frequency of the beeps will increase.

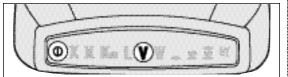


Instant-On Detection

The Cobra ESD-9200 is also designed to detect Instant-on speed monitoring signals. **Immediate action is required when warning is given**.

VG-2 Undetectable

The Cobra ESD-9200 is undetectable by police VG-2 detection devices. It will alert you when one is in use near your vehicle. During this time, the unit is still on full alert and able to detect other signals.



The VG-2 LED on the front of the unit will illuminate yellow.

VG-2 Alert

Note

15

The display does not indicate signal strength.

Detection

VG-2 Audio Alert Operation

Safety Alert[®]

System and Strobe Alert[™]

with 360° Laser Eye

The display does not indicate signal strength.

Note

"ON" position.

VG-2 Audio Alert

To turn the VG-2 Audio Alert "OFF", Press and hold *the* O DIM button for 2 seconds. The radar detector will beep once and the **Y** VG-2 LED will blink Operation of the VG-2 Audio Alert may be selected by the once indicating the VG-2 Audio Alert has been disuser. The initial factory setting abled.

of the VG-2 Audio Alert in the To turn the VG-2 Audio Alert "ON", Press and hold *the* O DIM button for 2 seconds. The radar detector will beep twice and the **W** VG-2 LED will blink twice indicating the VG-2 Audio Alert has been



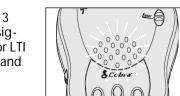
Safety Alert[®] Traffic Warning System Traffic Warning and Strobe Alert™ Indicator "W" is illuminated.



Laser Eye 360° Detection Indicator "L" is illuminated. Laser Detection

Laser will trigger 3 distinct audible signals; one each for LTI 20-20,Ultra Lyte and ProLaser.

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Type of Audible Signal	Interpretation and Response
Your COBRA ESD-9200 starts to signal slowly, then increases in rate very rapidly.	Most likely police radar. FULL ALERT.
Your COBRA ESD-9200 signals just once.	Most likely a false sour ce, or could be pulsed radar. Exercise Caution .
Very fast signal rate instantly.	Radar or VG-2 close by has been suddenly switched on. FULL ALERT .
Slow signal rate as you approach hill or bridge.Sharp increase in signal rate as you reach hill or bridge.	Most likely police radar on other side of hill or bridge. FULL ALERT.
Short-term, weak signaling; series of such signals.	Most likely a false radar source. Exercise Caution.
Laser will trigger 3 distinct audible signals;one each for LTI 20-20,Ultra Lyte and ProLaser.	Use Full Caution. There are no false laser signals.
Safety Alert and Strobe Alert ha ve their own unique "European Emergency" signal.	An emergency vehicle is approaching, you are in the vicinity of a railroad crossing, or you are approaching a road hazard (construction site, acci- dent scene, etc.).

Radar/VG-2/Laser Alerts

Radar/VG-2/ Laser Alerts



Detection

Facts About Safety Alert[®] Traffic Warning System

Facts About the Safety Alert[®] Traffic Warning System

FCC-approved Safety Alert Transmitters emit microwave radar signals to indicate the presence of a safety-related concern. Depending on the frequency of these signals, as set on the transmitter, the outgoing signal can indicate whether the transmitter is on a speeding emergency vehicle or train,or at a stationary road hazard location. These microwave signals are located in the K-band and as a result, any radar detector which detects K-band radar will detect these Safety signals as standard K-band radar alerts. However, unlike a standard radar detector, your Cobra ESD-9000 is designed to differentiate between a standard K-band alert and a Safety Alert warning. Safety technology is relatively new so the number of

transmitters in operation is still growing. You may not receive Safety Alert on a daily basis and should not be surprised to encounter some emergency vehicles, road hazards or trains not yet equipped with these transmitters, therefore failing to provide a signal. As Safety Transmitters become more prevalent (the number of operating transmitters is growing every day),these Safety Alerts will become more common. The Safety Alert Transmitter is in use in all 50 states in limited quantities.

Facts About Strobe Alert™

Alerts motorists to over 50,000 emergency vehicles equipped with strobe transmitters that activate red lights at traffic intersections in emergency high speed situations.

Radar Frequencies

There are now three frequencies that have been approved by the FCC (Federal Communications Commission) for use in speed monitoring equipment. They are:

X Band (10.525 GHz),K Band (24.150 GHz) Ka Band (33.400-36.000 GHz)

Your Cobra ESD-9200 can detect signals in all three radar bands including photo radar and STALKER radar which use the Ka band, and Cobra's Safety Alert signals on the K band.

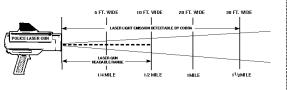
Facts About LIDAR (Laser)

What is LIDAR?

LIDAR stands for Light Detection And Ranging. While everyone refers to it as LASER the correct name is LIDAR.

How does LIDAR work?

LIDAR operates a lot like RADAR.Like RADAR, it spreads out. Not as quickly, but it does spread, as shown on the diagram below.



Radar Frequencies

Facts About LIDAR (Laser)

LIDARs must have a clear line of sight to target a vehicle during the entire measurement interval. Intervening objects such as signposts, utility poles, tree branches, etc., will prevent a valid speed reading.



works with Tomar and

local Fire/Police depart-

ment for your area cover-

age or area in which you

18

will be traveling.

Opticom systems. Call your

Note

Specifications

band

LI

Facts About LIDAR (Laser)	Does weather have any effect on LIDAR? Yes, rain, snow, smoke, fog, and airborne dust particles will all reduce the effective range, and	GENERAL SPECIFICATIONS A.FREQUENCIES		Specifications
	if sufficiently dense, may prevent its operation.	1. X BAND	10.525 GHz ± 50 MHz	
	Can LIDAR operate through glass?	2. K BAND	24.150 GHz ± 100 MHz	
	No, LIDAR guns cannot obtain readings through any glass. But the laser pulse can be received	3. Ka BAND	33.4 - 36.0 GHz	
	through glass to easily and quickly trigger a laser detector's alarm.	4. VG-2	11.4 GHz - 11.7 GHz	
	Can LIDAR operate while moving?	5. Safety Alert	24.07,24.11,24.19 GHz	
	No, since LIDAR is line of sight, an officer cannot	6. LTI 20-20 Laser	300 THz - 375 THz	
	drive, aim, and shoot while driving.	7. Strobe Alert	300 THz - 770 THz	-
	Is a LIDAR DETECTOR legal to use? Yes, it is legal in all 50 states.	8. Ultra Lyte	300 THz - 375 THz	
Maintenance	Maintenance	9. ProLaser	300 THz - 375 THz	
Maimenance	Your COBRA ESD-9200 RADAR/LASER DETECTOR	B. UNIT DIMENSIONS		
	will give you years of trouble-free service with minimum maintenance.	3-3/16"W x 1-1/4"H x 5"D		
	Replacing Power Cord Fuse Unscrew cap of cigarette lighter adapter and remove fuse. Replace with 1-ampere fuse only.			
	Troubleshooting If your COBRA LASER DETECTOR ESD-9200 isn't operating, we suggest you make the following checks: 1. Is the power cord properly connected?			
	 Is the fuse OK? Is the cigarette lighter socket clean and free from corrosion? 			
	20			21
	— (\rightarrow		

Limited One Year Warranty

Optional Accessories



Cobra Electronics Corporation 6500 West Cortland Street Chicago, Illinois 60707 www.cobraelec.com

COBRA ELECTRONICS CORPORATION warrants that its COBRA 9 Band Radar/Laser Detectors, and the component parts thereof, will be free of defects in workmanship and materials for period of one (1) year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

COBRA will,without charge, repair or replace, at its option, defective 9 Band Radar/Laser Detectors, products or component parts upon delivery to the COBRA factory Service Department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt.

You must pay any initial shipping charges required to ship the product for warranty service, but the return charges will be at Cobra's expense, if the product is repaired or replaced under warranty.

Exclusions: This limited warranty does not apply; 1) to any product damaged by accident;2) in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs;3) if the serial number has been altered, defaced or removed;4) if the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty. COBRA shall not be liable for any incidental, conse-

quential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.



V



Straight 12V DC Power Cord Includes plug and fuse 420-080-N-001 \$10.00

Curled 12V DC Power Cord Includes plug and fuse 420-080-N-002 \$10.00



Windshield Mounting Bracket Includes suction cups 545-139-N-001 \$7.00

You Can Find These Fine Accessories At Your Local Cobra Dealer If you wish, you can order directly from Cobra.

Order by phone Call 1.773.889.3087 (Press 1 from the main menu) 8 a.m.-8 p.m. M-F CST.)

Order by mail or fax Please fill out order form on next page, and mail/fax directly to Cobra.

Accessory Order Form

24



and fax to: 1.773.622.2269 payat or call 1.773.889.3087 Cobra (Press 1 from the main menu) 6500 8:00 am - 8:00 pm,M-F, CST. Chica Please print clearly Name	Su (Ta Sh To heck e to: Elect fest (o, IL o	ronics Cortland St.	dling	
545-139-N-001 Windshield Mounting Brack Prices subject to change without notice. Tax Table Illinois residents add 7% Cook Co. residents add 7% Cook Co. residents add 7% Cobastantian (Strand Strand Stra	Su (Ta Sh To heck e to: Elect fest (o, IL o	\$7.00 btotal ix if applica ipping/han tal c or money or ronics cortland St. 50707	dling	
Prices subject to change without notice. Tax Table Illinois residents add 7% Cock Co. residents add 7% (7.75% total) Chicago residents add 5% Michigan residents add 4% Minnesota residents add 6% Ohio residents add 6% Wisconsin residents add 5% For credit card orders fill out order form and fax to: 1.773.622.2269 or call 1.773.889.3087 (Press 1 from the main menu) 8:00 am - 8:00 pm,M-F, CST. Please print clearly Name	Su (Ta Sh To heck e to: Elect fest (o, IL o	btotal ix if applica ipping/han tal cor money or ronics 2ortland St. 50707	dling	
Tax Table Illinois residents add 7% Cook Co. residents add 7% (8.75% total) Chicago residents add 7% (8.75% total) Indiana residents add 5% Michigan residents add 4% Minnesota residents add 6% Ohio residents add 6% Ohio residents add 6% Por credit card orders fill out order form and fax to: 1.773.622.2269 payat or call 1.773.889.3087 Cobra (Press 1 from the main menu) 6500 8:00 pm,M-F, CST. Please print clearly Name	(Ta Sh To heck e to: Elect Vest (0, IL o	x if applica ipping/han tal cormoney or ronics Cortland St. 50707	dling	
and fax to: 1.773.622.2269 payał or call 1.773.889.3087 Cobra (Press 1 from the main menu) 6500' 8:00 am - 8:00 pm,M-F, CST. Chica Please print clearly Name	e to: Elect /est (o, IL (ronics Cortland St. 60707	der (no	stamps)
Name Address (No P.O. Box)				
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City	_	State		
Zip				
Telephone ()				
Credit Card No		Exp. Dat	te	
Customer Signature				
Circle One: Visa MasterCard Di	co۱	/er		

The Cobra line of quality products also includes:

- CB Radios
- MicroTalk[™] Radios
- Accessories
- SafetyAlert[™]
 Traffic Warning Systems

Nothing comes close to a Cobra[™]



&Cobra®

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If You Think You Need Service

For technical assistance, please call our Automated Help Desk which can assist you by answering the most frequently asked questions about Cobra products. (773) 889-3087 24 hours a day, 7 days a week. A Consumer Service Representative can be reached through this same number 8:00 am - 8:00 pm, Monday through Friday, CST. Technical assistance is also a vailable on-line in the Frequently Asked Questions (FAQ) section at www.cobraelec.com or by e-mail to productinfo@cobraelec.com

If you think you need service call 1.773.889.3087

"If your product should require factory service please call Cobra first before sending your unit in. This will ensure the fastest turn-around time on your repair."

You may be asked to send your unit to the Cobra factory. It will be necessary to furnish the following in order to have the product serviced and returned.

- 1. For Warranty Repair include some form of proof-of-purchase, such as a mechanical reproduction or carbon or a sales receipt. If you send the original receipt it cannot be returned.
- 2. Send the entire product.
- 3. Enclose a description of what is happening with the unit.Include a typed or clearly print name and address of where the unit is to be returned.
- 4. Pack unit securely to prevent damage in transit. If possible, use the original packing material.
- Ship prepaid and insured by way of a traceable carrier such as United Parcel Service (UPS) or First Class Mail to: Cobra Factory Service, Cobra Electronics Corporation, 6500 W. Cortland St., Chicago, IL 60707.
- 6. If the unit is in war ranty, upon receipt of your unit it will either be repaired or exchanged depending on the model. Please allow approximately 3 to 4 weeks before contacting us for status. If the unit is out of warranty a letter will automatically be sent informing you of the repair charge or replacement charge. If you have any questions, please call 1.773.889.3087 for assistance.

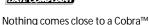
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Part No. 480-298-P-001

Operating Instructions for your Cobra 9 Band Extra Sensory Detection

Radar/Laser Detector Model ESD-9200





Introduction

SAFETY ALERT

and Strobe Alert™

Use of this product is not intend ed to, and does not, ensure that the motorist and any passenger will not be involved in a traffic accident. It is only intended to alert the motorist that an emergency or service vehicle equipped with a CODE 3,Strobe (Opticom or Tomar Preemption System) or Cobra Safety Alert Transmitte is in the area as defined by the range of the product. Please call your local Fire/Police departmen to verify if coverage exists in your area.Motorists are expected to exercise all due caution while using this product, and to observe and follow all applicable traffic laws. Operators of emergency or service vehicles are also expected to exercise

all due caution while using this product, and to observe and follow all applicable traffic laws. *Opticom is a registered trademark of 3M Corporation

A1

Introduction

Congratulations! You have just purchased the most sophisticated RADAR/LASER DETECTOR available today. This booklet contains instructions and information designed so that you will be able to understand how the Cobra ESD[™]-9200 works and how radar and (LIDAR) laser are used. Enjoy your Cobra ESD-9200 Radar/Laser Detector and **drive safely**.

Federal Law Governing Use of Radar Detectors

It is not against Federal Law to receive radar transmissions on your COBRA Radar Detector. The Communications Act of 1934 guarantees your right to receive radio transmissions on any frequency. Local laws that contravene the Communications Act of 1934, while illegal, may be enforced by your local law enforcement officials until and unless they are prohibited from doing so by Federal Court action.

WARNING: Before leaving your car, make sure that you conceal your radar detector. This will reduce the possibility of break-in and theft of your unit.

Included with your ESD-9200
Windshield Bracket
Hook and Loop Material
Power Cord



Controls and Indicators

