

SIRIUS[®]

SATELLITE RADIO



SIR-ECL1

ECLIPSE COMPATIBLE
SIRIUS SATELLITE RADIO TUNER

Installation Guide



Congratulations on your purchase of the SIR-ECL1– the ECLIPSE Compatible SIRIUS Satellite Radio Tuner!

Your new SIRIUS Tuner is designed to work with 2005 and up ECLIPSE E-LAN headunits that are designated “SIRIUS READY.” 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 broadcasted 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.

With SIRIUS, the emphasis is on the music and entertainment you want. The music is hosted by SIRIUS Jockeys, who are true experts. They back-up the music with compelling information about the song being played, and they understand that sometimes it's best to just let the music speak for itself.

Rely on SIRIUS rocket science for superior coverage.

Only SIRIUS has **three** powerful satellites that fly directly over the U.S. ensuring coast-to-coast coverage with high elevation angles. This gives the satellites a “clear line of sight” to your car or home, with much less concern for buildings, trees or other objects that might block conventional satellite signals.

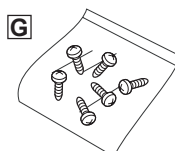
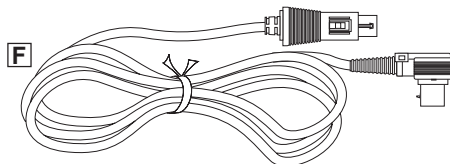
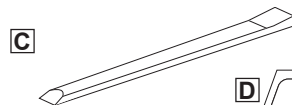
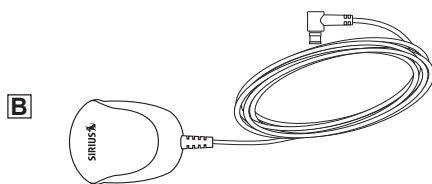
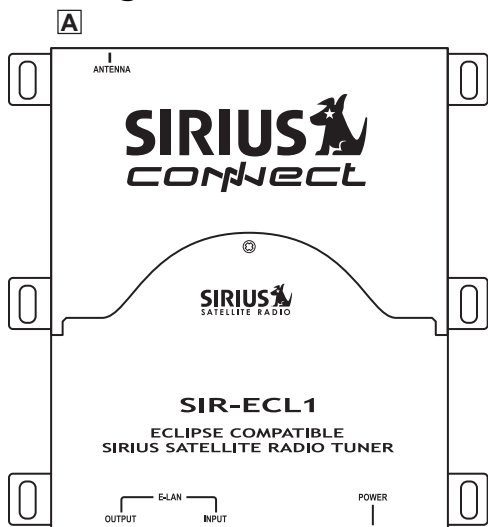
Once you experience more than 120 channels of digital entertainment, you'll never want to leave your car. For more information, visit www.sirius.com.



Table of Contents

Package Contents	3
Warnings and Cautions	4
Installation	6
Mounting the Tuner	6
Installing the Antenna	6
Optimum Antenna Mounting Locations	7
Wiring and Cable Connections	8
System Connection Examples	10
Activating Your SIRIUS Subscription	12
Basic Operation	13
SIRIUS Compatibility Features	13
Headunit Messages	13
Specifications	14
Warranty	15

Package Contents



- A** SIR-ECL1 Tuner
- B** Magnetic Micro Antenna
- C** Antenna Cable Cover/Tail
- D** Alcohol Swab
- E** Power Harness With In-Line Filter/Fuse
- F** 3.5-Meter E-LAN Cable
- G** 6 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 WHERE IT WILL BE EXPOSED 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 non-specified 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.

Installation

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

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

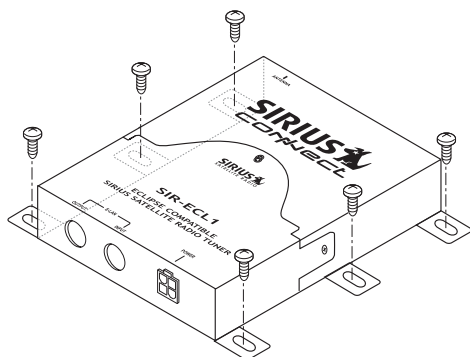
- Any location where the tuner is exposed to moisture.
- Any location where the unit is exposed to extreme heat.
- Any location that would interfere with moving parts on the vehicle or hamper driving.

Mounting the SIR-ECL1 Tuner

Be sure that you find a location that is flat and has clearance above the unit 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:

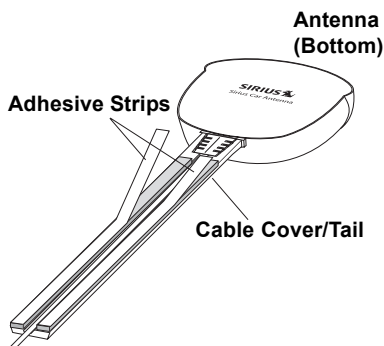
If you are attaching the unit directly to the vehicle's chassis, be sure that you check to make sure the area behind the unit is free from moving parts, fuel or break lines, wire harnesses or any other items which may get damaged by drilling a mounting hole or using the supplied screws.

Installing the Antenna

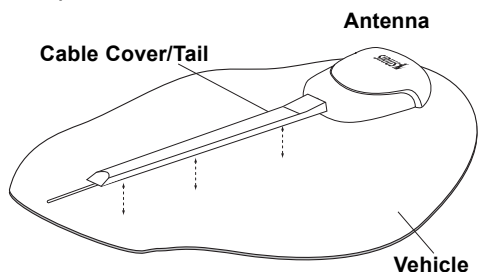
The antenna includes a 6-1/2" cable cover/tail which covers the exposed antenna cable and keeps it attached securely to vehicle roof. The tail also helps position the antenna the proper distance from the window, sunroof or rear hatch.

To attach the cover/tail:

- 1) Once you have determined the proper mounting location (see next section), clean the area with the supplied alcohol swab
- 3) Connect the 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.



- 4) Remove the protective tape from the adhesive, carefully position the antenna with cover/tail and apply pressure to secure to the vehicle.



Optimum Antenna Mounting Locations

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

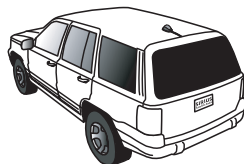
- Place the antenna on a metal surface of your vehicle at least 12" x 12", and at least 6" from a window. (Use the antenna cover/tail as a guide for the proper distance).
- The antenna's powerful magnet will secure it to the metal surface. The adhesive that is attached to the antenna cover/tail will secure the cable to the vehicle. Before routing the antenna cable, confirm that the antenna is mounted in a good 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 for the tailgate, and continue under the interior trim.
- From the trunk, carefully route the cable to the location of the SIR-ECL1 and plug the SMB connector onto the unit.

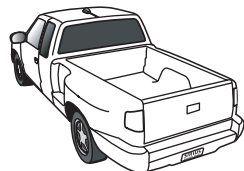
Sedan/Coupe



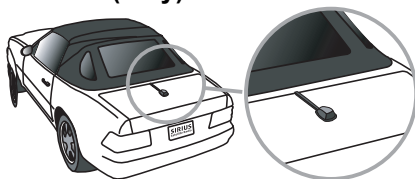
SUV/Mini-Van



Truck



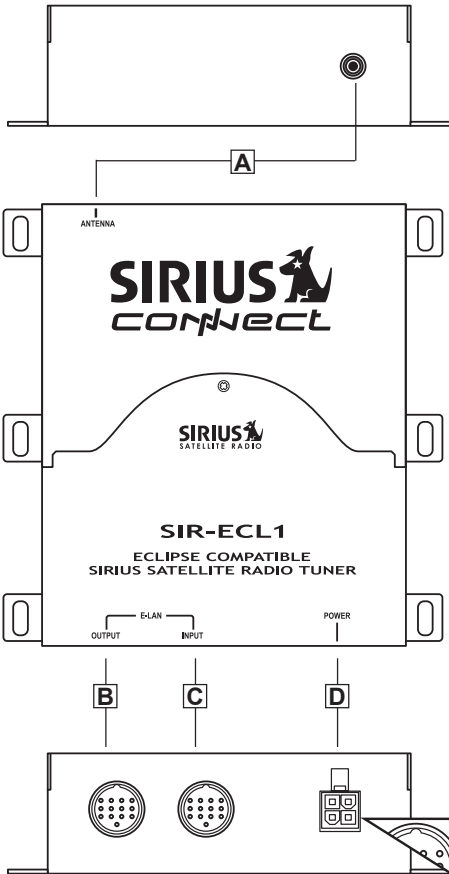
Convertible (only)



⚠ 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 – like 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

Use the supplied E-LAN cable to connect to the ECLIPSE Headunit – See “System Connection Examples” for more specific details.

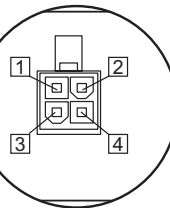
E-LAN Input Connector

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

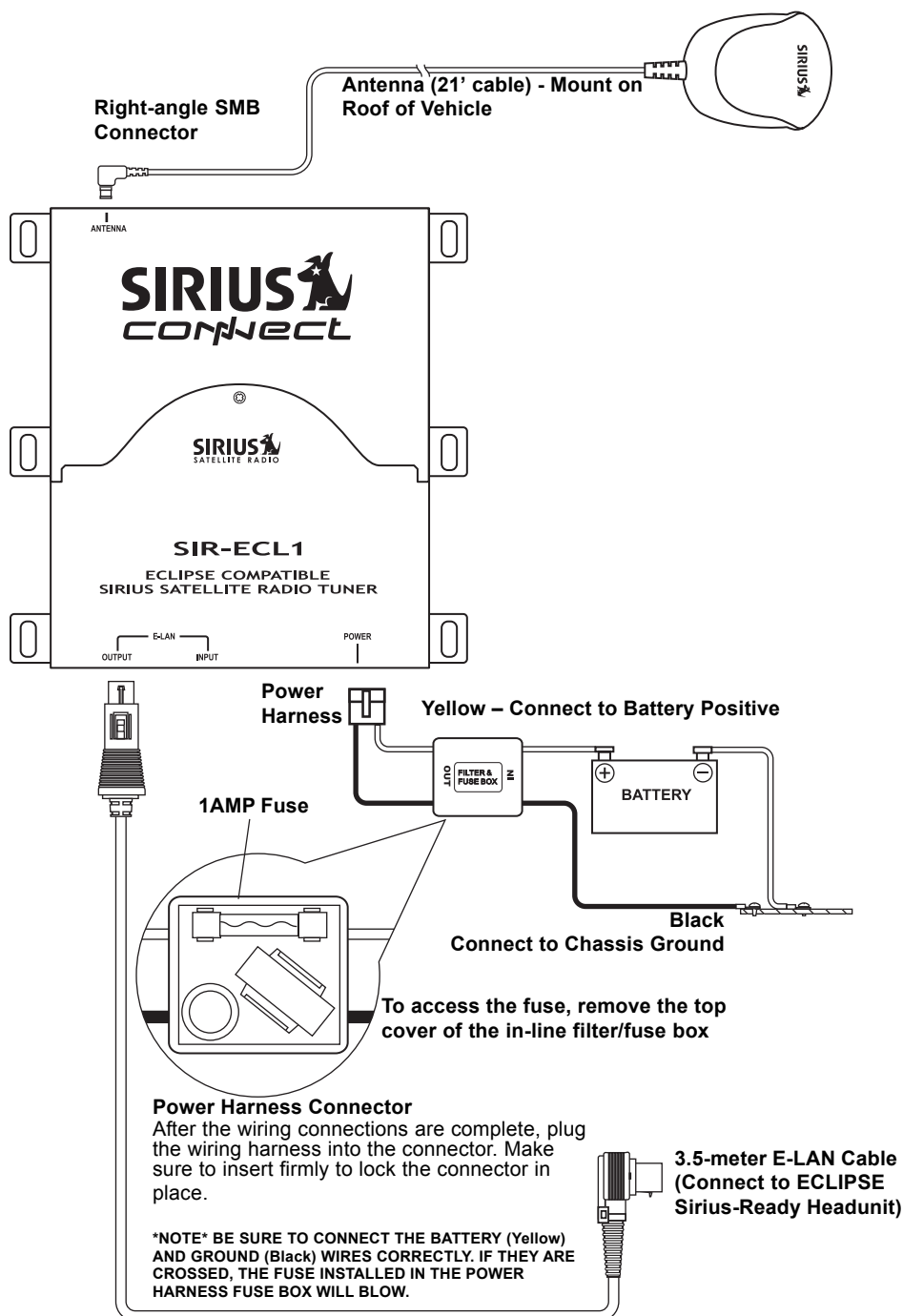
Power Harness Connector

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** Power Connector

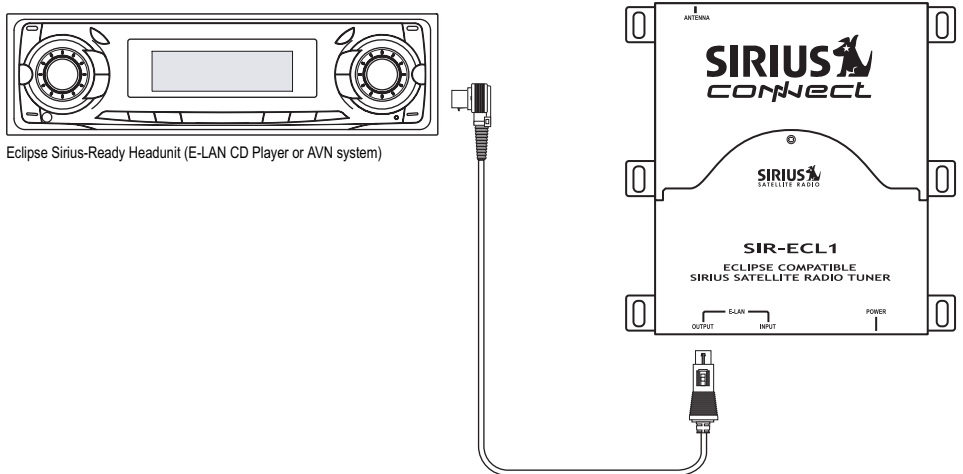


- 1** Open
- 2** Battery (+)
- 3** Chassis Ground (-)
- 4** Open

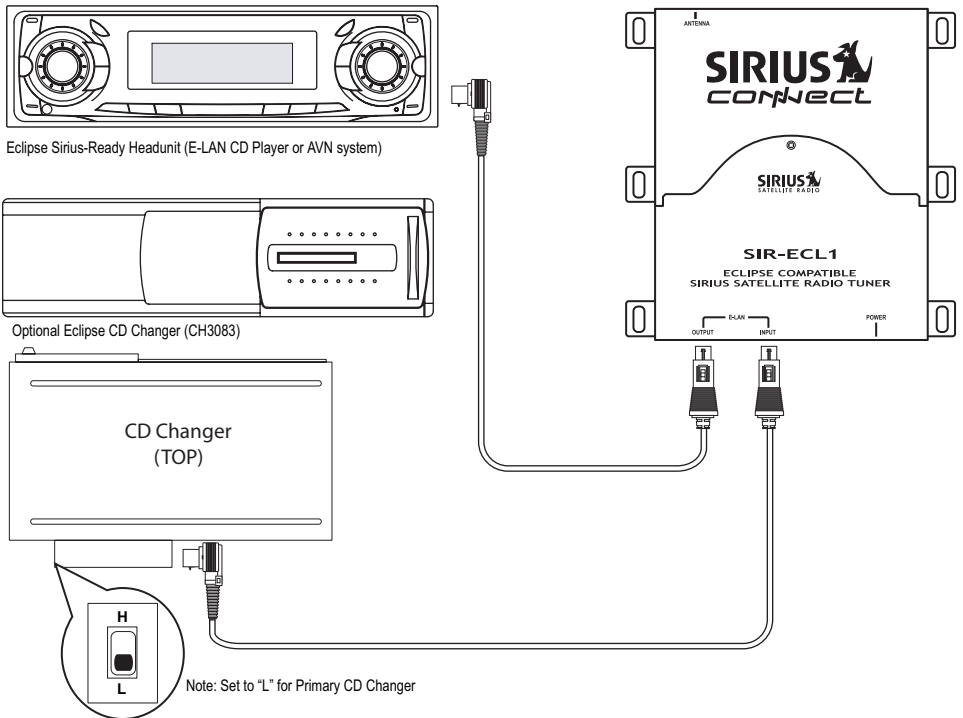


System Connection Examples

System 1: ECLIPSE Headunit and SIR-ECL1

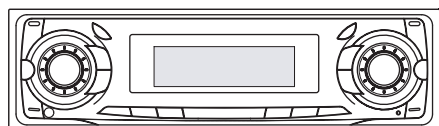


System 2: ECLIPSE Headunit, CD Changer and SIR-ECL1

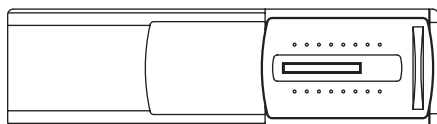


System Connection Examples

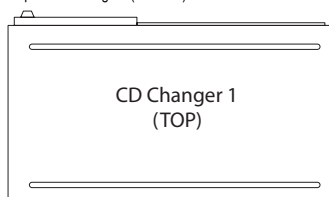
System 3: ECLIPSE Headunit, 2 CD Changers and SIR-ECL1



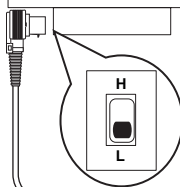
Eclipse Sirius-Ready Headunit (E-LAN CD Player or AVN system)



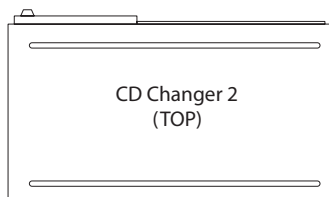
Optional Eclipse CD Changers (CH3083) x 2



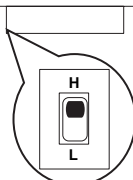
CD Changer 1
(TOP)



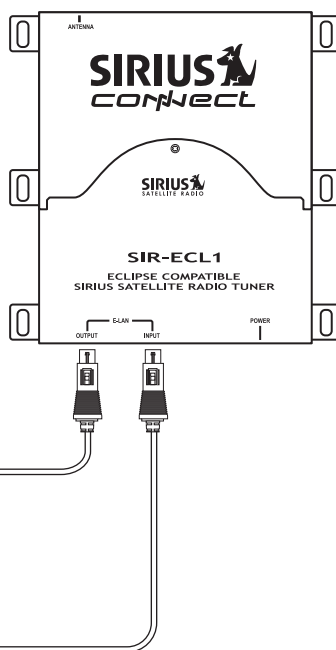
Note: Set to "L" for Primary CD Changer



CD Changer 2
(TOP)



Note: Set to "H" for Secondary CD Changer



Activating Your SIRIUS Subscription

You must activate SIR-ECL1 before you can start to receive the SIRIUS Satellite Radio broadcast.

1. Make sure that the SIR-ECL1 is properly connected and that its antenna is oriented to receive the SIRIUS satellite signal.
2. Turn on the ECLIPSE headunit.
3. Select SIRIUS as the source:
CD Headunits: Press and Hold the "FM/AM" button to select SIRIUS as the source.
AVN Headunits: 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-ECL1 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 ID:
For CD Headunits: Each time you Press and hold (some units Press and Release) the "DISP" button the display content will change- repeat until the SIRIUS ID appears on the display.
For AV Headunits: Some AVN units will display the SID on the top of the

display at all times when in the SIRIUS source mode. All others you must Press "INFO" button on the face of the unit, then press the "SIRIUS" button (located on the touch screen). The SIRIUS ID will display on the screen.

5. The SIRIUS ID is a 12-digit number. Write down the SIRIUS ID (SID) in the location provided on the next page for future reference.
Note: If the SIRIUS-ID does not show up on the text display of the headunit, the SIR-ECL1 has been deactivated. To obtain the SIRIUS-ID, you must get it from the unit itself. The SIRIUS-ID can also be found on the sticker that is on the bottom of the SIR-ECL1 as well as on the original packaging.
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 headunits will have different messages- please consult your headunit owners manual for more information.
8. Once the "SUB UPDATED" text message disappears, you may now tune to any actively subscribed channel.

Basic Operation

The SIR-ECL1 SIRIUS Satellite Radio Tuner is compatible with any ECLIPSE headunit that is "Sirius-Ready" – which includes most 2005 models. Consult ECLIPSE or Sirius Customer Support Departments for more information about compatibility.

Please consult your ECLIPSE owner's manual for proper operation instructions for using satellite radio products.

SIRIUS Compatible Features

The following features are compatible with 2005 Eclipse Headunits:

- Channel Tune UP/DN
- Category Tune - UP/DN
- Channel tune within a Category - UP/DN
- Direct Channel Selection
- Preset Memory - 6 Presets per Band, 4 Bands (24 total)
- Preset Channel Scan
- Text Display Information*:
 - Channel Number
 - Channel Name
 - Category
 - Song Title
 - Artist
 - SIRIUS-ID**

* Note that any Special Characters (&, @, %, etc.) that are sent to the system may show up as blank spaces or as asterisk symbols- this is a limitation of the headunit. Also note that Eclipse headunits do not support the Composer information field

** Note that the SIRIUS ID (SID) can only be viewed while tuned to any valid subscribed channel. If the unit has been deactivated, ALL CHANNELS become unsubscribed. Obtain the SID from the bottom of the SIR-ECL1

Headunit Messages

These messages vary by headunit model- consult your ECLIPSE owners manual for more information.

UPDATING - Indicates that the SIR-ECL1 is receiving a channel or category update.

SUB UPDATED - This message appears when the SIR-ECL1 is receiving a subscription update.

ACQUIRING - Will display when there is weak or no antenna signal present.

INVALID - Will display when tuned to an invalid channel.

ANTENNA - Will display if the antenna is damaged or disconnected.

CALL 888-539-SIRIUS - Will display on an unsubscribed channel.

Specifications

Operational Frequencies	
Satellite	2322.293/2330.207 MHz
Terrestrial	2326.250MHz
Power Requirements	
Fuse Type	1-AMP (Glass)
Chassis Size (without Mounting Tabs)	
.....	4-1/8" x 5" x 1-3/8 (W XHxD)
.....	105mm x 126mm x 35mm (WxHxD)
Chassis Size (with Mounting Tabs)	
.....	4-7/8" x 5" x 1-3/8 (W XHxD)
.....	127mm x 126mm x 35mm (WxHxD)
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)
Included Cable	
.....	3.5 Meter E-LAN (Male/Male)

Please write down your SIRIUS-ID in the space provided below:

SIRIUS ID: _____

SIRIUS Customer Service: 1-888-539-7474

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

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.



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(800) 233-2216
www.eclipse-web.com**