

SIRIUS[®]

SATELLITE RADIO



SIR-ECL2nt

ECLIPSE COMPATIBLE
SIRIUS SATELLITE RADIO PLUS TRAFFIC TUNER

Installation Guide

Congratulations on your purchase of the SIR-ECL2nt, the Eclipse Compatible SIRIUS Satellite Radio Plus Traffic Tuner!

Your new SIRIUS Radio Plus Traffic Tuner is designed to work with compatible Eclipse satellite radio ready headunits and traffic ready navigation systems. Contact Eclipse or SIRIUS for model compatibility.

What is SIRIUS Satellite Radio?

Over 120 channels of the best entertainment and completely commercial-free music for your car, home or office.

Only SIRIUS has more than 65 original music channels, from today's hits to R&B oldies to classical masterpieces. From authentic country and real bluegrass to cool jazz, hot latin, reggae, rock and many more. Best of all, it's all completely commercial-free. SIRIUS also has more than 55 channels of world-class sports, news and entertainment. Included as part of your subscription, you get up to 16 NFL games a week, up to 40 NBA games a week and up to 40 NHL games a week. (Games are broadcast during their respective seasons.) Coupled with great sports news from ESPN, the SIRIUS sports offering is unrivaled. And don't forget a host of other great news and entertainment, like NPR, CNBC, Fox News, Radio Disney and E! Entertainment Radio. For more information, visit www.sirius.com.

What is SIRIUS Traffic?

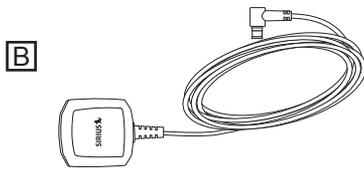
Navigational traffic information for 22 major metropolitan areas* in the continental US.

SIRIUS Traffic conveys navigational traffic information for visual display on a compatible navigation system.

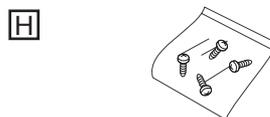
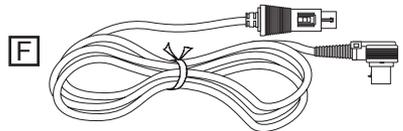
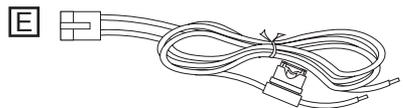
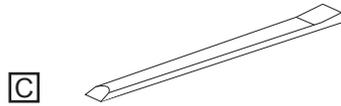
Using a navigation system (such as the ECLIPSE AVN6610), traffic data from SIRIUS is displayed either superimposed on a navigation map, or in a list type format displayed on the navigation screen. The data provides traffic speed and flow information as well as scheduled and unscheduled incidents, alerting you to congestion, accidents, road construction, detours, and other traffic related information as you drive. The SIRIUS Traffic data is updated frequently enabling you to be up-to-date regarding traffic situations. Based on the information from SIRIUS Traffic, the navigation system can then plan alternate routes before you get caught in traffic, and if you make a wrong turn, the system can recalculate your route and get you back on track in seconds.

* Metropolitan areas for which the SIRIUS Traffic service is available as of November 2006 are: Atlanta, Austin, Baltimore, Boston, Buffalo/Niagra Falls, Columbus, Cincinnati, Cleveland, Chicago, Dallas /Ft. Worth, Denver/Boulder, Detroit, Hartford/New Britain/Middletown, Houston/Galveston, Kansas City, Las Vegas, Los Angeles, Memphis, Miami/Ft. Lauderdale/Hollywood (FL), Milwaukee/Racine, Minneapolis/St. Paul, Nashville, New York City, Norfolk/Virgina Beach/Newport News, Orlando, Philadelphia, Phoenix, Portland, Pittsburgh, Providence/Warwick/Pawtucket, Sacramento, San Antonio, San Francisco/Oakland, San Diego, San Jose, Sarasota/Bradenton, Seattle, St. Louis, Tampa/St. Petersburg/Clearwater, Tacoma, Washington, DC, Wilmington, and West Palm Beach/Boca Raton. Additional cities are expected to be added as they become available.

Table of Contents	3
Package Contents	3
Warnings and Cautions	4
Installation	6
Mounting the SIR-ECL2nt tuner	6
Installing the Antenna	6
Optimum Antenna Mounting Locations	7
Wiring and Cable Connections	8
System Connection Examples	10
Activating Your SIRIUS Subscriptions	15
Traffic Information Setup	17
Basic Operation	19
Audio Headunit Messages	21
Navigation System Messages	21
Specifications	22
12 Month Limited Warranty	23
Package Contents	



- A** SIR-ECL2nt Tuner
- B** Magnetic Mini Antenna
- C** Antenna Cable Cover/Tail
- D** Alcohol Swab
- E** Power Harness With In-Line Fuse
- F** 3.5-Meter E-LAN Cable
- G** 3.5-Meter Data Cable
- H** 4 Mounting Screws



WARNING

This symbol means important instructions. Failure to heed them can result in serious injury or death.

DO NOT OPERATE ANY FUNCTION THAT TAKES YOUR ATTENTION AWAY FROM SAFELY DRIVING YOUR VEHICLE.

Any function that requires your prolonged attention should only be performed after coming to a complete stop. Always stop the vehicle in a safe location before performing these functions. Failure to do so may result in an accident.

DO NOT OPEN, DISASSEMBLE OR ALTER THE UNIT IN ANY WAY. Doing so may result in fire, electric shock or product damage.

DO NOT INSERT ANY OBJECTS INTO THE UNIT. Doing so may result in fire, electric shock or product damage.

USE THE CORRECT AMPERE RATING WHEN REPLACING FUSE. Failure to do so may result in fire, electric shock or product damage.

MAKE THE CORRECT CONNECTIONS. Failure to make proper connections may result in fire or product damage.

DO NOT SPLICE INTO A ELECTRICAL CABLES. Never cut away cable insulation to supply power to other equipment. Doing so will exceed the current carrying capacity of the wire and result in fire or electric shock.

DO NOT INSTALL IN LOCATIONS THAT MIGHT HINDER VEHICLE OPERATION. Doing so may obstruct vision or hamper movement which can result in a serious accident.

DO NOT INSTALL THE UNIT TO HIGH LEVELS OF HUMIDITY, MOISTURE OR DUST. Doing so can result in electric shock or product failure

FCC Warning: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in this User Guide. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

Note: This equipment has been tested and found to comply with Part 15 of the FCC Rules. These rules are designed to provide reasonable protection against harmful interference. This equipment may cause harmful interference to radio communications if it is not installed and used in accordance with these instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is

encouraged to try to correct the interference by one of more of the following measures:

- Relocate the receiving antenna.
- Consult the dealer or an experienced technician for help.

 **CAUTION**

This symbol means important instructions. Failure to heed them can result in injury or material property damage.

HALT USE IMMEDIATELY IF A PROBLEM APPEARS. Failure to do so may cause personal injury or damage to the product. Return the unit to your authorized retailer or nearest service center for repairing.

INSTALL THE WIRING SO THAT IT IS NOT CRIMPED OR PINCHED BY SCREWS OR SHARP METAL EDGES. Route the cables away from moving parts or sharp pointed edges. This will prevent crimping and damage to the wiring. If the wiring must pass through a metal hole, be sure to use a rubber grommet to prevent the wire's insulation from being cut by the metal edge

of the hole.

USE THE SPECIFIED ACCESSORY PARTS AND INSTALL THE PRODUCT SECURELY. Be sure to use only the specified accessory parts. Use of nonspecified parts may damage this unit internally or may not securely install the unit in place. This may cause parts to become loose, resulting in hazards or product failure.

USE CAUTION IF YOU NEED TO DISCONNECT THE BATTERY TERMINAL. Please consult the vehicle's owner's manual or a service technician prior to removing the battery positive or ground connection, as it may cause damage to the vehicle's electrical system or require reprogramming of the vehicle's computer controlled devices.

SIRIUS 
SATELLITE RADIO

Installation

It is recommended that prior to starting the installation, you read completely this installation manual and follow the guidelines listed below:

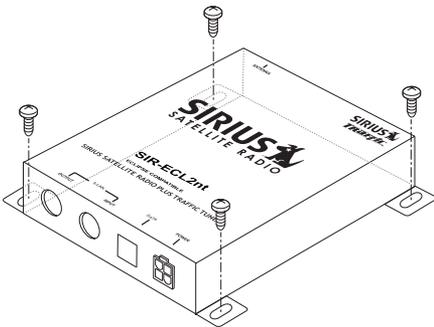
Consider the mounting location carefully. You should make sure that you avoid the following:

- Any location where the tuner is exposed to moisture.
- Any location where the tuner is exposed to extreme heat.
- Any location that would interfere with moving parts on the vehicle or interfere with driving.

Mounting the SIR-ECL2nt tuner

Be sure that you find a location that is flat and has clearance above the tuner to prevent any damage, as well as allow for ventilation.

Do not install the tuner under the carpet or in a small enclosed area without proper ventilation. Doing so can result in damage to the tuner or the vehicle. Use the supplied screws to securely fasten the unit.



⚠ Caution:

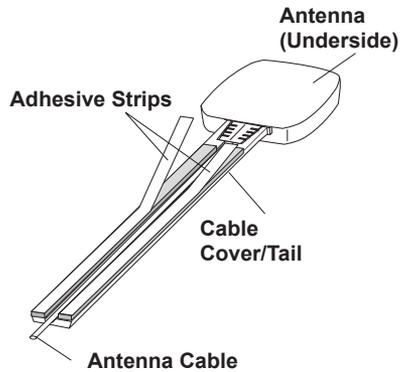
If you are attaching the tuner directly to the vehicle's chassis, be sure that you check to make sure the area behind the tuner is free from moving parts, fuel or brake lines, wire harnesses or any other items which may get damaged by drilling a mounting hole or from the screws.

Installing the Antenna

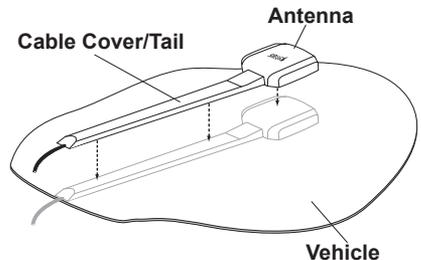
The antenna includes a plastic cable cover/tail which covers the exposed antenna cable and keeps it attached securely to vehicle roof. The tail also helps position the antenna the proper distance from the rear window, sunroof or rear hatch.

To attach the cover/tail:

1. Once you have determined the proper mounting location (see the next section), clean the area with the supplied alcohol swab.
2. Connect the antenna cover/tail to the antenna cable, making sure that the strain-relief on the antenna seats into the cover/tail groove. Route the cable through the wire channel in the cover/tail.



3. Remove the protective tape from the adhesive and carefully position the antenna with cover/tail and apply pressure to secure it to the vehicle.



Optimum Antenna Mounting Locations

The optimum location to mount the antenna is on the roof of the vehicle. It is important to avoid any obstruction that will block the satellite signal, such as a roof rack. For convertible vehicles, install the antenna on the trunk lid as shown.

- Place the antenna on a metal surface of your vehicle at least 12" x 12", and at least 6" from a window. (Use the antenna cover/tail as a guide for the proper distance from the rear window.)

- The antenna's magnet will secure it to the metal surface. The adhesive that is attached to the antenna cover/tail will secure the cable to the vehicle. Before routing the antenna cable, confirm that the antenna is mounted in a suitable location.

- Route the cable from the antenna to the vehicle's interior by tucking it underneath the rubber molding around the rear window, if possible.

- Route the cable from the lowest point of the rear window into the trunk. Take advantage of any existing cable channels or wiring conduits.

- For SUVs, minivans and five-door vehicles, bring the cable into the vehicle under the rubber molding of the tailgate, and continue under the interior trim.

- From the trunk, carefully route the cable to the location of the SIR-ECL2nt and plug the SMB connector into the tuner.

Sedan/Coupe



SUV/Mini-Van



Truck



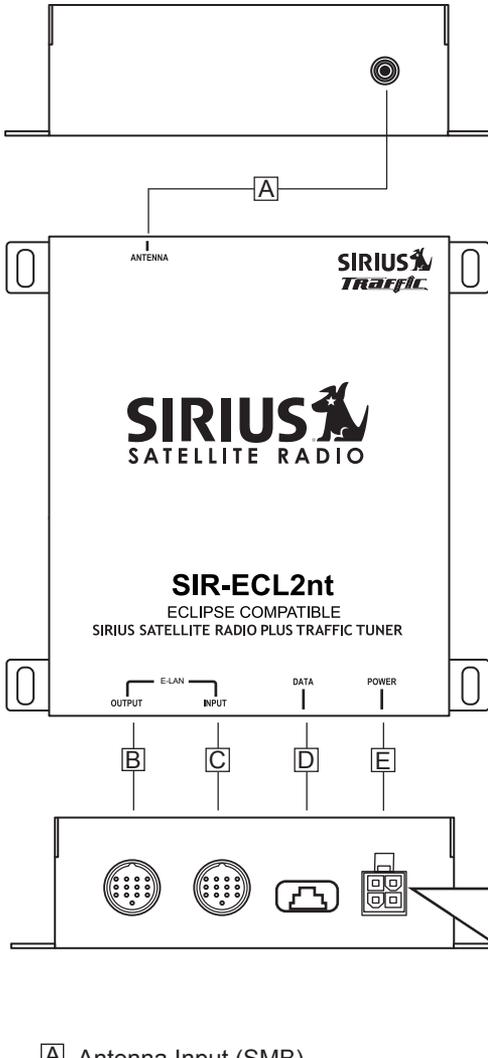
Convertible (only)



Caution:

- Do not pull the wire across sharp edges that could damage it.
- Keep the wire away from areas where it could become tangled in the driver's and passenger's feet.
- Keep the antenna wire away from extreme heat, such as exhaust systems.
- Avoid placing the cable near any moving parts.

Wiring and Cable Connections



Antenna Input

Connect the right-angle SMB connector from the antenna. Push firmly to attach.

E-LAN Output Connector

E-LAN Input Connector
Use the supplied E-LAN cable to connect to the ECLIPSE Headunit or Audio Processor. See "System Connection Examples" for more specific details.

E-LAN Input Connector

Connect to optional ECLIPSE audio equipment like CD Changers - See "System Connection Examples" for more specific details.

Power Harness Connector

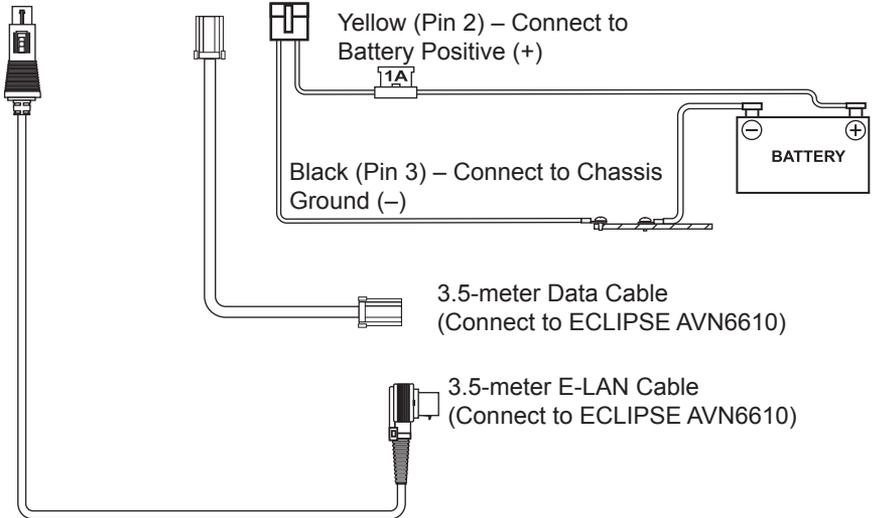
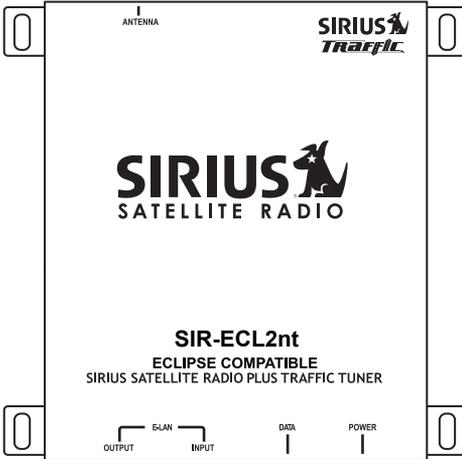
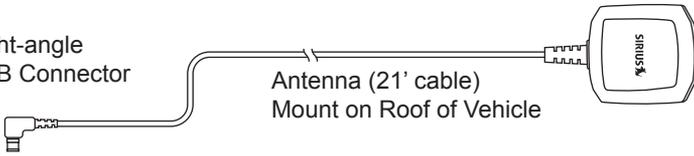
After the wiring connections are complete, plug the wiring harness into the connector. Make sure to insert firmly to lock the connector in place.

- A** Antenna Input (SMB)
- B** E-LAN Output Connector
- C** E-LAN Input Connector
- D** DATA Connector
- E** Power Connector

- 1** Open
- 2** Battery (+)
- 3** Ground (-)
- 4** Open

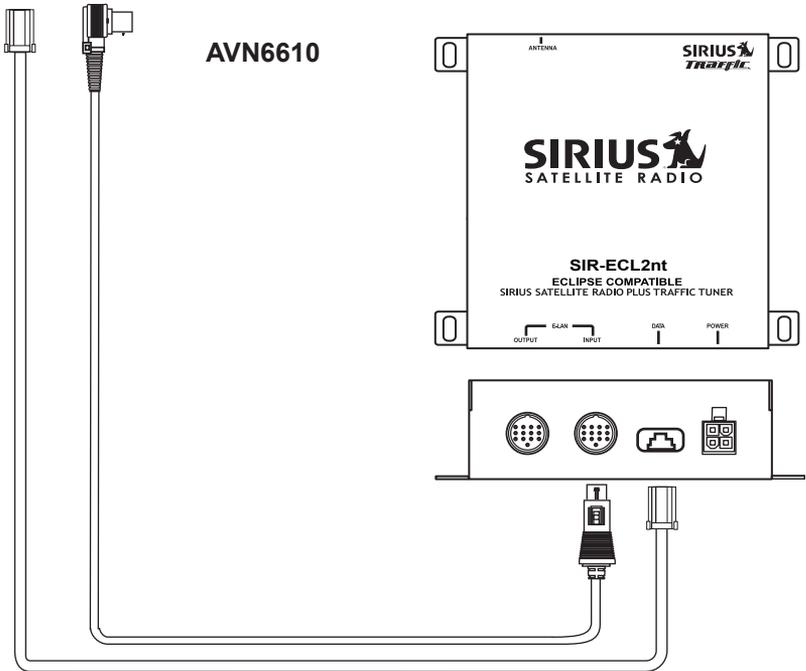
Right-angle
SMB Connector

Antenna (21' cable)
Mount on Roof of Vehicle



System Connection Examples

System 1: ECLIPSE Navigation System and SIR-ECL2nt



Activating Your SIRIUS Subscription

You must activate SIR-ECL2nt before you can start to receive the SIRIUS Satellite Radio service and the SIRIUS Traffic service. Each is a separate service, and each needs to be activated individually. In order to activate your radio and traffic subscriptions, you will need the two SIRIUS IDs (SIDs) – one for the SIRIUS Satellite Radio service and one for the SIRIUS Traffic service – which uniquely identify your SIR-ECL2nt tuner. The SIDs may be found on sticker located on the bottom of the SIR-ECL2nt packaging or on the bottom of the unit itself. The label will have printed on it two 12-digit SID numbers. The first will be the Data SID for the SIRIUS Traffic service, for example, “Data SID: 123456789012”. The second is the Audio SID for the SIRIUS Radio service, for example, “Audio SID: 987654321098”.

Note: You will need the Data SID for the SIRIUS Traffic service from the label on the bottom of the unit or from the original packaging, the AVN source unit does not display this number. The Audio SID can be displayed by the unit.

Note: It is possible to activate only the audio or the traffic service, just use the appropriate SID. When you have located both SIDs, write them down in the space provided on page 16 of this manual.

1. Make sure that the SIR-ECL2nt is properly connected and that its antenna is oriented to receive the SIRIUS satellite signal.
2. Turn on the ECLIPSE source unit.
3. Select SIRIUS as the source:
AVN source unit: Press the “SIRIUS” button (located on the touch screen) to select SIRIUS as the source.

Note: If this is the first time selecting SIRIUS as a source, the display may show the text “UPDATING” - which means the SIR-ECL2nt is receiving important channel or category updates.

Note: Don’t push any buttons or perform any operations until updating has been completed.

Once updated and the SIRIUS channels are received, the display will change to Channel 184 the SIRIUS Satellite Radio’s Preview Channel (the display will show “CH184” and “CALL 888-539-SIRIUS”). At this time you should also be able to hear the audio from the Preview Channel.

4. To display the SIRIUS Audio ID: AVN6610: Press “MENU” then select “INFO” then “SIRIUS ID”, or tune to channel “0” and press “FUNC”, “TITLE”.
5. The SIRIUS ID is a 12-digit number. Write down the SIRIUS ID (SID) in the location provided on page 16 for future reference.

6. Contact SIRIUS on the Internet:
<https://activate.siriusradio.com>
Follow the instructions to activate your subscription. You can also call SIRIUS toll-free at 1-888-539-SIRIUS (1-888-539-7474) to activate your service.

Note: You will not be able to tune to any other channels until you activate your SIRIUS subscription.

7. When the subscription is activated or updated, the word "SUB UPDATED" will appear on the display. Note some ECLIPSE source units will have different messages- please consult your source unit owners manual for more information.
8. Once the "SUB UPDATED" text message disappears, you may now tune to any actively subscribed channel

Obtaining the Data SID from the Eclipse AVN6610 Navigation System

The Eclipse AVN6610 cannot display the Data SID number. You need to obtain the Data SID number from the label on the bottom of the SIR-ECL2nt or the original package.

Activating the SIRIUS Audio and/or Data Services

1. Be sure that your AVN6610 is turned on and that you have the SID information available.
2. Call SIRIUS toll-free at 1-888-539-SIRIUS (1-888-539-7474) or (1-888-869-5364) to activate your subscription.
3. During the activation process, be sure to tell the operator that have a receiver on which you want to activate both a SIRIUS Radio service subscription and a SIRIUS Traffic service subscription. Provide the operator with both the Audio SID and the Data SID.

Once the subscription process is completed, your audio and/or navigation system is ready to use. Refer to the AVN6610 navigation system owners manuals for operation instructions.

If you have subscribed to the SIRIUS Traffic service, proceed to the next section to continue with the traffic information setup.

SIRIUS Traffic Menu



When **SIRIUS Traffic** is pressed and the system is not activated "Call (888)869-5364 to activate your SIRIUS Traffic subscription" will pop up and display and disappear.

Traffic Information Setup

The traffic information setup controls the way the traffic and navigation information is displayed. To review and/or change these parameters:

1. Turn on the AVN6610.
2. Select the MENU button on the unit.
3. When the MENU Screen is displayed select the NAVI MENU on the display, then select the SIRIUS Traffic.



4. When SIRIUS Traffic is selected the traffic setup parameters will be displayed.

The following sub-sections explain each of the traffic information setup parameters.

Show SIRIUS Traffic Information

When the system receives traffic incident and flow information, you can choose whether to display the traffic incident icons and flow information on the map screen. Traffic incident icons and flow information are displayed when the map scale is set below 8 miles.

To change the Traffic information setting, touch the Show SIRIUS Traffic Information, on or off.

ON: The traffic incident icons and flow information are displayed on the map screen.

OFF: No traffic incident icons and flow information are displayed on the map screen.

SIRIUS Traffic Flow Information

When the system receives information about traffic flow (congestion), you can choose whether to display the traffic flow information on the map screen.

To change the Traffic Speed Flow settings, turn on the “Show Free Flowing Traffic”, “Show Traffic Jam”, “Show Stationary Traffic”, turning these on and off will change the traffic flow settings.

ON: Traffic flow information is displayed on the map screen.

OFF: No traffic flow information is displayed on the map screen.

Traffic speed flow information is viewable on the map only for those roads for which this information is provided by the SIRIUS Traffic service. Contact SIRIUS for updated information on traffic flow coverage for your area.



Auto Avoid Traffic

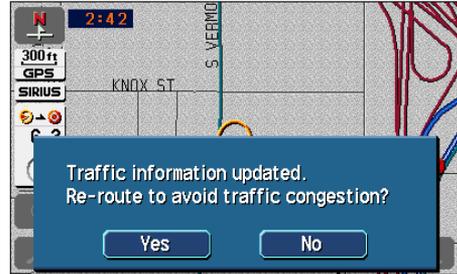
When you select “Auto Avoid Traffic” the system checks for the best route every 5 minutes, when a quicker route is found the system will display “Traffic information updated. Re-route to avoid traffic congestion?”

Select “Yes” to Re-route or “No” to keep the original route.

To change the Auto Avoid Traffic, select ON or OFF on the screen.

ON: The “Auto Avoid Traffic” is turned on.

OFF: The “Auto Avoid Traffic” is turned off.

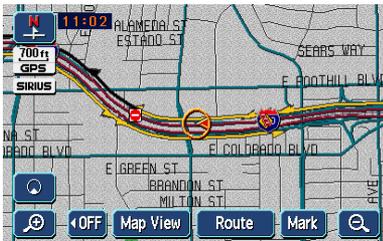


Basic operation (Only for AVN6610)

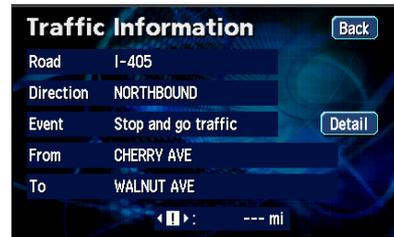
The SIRIUS traffic information service allows the unit to display the traffic information on the map using the SIRIUS satellite radio. After you subscribe to the SIRIUS traffic information service, connect the SIRIUS traffic information tuner (SIR-ECL2nt) to the unit to use the service.

With the SIRIUS traffic information service, you can confirm traffic jams, accidents or road construction. Furthermore, the traffic jams are categorized by colored arrows so you can confirm the information about traffic easily. There are two displaying methods; “Map display screen” and “Text display screen”.

See your *Navigation Manual* for more information.



● Map display screen



● Text display screen

How to see the displayed map

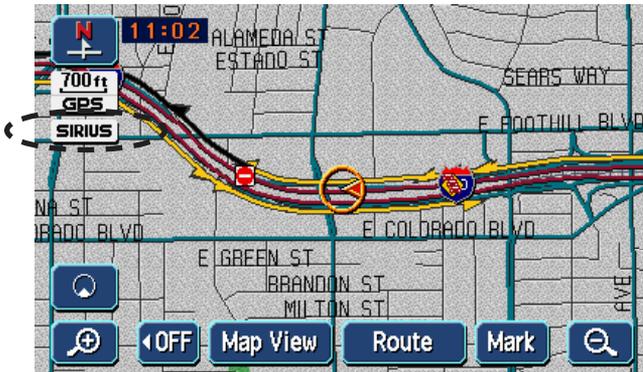
Using color coding, the traffic jams are categorized as follows:

Color	Status	Color	Status
Light Blue	Uncrowded	Orange	Stationary Traffic
Yellow	Jam or Restriction	Black (Day time Display) White (Night time Display)	Closed Road

The meanings of icons are as follows:

Icon	Type of restriction	Icon	Type of restriction	Icon	Type of restriction
	Stationary Traffic Traffic Jam Delays		Road Work		Weather
	Accidents		Danger		Parking
	Closed Road		Road Conditions		Out of Order

“SIRIUS” indicator is NOT displayed in the following conditions.



- SIRIUS Traffic tuner is not connected.
(Stay on for 15 min after disconnection)
- SIRIUS Traffic tuner does not have satellite signal reception.
(Stay on for 15 min after no signal reception)
- SIRIUS Traffic service is not subscribed.
- Out of the service area and no received traffic data
- SIRIUS Traffic function is OFF.
(Show SIRIUS Traffic Information is “OFF”)

Specifications

Operational Frequencies

Satellite	2322.293/2330.207 MHz
Terrestrial	2326.250MHz
Power Requirements	8-16 Volts DC
Fuse Type	1-AMP (ATC)
Chassis Size (without Mounting Tabs)	4-1/8" x 5" x 1-3/8" (WxHxD) 105mm x 126mm x 35mm (WxHxD)

Chassis Size (with Mounting Tabs)	4-7/8" x 5" x 1-3/8" (WxHxD) 127mm x 126mm x 35mm (WxHxD)
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Antenna Type	Mini-Magnetic
Antenna Cable Length	21' (single micro-cable)
Connector Type	SMB (Right-angle)
Audio Interface	2 E-LAN Connectors (Input/Output)
Audio Output	850mV (Fixed)
Weight	0.528 kg. (1.16 lbs.)
Included Cables	3.5 Meter E-LAN (Male/Male)

Note: Design and specifications are subject to change without notice.

Please write down your SIRIUS IDs in the space provided below:

SIRIUS AUDIO Service SID: _____
SIRIUS DATA Service SID: _____
SIRIUS Customer Service: 1-888-539-7474

12 MONTH LIMITED WARRANTY

Sirius Satellite Radio warrants to the original retail purchaser of this product that should this product or any part thereof, under normal use and conditions, be proven defective in material or workmanship within 12 months from the date of original purchase, such defect(s) will be repaired or replaced with new or reconditioned product (at the Company's option) without charge for parts and repair labor. To obtain repair or replacement within the terms of this Warranty, the product is to be delivered with proof of warranty coverage (e.g. dated bill of sale), specification of defect(s), transportation prepaid, to the location shown below under WARRANTY RETURN.

This Warranty does not extend to the elimination of externally generated static or noise, to correction of antenna problems, to costs incurred for installation, removal or reinstallation of the product, or to damage to tapes, compact discs, speakers, accessories, or vehicle electrical systems.

This Warranty does not apply to any product or part thereof which, in the opinion of the Company, has suffered or been damaged through alteration, improper installation, mishandling, misuse, neglect, accident, or by removal or defacement of the factory serial number/bar code label(s). THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY PURCHASER FOR THE PRODUCT.

This Warranty is in lieu of all other express warranties or liabilities. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. ANY ACTION FOR BREACH OF ANY WARRANTY HEREUNDER INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY MUST BE BROUGHT WITHIN A PERIOD OF 48 MONTHS FROM DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER. No person or representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

WARRANTY RETURN: To obtain repair or replacement within the terms of this Warranty, please return product to an authorized ECLIPSE Dealer or call (800) 233-2216. Proof of purchase and description of defect are required. Products to be returned to an approved warranty station must be shipped freight prepaid.



SIRIUS Satellite Radio
1221 Avenue of the Americas
New York, NY 10020
(888) 539-7474
www.sirius.com